HISTORIC CONTEXT FOR ENERGY DEVELOPMENT

MANAGEMENT REGION #3

1897-1930

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REGIONAL OVERVIEW

A great deal of Oklahoma's history has taken place in the nineteen counties of Management Region 3. In the early history of this area, it is believed DeSoto explored along the Grand River, Wilkinson followed the Arkansas River, Washington Irving conducted part of his well-known tour of the prairies, and the Choteaus established trading posts to carry on fur trading. Later, Region 3 included parts of both Oklahoma and Indian Territory. The northwestern counties of the region (Osage and Pawnee) were allotted to the Osage and Pawnee Indian tribes during the nineteenth century. Several small Indian tribes occupied the extreme northeastern part of the region prior to statehood: Peoria, Quapaw, Ottawa, Shawnee, Wyandotte, Modoc, and Seneca. The remainder of Region 3 was composed of Cherokee and Creek Nation lands. All but Osage and Pawnee Counties were included in the proposed State of Sequoyah which was a plan to have two states created from the Twin Territories. Region 3 is still the area where the greatest number of Indians reside.

During more recent decades, the "boom and bust" of mineral development has had an impact on the region. Lead and zinc mining was of primary importance in Ottawa County as a part of the Tri-State Mining District which also included southeastern Kansas and southwestern Missouri. Coal has been mined near Henryetta, Claremore, Vinita, and other communities in the region. Petroleum has been pumped from large oil fields such as Glenn Pool, Red Fork, Cleveland, Burbank, Cushing, and Barnsdall.

Tulsa is the major urban center of Region 3. It is the second largest population center in the state after Oklahoma City. Although Tulsa has been known as the "Oil Capital," it also contains a large number of other manufacturing enterprises such as aerospace. It is also known as the cultural center of the state with facilities like the Philbrook Art Center and

Gilcrease Museum. Tulsa is likewise an important transportation center having access to the great manufacturing centers of the nation by water via the Arkansas River Navigation Channel from the Port of Catoosa.

Additional cities of Region 3 are centers of varied activities. Muskogee has large glass manufacturers. Bartlesville is noted for its research work with petroleum and home of Phillips Petroleum. Claremore is the heart of Will Rogers country. Tahlequah is famous for its Cherokee history, and Pawhuska is the Osage Center.

Region 3 is noted for its tourist attractions, especially water recreation. Many large man-made lakes and reservoirs are scattered along the principal rivers of the region such as Grand Lake, Lake Tenkiller, and Lake Keystone. The topography of the area adds to its scenic beauty with the Ozark Plateau being the principal relief feature.

Region 3 is composed of nineteen counties with a combined population of 1,048,976 (1980 U. S. Census) and a total area of 13,919 square miles. Population density slightly exceeds 75 people per square mile.

In terms of land area, Osage is by far the largest county (largest in the state) with 2,265 square miles, whereas Washington is the smallest with 423. The 1980 census indicated that Tulsa County has 470,592 inhabitants ranking it first in total population while Okfuskee has only 11,125 people which is the least of all nineteen counties. Comparative data show that only one county in the region had experienced a decrease in total population from 1970 to 1980: Okfuskee. The most urbanized county is Tulsa (94.3% urban) while several other counties have over one-half of their population living in cities of 2,500 or more: Muskogee, Okmulgee, Ottawa, and Washington. Delaware ranks first in terms of percentage of population 65 years of age and over with 37.1 percent while Rogers has the least percentage (8.9) of people

65 and over. Two counties (Okmulgee and Okfuskee) have populations of more than ten percent black.

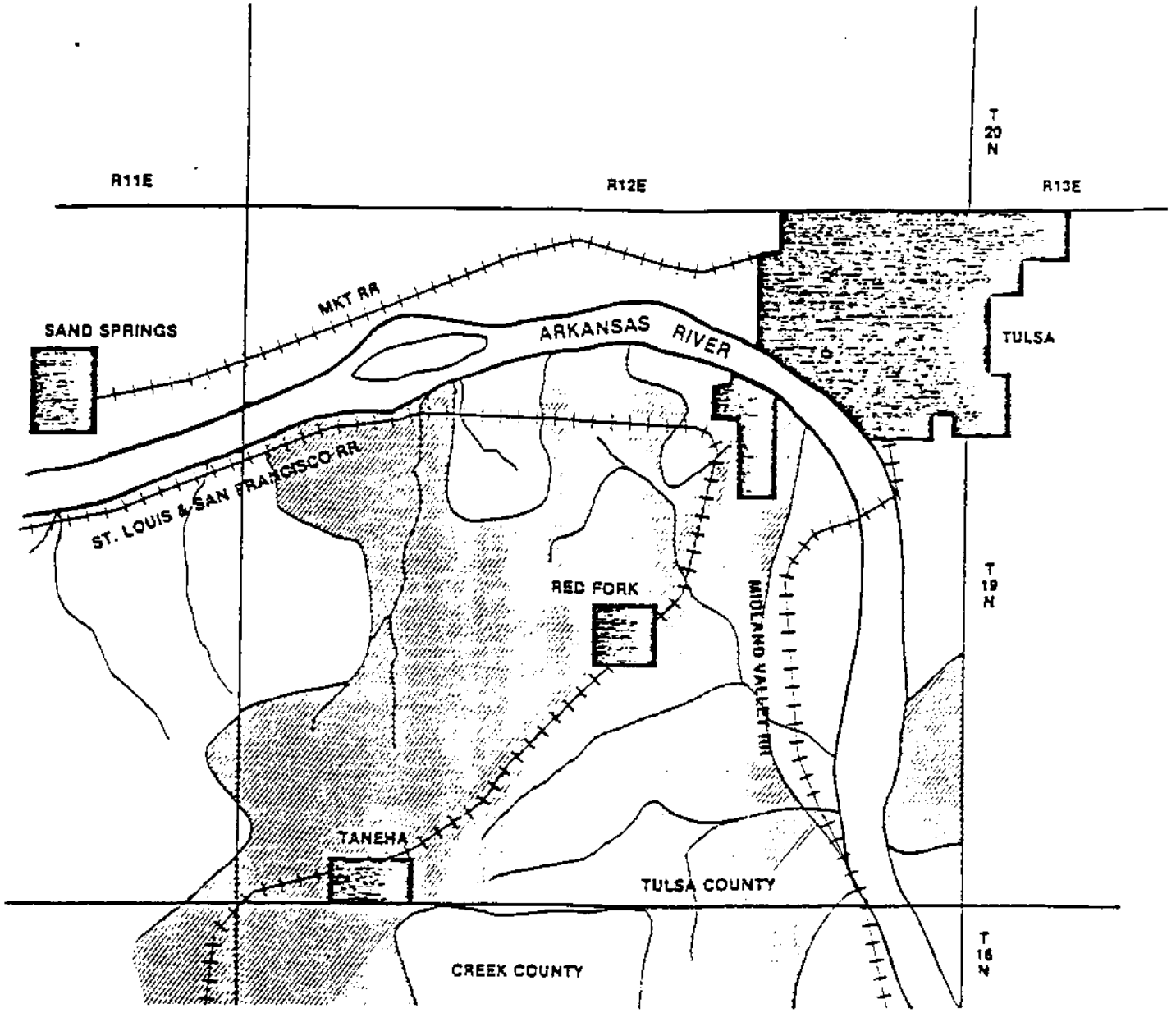
Economic statistics based on 1970 census show that Washington has the highest per capita income ($5,051) and highest median family income ($9,984). Adair has the lowest per capita income ($2,079) as well as lowest median family income ($3,996). Tulsa is by far the most industrialized county in terms of both total establishments and value added by manufacture. Tulsa, Osage, and Creek are the top three counties in value added in mining. Tulsa again ranks as the top county in both wholesale and retail trade.

HISTORICAL NARRATIVE

Petroleum history in Management Region 3 began as early as the latter part of the nineteenth century when various oil wells were drilled in Indian Territory in lands of the Cherokee, Creek, and Osage Nations. According to Oklahoma Geological Survey Bulletin reports, the Cherokee Oil and Gas Company drilled three small wells on their leases near Chelsea in 1889. Average depth was 36-120 feet and initial production was 5-10 barrels per day. Geologists claim this was the first record of drilling for oil in Oklahoma.(1) Although petroleum activity in Oklahoma began in 1889, the first commercial well was not drilled until 1897, the starting date for the period of significance for energy development in Region 3. Petroleum development in Region 3 continued until 1930 when most of major fields in the region had either declined in production or had ceased operations.

The first commercial well was drilled along the Caney River, just northwest of early day Bartlesville. William Johnstone and George Keeler, two pioneer settlers in the Bartlesville area, were early promoters of drilling for oil and secured leases from the Cherokee Nation in 1895. The leases were transferred to Cudahy Oil Company which had been active in exploration for petroleum in other parts of Indian Territory. As early as 1894, development was begun in the Muskogee townsite by the Cudahy Oil Company. This field was known as the Beland Pool and was expanded southwestward by 1906.(2)

The Bartlesville well, named for the daughter of William Johnstone (Nellie), produced between 50 and 75 barrels of oil per day. Oklahoma's first commercial well was a technical success but failed because of the lack of a market. These early oil pioneers, however, had discovered a portion of what eventually would be called the Mid-Continent Oil and Gas Field, a vast area covering approximately 20,000 square miles in northeastern Oklahoma and southeastern Kansas.(3)



Red Fork
1917

Oil Producing Area

Figure 1

The next major strike in Management Region 3 was Red Fork, just to the southwest of present-day Tulsa, on June 25, 1901 (Figure 1). There are two major theories regarding the personalities and events involved in this discovery. One thesis contends that C.W. Bland and Fred S. Clinton, two local physicians, sunk the well that initiated the first major boom in Oklahoma. Another group suggests that the Red Fork Field was opened by Jesse A. Heydrick and J.S. Wick, two experienced wildcatters.

Despite the controversy surrounding the early activities, the Crossman drilling equipment spudded in the first well in the Red Fork Field on May 10, 1901. Within five days, the hole had reached the 150-foot level. On June 24, 1901, shortly before midnight, the bit struck a gritty lime at the 534 foot level. When the bit finally penetrated the formation it released a pocket of natural gas and oil that shot 30 feet into the air.(4) The Sue A. Bland No. 1, the discovery well at Red Fork, was a reality.

Red Fork was converted almost overnight from a small farming community, with several stores and a few houses, into a bustling oil boom town. Tents sprouted everywhere, and by July 4, 1901, more than 1,000 representatives of various oil firms were operating in the area. Within 48 hours of the completion of the well an estimated 4,800 people were milling around the town.(5)

Many of the early wells at Red Fork were gassers. Production ranged from 1-2 million cubic feet per day. At this time, however, it was often difficult to sell gas. To open new markets for their natural gas, Charles Colcord, an Oklahoma City businessman, and other early developers made arrangements to pipe the gas to Tulsa where it could be used for lighting and heating. This was the beginning of the Oklahoma Natural Gas Company.

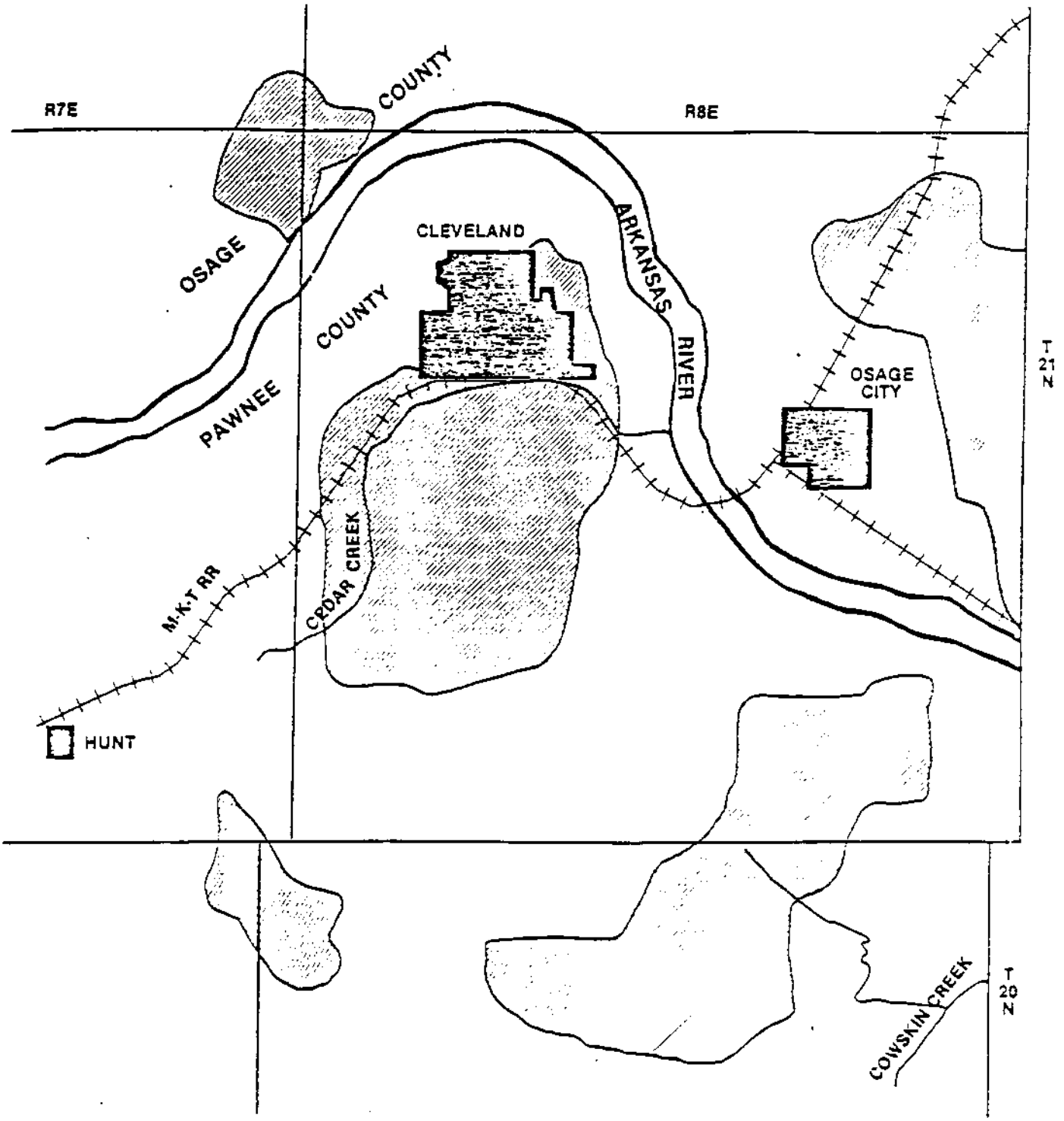
Because of the lack of a suitable profit from the crude oil, and problems in gaining clear title of property, the Red Fork Field never became a prolific producer and within five years was overshadowed by the tremendous production

of Glenn Pool. Although not in the same category of some of Oklahoma's giant oil fields, Red Fork's annual output by 1950 had reached a respectable 15,330 barrels of crude. Of more importance than production, however, was the excitement generated by the discovery. Enough interest was stimulated by the Red Fork discovery that Oklahoma was thrust into the forefront of the American petroleum industry. Furthermore, Red Fork was a vital factor in the continuation of exploration for petroleum in Management Region 3.

One of the most significant outgrowths of the Red Fork di covery was the linking of Tulsa and Red Fork by a means other than the railroad bridge across the Arkansas River. Soon after the completion of the Sue A. Bland No. 1, Tulsa's Commercial Club began planning for another structure that would accommodate wheeled traffic as well as pedestrians between Tulsa and the oil field. in 1904, the Eleventh Street Bridge was dedicated. The linking of Tulsa with the oil fields south of the Arkansas played a major role in the transformation of Tulsa into the "Oil Capital of the World."(6)

By 1902, the Department of Interior had withdrawn some of its objections to oil leases in Indian Territory and allowed petroleum exploration to begin anew. In 1904, a significant strike was made near Cleveland in Pawnee County, Oklahoma Territory. One year later the famous Glenn Pool discovery well, Ida Glenn No. 1, came in about ten miles south of Tulsa, Creek Nation.

The Cleveland Field was opened on May 27, 1904 when the Minnetonka Oil and Gas Company drilled on the "Uncle Bill" Lowery farm just south of the town of Cleveland (Figure 2). Nearly 100 of Cleveland's 1,000 citizens were on hand when W.J. Fellows and John Schell spudded in the well. With 2-men crews working 12-hour shifts, the hole was deepened rapidly and within a short time it was reported that the well had penetrated a formation that was identical with that of developed fields. At the 600-foot level, sand filled with salt water and a trace of oil was located. Fellows and Schell were encouraged and continued deeper.



Cleveland
1917
Oil Producing Area □

Figure 2

On June 28, 1904, a month and a day after the well was started, a light flow of gas was found between 900 and 1,000 feet. The next day, a third pay sand was found at a depth of 1,100 feet. The flow was strong enough to spew ten or fifteen feet above the well head. By the time drilling reached 1,250 feet, the flow of gas was estimated at 750,000 cubic feet per day. When the well reached a depth of 1,625, oil sand was found and it was decided to shoot the well with nitroglycerine. Immediately after the well was shot, the Uncle Bill No. 1 produced crude at a rate of approximately 250 barrels daily from two rich oil formations, which were named the Cleveland and Kelso sands. The Cleveland sand proved to be almost 20 feet thick. After initial production, the well stabilized at about 50 barrels of crude per day.(7)

Although the strike was not the magnitude of Spindletop, it did generate quite a bit of excitement among oilmen. Several local residents quickly formed the Cleveland Oil, Gas, and Manufacturing Company and began leasing nearby property. At first, wells were drilled in all directions from the Uncle Bill No. 1, but after several dry holes the oilmen discovered that the field lay to the south and west of the original strike. Sections 16-17 of T21N-R8E proved to be the richest acreage in the field. Other producers were completed in sections 18, 20, and 29.(8)

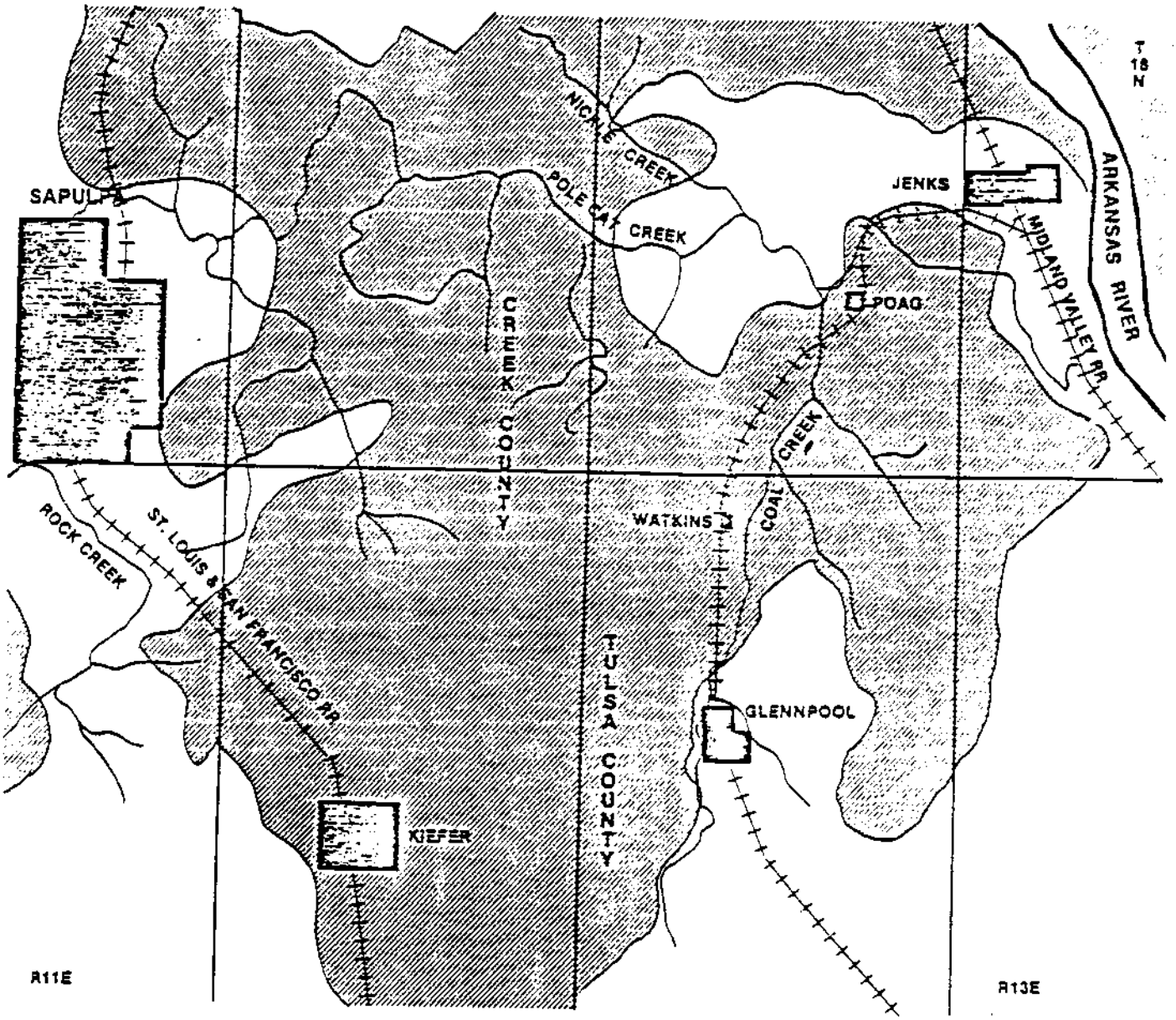
The effect of the Uncle Bill No. 1 was predictable. According to Territorial Governor Thompson B. Ferguson, the news had spread all over the territory. He also reported by July of 1905 that some 220 wells in the area had been drilled with a daily production of approximately 11,000 barrels. Cleveland grew from a tiny hamlet of less than 1,000 people to a boom town of more than 7,000. Deposits at local banks increased by 75 percent. Within six months, it was reported that 25 new homes and several new business buildings were under construction. It was estimated that a total of $1,500,000 was spent developing the Cleveland Field.(9)

The problem at Cleveland was no ready market for the pool's crude

production, and no market whatsoever for any natural gas output. With no outlet, the gas was worthless to oilmen. As a result, the natural gas simply was vented into the air. A second problem was the lack of shipping facilities which forced many Cleveland oilmen to store their production in open pit earthen tanks. This allowed large amounts of oil to be lost through seepage or evaporation. The problem was eased somewhat in late 1904 when the Prairie Oil and Gas Company connected the field to its pipeline and shipping facilities at Red Fork. At the same time nearly 1,500,000 barrels of steel and wooden tankage were being built in the Cleveland area. As a result of this construction, the price of oil properties increased.(10)

Because Oklahoma Territory oilmen were not hindered by the federal government and tribal policies, Cleveland was the first fully developed field in what became Oklahoma. With its growth came an influx of capital necessary to continue the development of the region's oil and gas reserves. Likewise, the discovery greatly stimulated the search for additional crude--a search that launched Oklahoma on the road to becoming a leader in the nation's oil and natural gas industries.

The fever generated over the discovery of the Cleveland Field soon spread into Indian Territory and in 1905, Robert Galbreath and Frank Chesley drilled a well on the Ida Glenn farm about ten miles south of Tulsa in the Creek Nation (Figure 3). Located near the center of Section 10-T17N-R12E, the Ida Glenn No. 1 was spudded in during the fall of 1905. Throughout October and November of 1905, the two men drilled without a trace of petroleum. At the 1,300 foot level, Galbreath, in a ploy to discourage sightseers, announced the project was abandoned. When the drill bit passed 1,400 feet without any sign of oil, Galbreath and Chesley discussed the possibility of actually abandoning the hole. Reluctant to give up, they decided to continue to 1,500 feet before making a decision. Their persistance was rewarded, for the next day, Chesley noticed an oil stain on the bit. The crew began to hear a noise coming from



Glenn Pool
1917
Oil Producing Area □

Figure 3

below. Then the Ida Glenn No. 1 broke loose and oil spewed over the derrick top, over the crown block, and high into the air. When the casing was set, the Ida Glenn No. 1 produced approximately 75 barrels of crude daily and ushered in the first major field in Oklahoma--the fabulous Glenn Pool.

As was the case with many early Oklahoma discoveries, there was no readily available means to market Glenn Pool's crude. As a result, almost as soon as the Ida Glenn No. 1 was completed, Galbreath was forced to begin work on several storage tanks to hold production. The storage situation was eased significantly when the Prairie Oil and Gas Company, a subsidiary of Standard Oil, connected its 6-inch pipeline running between its refinery at Whiting, Indiana, and the Red Fork Field to the discovery at Glenn Pool with a 2-inch line on February 16, 1906. The outlet was so important that with the connection of the last string of pipe, local oilmen christened the line with a bottle of wine, despite the fact that liquor was prohibited in Indian Territory.(11)

By Christmas of 1905, it was obvious to Galbreath that he had located a huge deposit of oil. When he returned to his home in Red Fork for the holidays, he began making plans to move his family to Tulsa, already becoming the center for many of the petroleum investors and companies operating in Indian Territory. So rapid was Glenn Pool's development that by the early summer of 1906 three producing wells a day were being completed in the field.(12)

Glenn Pool eventually grew from an eighty acre tract to a field of almost eight thousand acres, establishing Oklahoma as one of the leading petroleum producing regions in the United States. By 1906 Oklahoma had surpassed the other states in the Mid-Continent-Gulf Coast Region. That year Oklahoma produced 18,091,000 barrels of oil. At the same time, Oklahoma moved from eighth among the oil producing states in 1905, to second, behind only

California, in 1906. The following year, 1907, Oklahoma's annual output of 43,524,000 barrels of oil made it number one among the oil-producing states.(13)

The impact of Glenn Pool was felt both at the state and national level and resulted in two important developments. First, it was discovered at a time when the production of the Gulf Coast and Texas fields had begun to decline. This prompted the Gulf Coast operators to extend their pipeline trunks northward into Oklahoma, thereby opening a new producing area to the petroleum industry. Secondly, the oil from Glenn Pool was rich in gasoline content, easy to refine and excellent for fuel oil, which made it easier for big refining and producing companies (Texas, Gulf, and Standard) to shift from the use of oil for illumination to the primary use of petroleum for energy.

Although production had decreased to 5,993,628 barrels in 1915, Glenn Pool's influence on the history of the Oklahoma petroleum industry extended beyond the heyday of the field. Glenn Pool was significant in energy development history for three reasons: (1) it had brought the pipelines to Oklahoma and opened new marketing outlets, (2) it had caused the great influx of capital into Oklahoma that would make continued development of the petroleum industry possible, and (3) it focussed the eyes of the nation on the petroleum industry of Oklahoma.(14)

The two remaining areas in Management Region 3 destined to become major producers were the Burbank and Cushing Fields (Figures 4-5). The Osage Nation land had been explored and some production occurred in the 1890s. The Indian Territory Illuminating Oil Company and Barnsdall Oil Company had made the initial discoveries in the eastern part of Osage County. Drilling operations on the Osage reservation began as early as 1896 when Edwin B. Foster secured a blanket lease on the region. Following Foster's death, Henry, his brother, organized the Phoenix Oil Company and continued exploration. A well in the SW¼ of Section 34-T27N-R12E showed promise in June of 1897, however, the

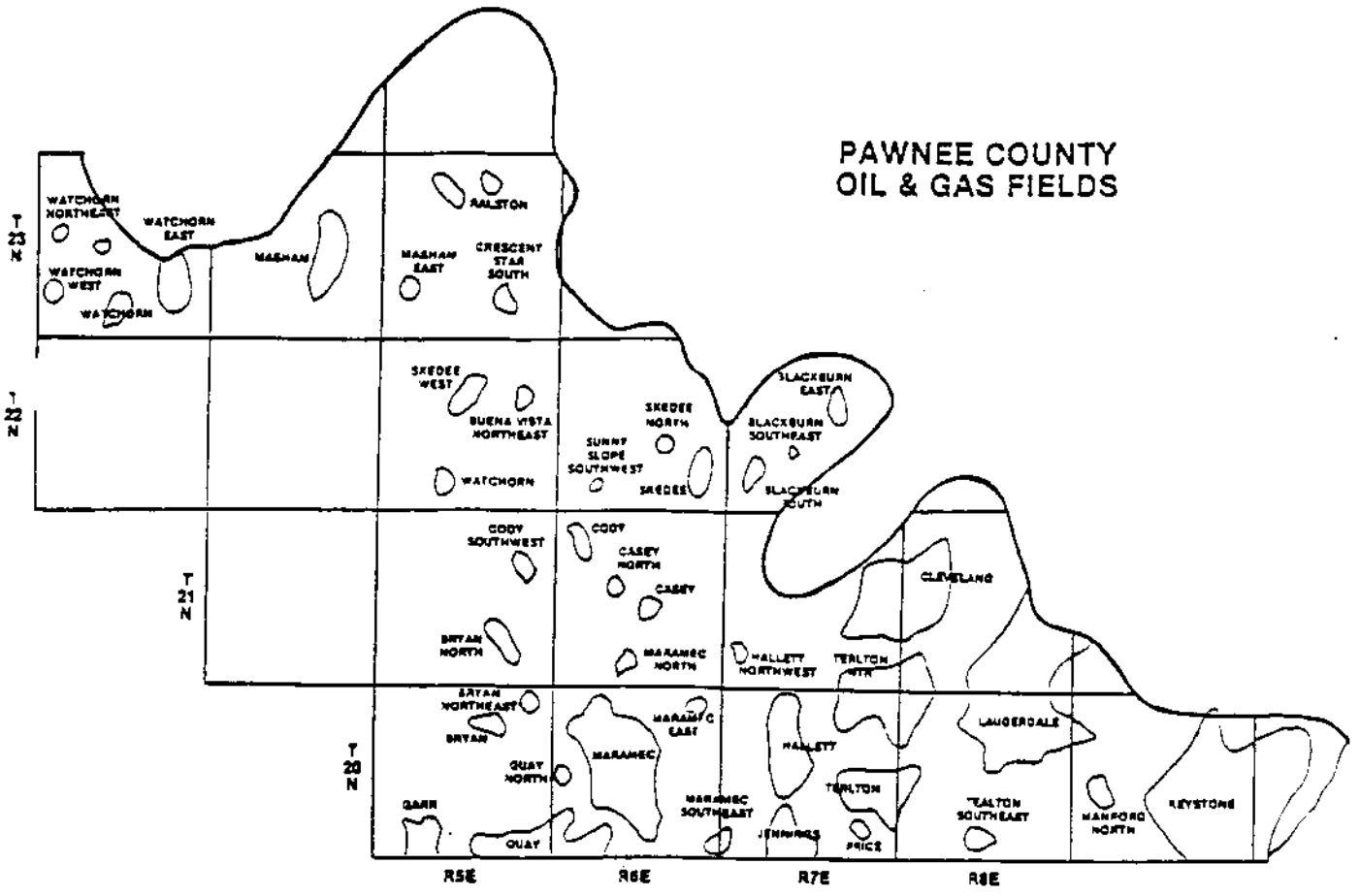

PAWNEE COUNTY
OIL & GAS FIELDS
T 23 N
T 22 N
T 21 N
T 20 N
R5E
R6E
R7E
R8E
WATCHORN NORTHEAST
WATCHORN EAST
WATCHORN WEST
WATCHORN
MASHAM
RALSTON
MASHAM EAST
CRESCENT STAR SOUTH
SKEDEE WEST
BUENA VISTA NORTHEAST
WATCHORN
SUNNY SLOPE SOUTHWEST
SKEDEE NORTH
SKEDEE
BLACKBURN EAST
BLACKBURN SOUTHEAST
BLACKBURN SOUTH
CODY SOUTHWEST
CODY
CASEY NORTH
CASEY
CLEVELAND
BRYAN NORTH
MARAMEC NORTH
HALLETT NORTHWEST
TEALTON NORTH
BRYAN NORTHEAST
BRYAN
MARAMEC EAST
MARAMEC
HALLETT
LAUGERDALE
QUAY NORTH
TEALTON
GARR
MARAMEC SOUTHEAST
JENNINGS
PRICE
TEALTON SOUTHEAST
MANFORD NORTH
KEYSTONE
QUAY

Figure 4

returns did not repay the initial investment and operations in the Osage Nation ceased.(15)

In 1901 the I.T.I.O.C. began an extensive exploration program in the area. A well producing 50 barrels of crude daily was drilled. The success of this well convinced many companies to continue operations in the area. In 1902 the Almeda Oil Company completed a producer in the SE¼ of Section 22-T26N-R12E. By the end of 1903, there were thirty wells drilled on the reservation.

In 1904 the Workman Oil and Gas Company discovered the Okesa Pool in Section 16-T26N-R12E, with a well that flowed at a rate of 25 barrels per day. In November of that year, the Osage City Pool in Section 20-T21N-R9E was opened by the Barnsdall Oil Company. The Avant and Wiser Pools were also discovered in 1904-1905.

The real impetus for the Osage Field (Burbank) did not come until World War I and the advent of the automobile. Not until 1918 did the western portion of Osage County yield any production. Gypsy, Guffey-Gillispie, Marland, and Carter, all major oil firms, secured drilling rights to several scattered tracts in Ranges 5, 6, and 7. In May, 1918 the Marland Oil Company brought in a producing well on the Bertha Hickman farm located in the SE¼ of Section 36-T27N-R5E. They found crude at a depth of approximately 3,000 feet which later proved to be the Bartlesville sand. Drilling operations spread in every direction from Marland's discovery well, however, major activity was centered to the north. As excitement grew over the Burbank discovery, a total of 102,192 acres of land were leased from December, 1921 to June, 1922.(16)

In 1920 crude flowing from the Burbank Field jumped from 134,408 barrels to 4,986,340 barrels in 1921, and reached an annual production of 24,230,563 barrels of oil in 1922. Peaking in 1923, annual production totaled 26,206,741 barrels of oil.

By 1930, two thousand wells were in operation in the region. Eventually, the field covered approximately 132 quarter-sections (33 square miles) and ultimately produced about 160,541,000 barrels of oil. Six producing horizons were present: Hoover, Suitcase, Layton, Oswego, Burbank, and Wilcox. Furthermore, the field returned approximately $285,762,980 to the producers, who had spent nearly $78,000,000 developing the field. As for the Osage Nation, they received more than $45,000,000 in royalties.(17)

Burbank was not the only field opened on the old Osage Reservation during the 1920s. In 1921, the Frankfort Pool in T29N-R6E was opened with a well that initially flowed 10 barrels of oil and one-three million cubic feet of gas per day. The pool was developed chiefly by the Tidal Oil Company. That same year, the Madalene and Prue Fields were discovered in T21N-R10E. The latter produced some of the best gas wells in Osage County and had an initial flow in several wells ranging from 20 to 65 million cubic feet of gas per day. In 1922 the Foraker Field was discovered in T2N-R7E with oil flowing between 10 and 100 barrels daily. Two years later the Atlantic Oil Company opened the Atlantic Pool with an initial production of 3,000 barrels. These finds, coupled with production from older fields, combined to maintain a high annual production from Osage County wells outside the Burbank Field. The crude from these wells rose from 17,077,348 barrels in 1920 to a substantial 41,810,178 barrels in 1923.(18)

The Cushing Field was opened in early 1912 on the Frank M. Wheeler farm, twelve miles east of Cushing, a small agricultural community prior to 1912.

After numerous failures of striking oil near Cushing in 1906 and Ripley in 1907, Thomas B. Slick, an experienced "wildcatter", struck oil on the Frank M. Wheeler farm, one mile north of the present town of Drumright and twelve miles east of Cushing, the nearest town. Slick, who obtained financial assistance ($8,000) from the oil magnate Charles B. Shaffer of Shaffer and

Cushing Oil District

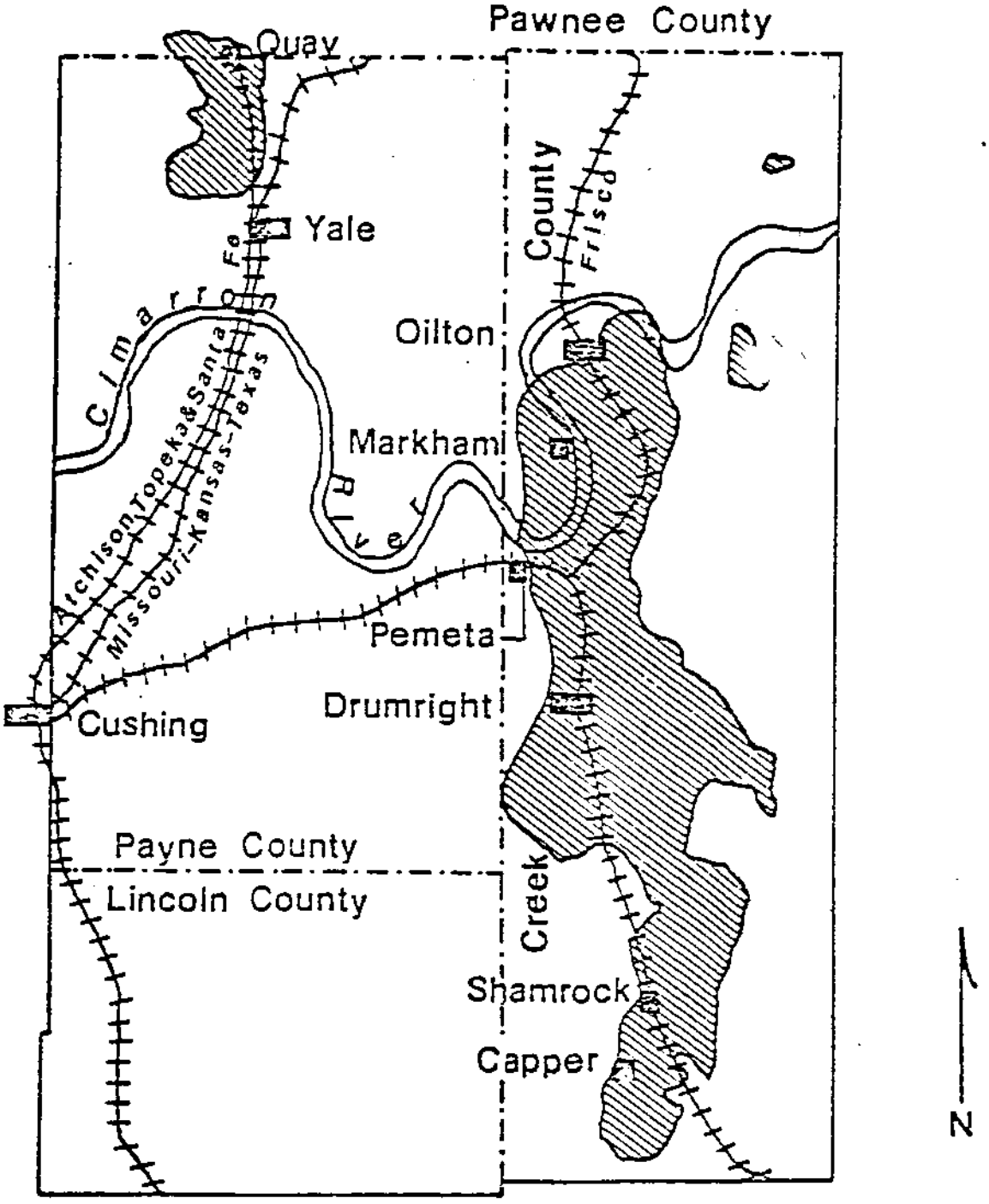


Figure 5

Smathers in Chicago, leased the land from Wheeler in January, 1912. Wheeler was promised an income from one-eighth of any oil produced from wells on his land.

The drilling crew worked in secrecy until April 1, 1912 when Slick and Shaffer made public their well log which showed that Weeler No. 1 was producing 400 barrels daily at a depth of approximately 2,300 feet. Lease buyers and oil speculators rushed to the site of the new discovery, and two miles east of the discovery well, Wheeler No. 1, Charles Wrightsman and B.B. Jones soon brought in a well producing 5,000,000 cubic feet of gas daily.

By mid-summer, 1912, five oil field supply companies had established offices in the town of Cushing. When the output of the Cushing field reached 2,200 barrels a day, two more companies opened operations in the field--Southwest Oil Company and the Gypsy Division of Gulf Oil Company.

Production began to increase in late 1912. By December of that year, there were forty-nine producing wells, fifty-nine being drilled, and rigs for eighty more were awaiting crews. The field's total output had reached 8,500 barrels daily. One month later daily production had jumped to 20,000 barrels a day.

Daily production continued to increase until it peaked in April, 1915 at an estimated 300,000 to 330,000 barrels per day, which represented more than two-thirds of the high grade refinable crude oil then being produced in all of North, Central, and South America. The field supplied oil to 90 percent of the existing refineries in Kansas and Oklahoma and had led to the construction of a dozen new refineries and several new pipelines in Oklahoma. The three largest pipeline companies--Prairie Oil and Gas, Texas, and Gulf--were carrying 40,000 barrels of crude oil a day from the Cushing field. Two hundred tank cars left Cushing each day transporting crude oil to out-of-state markets.

Oklahoma led the nation in the production of crude oil in 1915. The majority of this oil came from the Cushing field's production of 49,079,704 barrels from its 1056 wells. The field yielded 17 percent of the petroleum sold in the United States during 1915 and produced 3,000,000 barrels more than the total production of Oklahoma in 1908, when it was the nation's principal oil-producing state for the first time.

New discoveries in 1915 near present-day Oilton and Pemeta, both located on the northern edge of the Cushing field, and Shamrock, located on the southern edge, helped Oklahoma to rank first among oil producing states in 1916. But by June, 1916, the immense quantities of oil had ceased to gush forth and its unprecedented production began to diminish. Oklahoma again produced more oil than any other state in 1917, but the Cushing field contributed less of the state's total output.

The Cushing oil field of Oklahoma dominated the petroleum industry of the United States for eight years (1912-1920). Although its production began to decrease by 1916, the Cushing field forestalled the development of other important fields in Oklahoma until the end of World War I.(19)

Okmulgee County provided several early discoveries in Management Region 3. Drilling activity began in 1906 and by 1907, the Morris Pool was opened with a well that flowed at the rate of 5,000 barrels per day. The Tulsa Fuel and Manufacturing Company drilled the discovery well in Section 20-T13N-R14E to the Morris Sand at a depth of 1,486 feet. The Okmulgee and Lucky Pools, opened in 1906, paved the way for leasing of Indian lands in Okmulgee County. Following those initial discoveries, several promising fields were developed prior to 1910 including Bald Hill (1908), Preston (1909), Schulter (1907), Salt Creek-Gypsy Hill (1910), and Tiger Flats-Turkey Pen Hollow (1908).

Bald Hill was opened by Joe Burns and Lou Caton near the center of the NE¼, Section 6-T14N-R14E at a depth of 1,661 feet and came in at 400 barrels

per day. This was the first well in the Bald Hill Pool. Opened by the Smith and Swan Oil Company, the Coalton Pool discovery well was located in Section 22-T12N- R13E and flowed at a rate of 60 barrels daily. It was known as the "picnic well" because the company held a picnic at the well site the day it was discovered. The Henryetta Pool discovery well was drilled in 1910 and produced 600 barrels of oil daily followed by a gas well of 80 million cubic feet per day. Development in the Henryetta Pool continued to 1913 when a total of 471 wells were completed.

Following these important discoveries in Okmulgee County were others opened after 1910 including Beggs (1910-1911), (French (1912), Natura (1914), Youngstown (1915), Wilcox (1919), Hoffman (1917), Hector (1918), Spencer (1917), Phillipsville (1920), Olean (1920), and Pollyanna (1921). The most significant fiends among this group were Beggs, Wilcox, Hoffman, and Olean. More than 40 wells were drilled in the Beggs Pool in a period of two years and some produced 1,000 barrels per day. The Wilcox Sand was first extensively developed in this pool at a depth of approximately 2,500 feet. The field remained active until 1919 when it declined rapidly. About 6 miles west of Beggs, H.F. Wilcox drilled the first well to the sand bearing his name. It produced up to 1,400 barrels per day. The Sterling Oil and Gas Company opened the Hoffman Pool in Section 30-T12N-R14E at depths of 2,800-2,850 feet and it flowed at a rate of 30-90 barrels of oil per day. Oklahoma Natural Gas and the Olean Petroleum Company were active in opening the Olean Pool in Section 11-T15N- R12E. It produced 15-150 barrels of crude oil per day.(20)

Prior to 1930 there were five counties in Management Region 3 that contained no petroleum activity: Adair, Cherokee, Delaware, Ottawa, and Mayes. In addition to the major fields and pools heretofore discussed, a significant number of minor pools were discovered in the other fourteen

counties of Region 3. These will be summarized on a county-by-county basis in alphabetical order.

The Wimer Pool, opened in 1914, was the only productive area in Craig County. Developed by the Kansas-Oklahoma Oil and Gas Company, it produced from seven different horizons at a rate of 20 barrels of oil and 1-3 million cubic feet of gas per day.

In addition to the Cushing Field, a 32 square mile area which included the Drumright, Shamrock, Pemeta, Markham, Oilton, and Olive Pools, were six other pools in Creek County: Bristow, Keifer, Kellyville, Mannford, Mounds, and Sapulpa. The Sapulpa Pool was a northwestern extension of Glenn Pool. It was opened in 1909 and produced at a rate of 100 barrels of oil and 5-10 million cubic feet of gas daily. Development in the Keifer area was also due to the Glenn Pool success. It produced gas and oil from twelve different sands and was opened in 1910. Aiko Oil and Gas Company opened the Kellyville Pool in 1915 in Section 11-T17N-R10E. It produced from seven different formations at a rate of 50-200 barrels per day. The Mounds Pool was developed in 1915 by Smith and Swan in Section 20-T16N-R12E. Gas production at 2,100 feet supplied the town of Mounds with gas for lighting and heating for ten years. J.J. Curl of Bartlesvile drilled the first well in the Bristow Pool in 1905 in Section 29-T16N-R9E. The hole was plugged and abandoned at 1,000 feet. The first well in Bristow Pool to discover gas was drilled in 1906 by Mattson, Barnes, and Freeland to a depth of 1,395 feet. This gas was converted into Bristow's town supply and used during the cotton ginning season. In the summer of 1907, Barnes and Freeland opened a second gas well in Section 2-T15N-R9E which produced 1 million cubic feet per day at a depth of 2,485 feet. It was also used by the town of Bristow. A later pool was opened near Mannford in 1922. Initial production was 1,000 barrels of oil per day at a depth of 2,966 feet.

McIntosh County produced four minor pools up to 1930. The first well in the county was drilled in 1889 near Eufaula to a depth of 2,575 feet. Oil and gas were produced from three different horizons. The Gladys-Belle Oil company opened the Onapa Pool in 1912. It was a gas pool which produced 1-5 million cubic feet per day at a depth of 1,800 feet. The Kusa Pool was discovered in 1914 by the Gundrich Oil Company in Section 6-T11N-R14E. It produced from three horizons at a rate of 400 barrels of oil per day. Sinclair and White and Simpson Fell Oil developed the Stidham Pool also in 1914.

Several small pools were developed in Muskogee County prior to 1930: Boynton (1914), Haskell (1909), Council Hill (1919), Jolly-Patton (1920), Summers (1914), Timber Ridge (1910), Keefeton (1925), Terra-Oklahoma (1919), Transcontinental (1918), Wainright (1910), and Yahola (1914). Among the most important of this group were Boynton discovered by H.H. Galbreath. His well produced 5-10 million cubic feet of gas at 1,800 feet. First oil producer created a great deal of excitement in Muskogee County with up to 150 barrels per day.

Prairie Oil and Gas drilled the first well in Council Hill Pool, located 3 miles northeast of town by the same anme. This well was completed in April of 1911. Timber Ridge initially produced 800 barrels of oil daily, but dropped dramatically to 20 barrels by 1930. Yahola was opened by the Gladys-Belle Oil Company in Sections 21, 28, and 33. It was primarily a gas producer with a rate of 10-40 million cubic feet per day.

After the early wells in the Chelsea area in the 1880s, Nowata County produced several pools in the period up to 1930. The Coody's Bluff-Alluwe-Chelsea District was one of the most active pools in Oklahoma in 1905-1906. A total of 1490 wells were drilled, all of which produced various quantities of oil. The first activity in the Delaware-Childers Pool was in 1908 and by 1911 there were over 475 wells completed with an initial production of 120 barrels

per day. By 1916, however, the field was almost exhausted. Another one of the first pools in Nowata County was the Lenapah District. It was opened in 1904 by the Bearea Oil and Gas Company in Section 2-T27N-R15E and flowed at 500 barrels per day at a depth of 982 feet. Other minor pools in Nowata County included Elliott (1909), Adair (1911), and South Coffeyville (1915).

The first pool to be opened in Okfuskee County was Paden in 1914. Prairie Oil and Gas drilled the discovery well in Section 8-T12N-R7E at a depth of 2,000 feet. Its initial production was 25 barrels of oil and 7 million cubic feet of gas per day. Most of the other pools in the county were opened in the 1920s: Deaner-Clearview (1920), Garrison (1922), Josey (1923), North Baltimore (1920), Okemah (1921), Okfuskee (1917), and Weleetka (1913). The most significant of these was the Deaner-Clearwater, where of the first 50 wells drilled, 36 produced oil and 14 gas in paying quantities. Dr. J.J. Deaner of Okmulgee opened the area and established a dental clinic with the proceeds. Clearwater was developed by the Riverland Oil and Gas Company.

In addition to the giant Burbank Field in Osage County, there were more than twenty other pools. Most were developed in the late teens or early twenties: Hominy (1916), Myers Dome (1916), Gilliland (1919), Nelagoney (1917), Pawhuska (1919), Pearsoma (1919), Pershing (1917), Pettit (1919), Prue (1920), South Elgin (1915), Fairfax (1925) and Wynona (1917) were among the most prolific producers. The I.T.I.O. opened the Pershing Pool in March of 1917 in Section 6-T24N-R10E. Carter Oil brought in the largest well in January of 1919 in Section 6-T24N-R10E with an initial production of 5,500 barrels per day. Leases in the Pershing Pool sold for $5,000 to $40,000 per quarter section (160 acres). Pawhuska was opened by the New England Oil and Pipeline Company at a depth of 2,292 feet with initial rate of 150 barrels per day. Marland Oil paid $620,000 for 160 acre lease in Section 34-T25N-R9E which was the highest paid for a quarter section up to 1920. One of the best

oil and gas producers in Osage County was the Pettit Pool opened by Marland Oil and Refining Company in Section 20-T23N-R8E. Marland paid $85,000 for this first quarter section lease in the Pettit Pool. Forty-three producing wells were located in the pool and leases ranged from $100,000-$150,000 for 160 acres. Another good gas producer in the county was the Prue Pool which flowed at 20-65 million cubic feet per day in the 1920s.

The Cleveland Field occupied some 50 square miles in the eastern section of Pawnee County. Additional pools in the area included Ralston (1909), Terlton (1912), Morrison (1917), Lauderdale (1915), Keystone (1919), Maramec (1920), and Hallett (1922). Ralston was opened by J.M. Critchlow in Section 3-T23N- R5E. Terlton produced from eight horizons at an initial rate of 1,500 barrels of oil and 1 million cubic feet of gas per day. The discovery well for Lauderdale was drilled by Charles Page in Section 34-T20N-R8E at a depth of 1,400 feet for 2 million cubic feet of gas. Hallett was opened by the Turner Investment Company on the McMillan Farm in NE corner of SW¼ of Section 3-T20N-R7E at a rate of 60-75 barrels per day. Morrison was opened by Robert Watchorn in Section 33-T23N-R3E and it became both an oil and gas pool. Keystone was opened by Pomeroy and Hamilton in Section 25-T20N-R9E and it produced from eight different formations.

Early pools in Rogers County included Claremore (1904), Oologah (1906), Vinita (1910), Talala (1913), Catoosa (1913), and Inola (1913). Later pools discovered in the 1920s were Sageeyah 91920) and Taneha (1923). Catoosa became a good gas producer at 10-15 million cubic feet per day. Claremore was the best oil producer at 20-60 barrels per day at a depth of 550-825 feet. Most of these wells were less than 1,000 feet and were small in size.

Sequoyah County had one major gas pool that produced at an initial rate of 3½ million cubic feet per day. It was located in the Webbers Falls-Muldrow-Vian District.

Tulsa County yielded a number of oil and gas wells throughout the period up to 1930. Bird Creek-Flat Rock was one of the early developments in Oklahoma being opened in 1906 shortly after Tulsa's first field at Red Fork. Over 1,000 wells were drilled and several produced a hundred barrels per day. Jenks, Broken Arrow, and Tulsa Pools were extensions of Red Fork and opened in 1901. The Bixby Pool was a small, but productive area. Many of the wells came in at 400-800 barrels a day. Collinsville was a 25 square mile gas pool which produced enough gas to power the zinc smelters in the town of Collinsville. The Sand Springs Pool was developed in 1916 by Charles Page and owned by the Sand Springs Orphanage. Known as "Tulsa's back yard pools", the Bruner-Vern District was opened in the early 1920s. The discovery well in the Bruner Pool was drilled by the Shaffer Oil and Refining Company and came in at 460 barrels. Charles Page completed a gas well in same area for 15 million cubic feet per day. In 1922, Munn Brothers opened the Country Club Pool, 2 miles west of the Tulsa Country Club. Initial production was 200 barrels of oil and 7 million cubic feet of gas per day. Additional pools in the county included Sperry (1919), Turkey Mountain (1922), and Sunray-Oakhurst (1925).

Wagoner County had a dozen pools opened prior to 1930. One of the first wells drilled in the county was in the Coweta Pool in Section 11-T17N-R16E with initial production of 720 barrels per day. Mission Oil Company developed the Mission Pool in 1914 when it opened the first well in Section 12-T17N-R15E. A gas pool was developed near Redbird in 1915 in Section 8-T16N-R16E by Wilson-Rhodes and Gillispie. In 1919 the Okay Pool was opened on th Maney Brothers Ranch. It produced a high grade lubricating oil at 1,000 feet. B.C. Goble opened the Stone Bluff Pool in 1915 in Section 5-T16N-R15E with initial flow of 600 barrels a day. Striker was opened in 1917 and eventually had 14 wells producing 10-150 barrels per day. On the Seltzer Farm in Section 32-T18N-R16E, Phillip Boyle opened the Seltzer Pool in 1923. It

was both an oil and gas producer. Further Wagoner Crounty development included Oak Grove (1920), Oneta (1916), Webster (1917), and Gillette (1924).

Earliest activity in Washington County occurred in 1894 when Cudahy Oil leased 200,000 acres in the vicinity of Bartlesville. By 1904 more than 100 wells had been drilled in the Dewey-Bartlesville Pool including the Nellie Johnstone No. 1. Initial production was at 1,000 barrels per day. Several pools were opened around the time of statehood in 1907 including Canary-Caney Pool, a gas field; Copan, an area of 8 square miles which produced over 2,000 wells during the next decade; and Hogshooter, one of the largest gas pools in the state. Gas from the latter pool was piped to Bartlesville, Dewey, and Miami for use in smelters. Later pools to be discovered included Ramona (1911), Ochelata (1910), Vera (1915), and Oglesby (1919). All the preceeding data were taken from various Oklahoma Geological Survey Bulletins, especially the one by Mills-Bullard.(21)

In summary, Management Region 3 was a singificant area in the evolution of the petroleum history of Oklahoma. Contributions and key activities of Region 3 during the chronological period of this project are outlined:

(1 drilling for oil in Oklahoma occurred near Chelsea in
:lahoma Geological Survey reports.

(2 . well in Oklahoma (Nellie Johnstone No. 1) was
:ar Bartlesville.

(3) First major oil fields in Oklahoma were opened in Region 3: Red Fork (1901), Cleveland (1904), and Glenn Pool (1905).

(4) First long distance pipelines from Oklahoma to the Gulf Coast and to Whiting, Indiana were constructed as a result of the Glenn Pool Field.

(5) In 1906 Glenn Pool production placed Oklahoma ahead of all other states in the Mid-Continent Field and second only to California in the nation.

(6) By 1907, year of statehood, Glenn Pool and other Oklahoma fields had moved Oklahoma to the number one producing state in the country.

(7) Glenn Pool and Cleveland opened new marketing outlets for Oklahoma oil, especially as the Texas and Louisiana Fields began to decline.

(8) Glenn Pool oil was rich in gasoline content, easy to refine, and excellent for fuel oil thereby creating a shift of oil for illumination to the primary use of petroleum for energy.

(9) Region 3 oil and gas fields stimulated the influx of capital into Oklahoma that would make continued development of the petroleum industry possible.

(10) Region 3 fields created a national awareness of Oklahoma as an oil producing state and brought new industries and population to the state.

(11) Glenn Pool, Cleveland, and Red Fork stimulated the development of other major fields and pools in Region 3 as well as throughout the state.

(12) Osage Nation received over 45 million dollars in royalties from petroleum in Osage County and improved their socioeconomic status as citizens of Oklahoma.

(13) Cushing Field helped Oklahoma to lead the nation in the production of crude oil during the years, 1915-1917.

(14) Cushing Field produced 17 percent of petroleum sold in the United States in 1915.

(15) Cushing Field supplied crude oil to 90 percent of existing refineries in Kansas and Oklahoma in 1915.

(16) Development of the Cushing Field resulted in the construction of 50 new refineries, 30 gas processing plants, and numerous new pipelines.

(17) Region 3 oil and gas fields forced oil companies to erect new and bigger storage facilities replacing the open earth pits and small redwood tanks.

(18) Region 3 oil and gas fields brought to Oklahoma a significant number of national companies such as Prairie Oil and Gas and Tidal Oil (subsidiaries of Standard Oil), Gulf, Texas Oil (Texaco), Roxana Petroleum (Royal Dutch Shell), and others.

(19) Region 3 petroleum activity spawned the development of several Oklahoma-based companies which have continued to influence petroleum history in the United States. Among these are Phillips, Skelly, Cosden, Sunray DX, Sinclair, Mid-Continent, and McFarlin.

(20) Numerous independent petroleum companies flourished as a result of Region 3 development. Included were Indian Territory Illuminating Oil Company, Marland Oil (later to become Conoco), Aiko Oil and Gas, Gladys-Belle Oil Company, and Mission Oil Company.

(21) Region 3 production resulted in the emergence of boomtowns throughout the area including Kelleyville, Keifer, Oilton, Shamrock, Drumright, and Pemeta.

(22) Existing towns grew in population such as Cushing, Sapulpa, Cleveland, Red Fork, and Glenn Pool.

(23) Petroleum production in Region 3 helped make Tulsa the "Oil Capital of the World." A new bridge was constructed across the Arkansas River as a result of the Red Fork discovery and new hotels were constructed to lure oil companies to the city.

(24) Region 3 fields were significant in the area of conservation of natural resources. The Oklahoma legislature enacted in 1915 the state's first oil and gas conservation statuses because of overproduction and waste in the Cushing Field. In 1917 an Oil and Gas Department was established within the Oklahoma Corporation Commission which issued new conservation regulations to protect crude oil and natural gas both before and after being brought to the surface.

(25) Region 3 produced a number of outstanding oil men who became financiers and philanthropists including Charles Page, Thomas Gilcrease, J. Paul Getty, and John Mabee.

Footnotes

1. Bess Mills-Bullard, Ed., "Digest of Oklahoma Oil and Gas Fields," Oklahoma Geological Survey Bulletin No. 40, Vol. 1 (July, 1928), p. 129.
2. Ibid., p. 113.
3. Kenny A. Franks, The Oklahoma Petroleum Industry (Norman: University of Oklahoma Press, 1980), pp. 16-20.
4. Carl Coke Rister, Oil! Titan of the Southwest (Norman: University of Oklahoma Press, 1949), pp. 83-84.
5. Carl B. Glasscock, Then Came Oil: The Story of the Last Frontier (New York: Bobbs-Merrill, 1938), p. 135.
6. Glenn S. Dille, "Economic Geology: Oil and Gas in Tulsa County," Geological and Mineral Resources of Tulsa County, Oklahoma Bulletin No. 69 (1952), p. 122.
7. Rister, Oil! Titan of the Southwest, p. 88.
8. Franks, The Oklahoma Petroleum Industry, p. 40.
9. Kenny A. Franks, The Rush Begins: A History of the Red Fork, Cleveland, and Glenn Pool Oil Fields (Oklahoma City: Oklahoma Heritage Association, 1984), p. 34.
10. Rister, Oil! Titan of the Southwest, p. 89.
11. J. Vere Frazier, Jr., "History of the Glenn Pool Field," (Master's Thesis, University of Oklahoma, 1951), p. 15.
12. Ibid., p. 20.
13. Franks, The Rush Begins, p. 72.
14. Franks, The Oklahoma Petroleum Industry, p. 46.
15. Gerald Forbes, "History of the Osage Blanket Lease," Chronicles of Oklahoma, Vol. 19 (March, 1941), pp. 70-81; and Charles G. Forbes, "The Origin and Early Development of the Oil Industry in Oklahoma," (Ph.D. Dissertation, University of Oklahoma, 1939), pp. 114-117.

16. Rister, Oil! Titan of the Southwest, p. 196-197.

17. H.T. Beckwith, "Osage County," Oklahoma Geological Survey Bulletin No. 40, Vol. 3 (July, 1930), pp. 246-247.

18. Ibid., p. 246.

19. Heather M. Lloyd, "Oklahoma's Cushing Oil Field," (Master's Thesis, Oklahoma State University, 1976).

20. Mills-Bullard, pp. 101-276.

21. Ibid.

PROPERTY TYPE ANALYSIS

Drilling Rigs

Drilling rigs as a class of historic resources associated with energy development are divided into two types based on design: cable tool and rotary. The earliest form of drilling rigs was the cable tool type which consisted of various parts represented in Figures 24 and 44. The parts of the cable drilling rig are classified under four headings: (1) power source, (2) rig wheels, (3) cables and cordage, and (4) drilling tools.

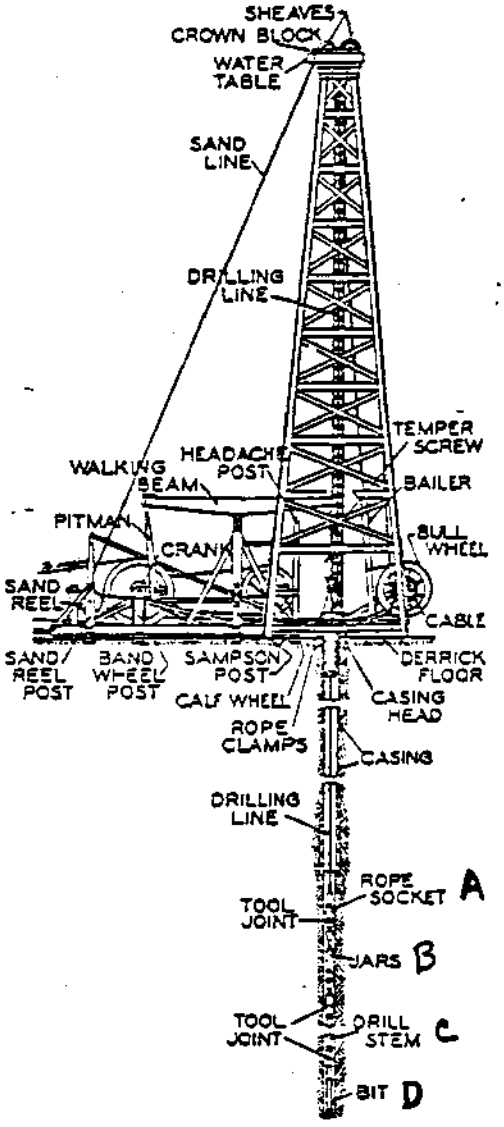
Power sources varied. Most of the early rigs used some system of manpower to raise a pole called a walking beam that dropped the bit and dug out more soil. Others managed to contrive a system that enabled a horse to supply the power in a method that resembled a threshing machine. The standard power source was a single, horizontal-cylinder steam engine, though electric motors and internal-combustion engines were also used in cable drilling. Most cable drillers preferred to use a steam engine because of its superior flexibility. In most oil fields, there was an abundance of cheap fuel so that steam power could be cheaply provided. The boiler plant was usually erected near the well so that it could be under the immediate control of the driller. For drilling with the standard cable rig, it was customary to provide two boilers of from 30 to 70 rated horsepower.

The rig wheels included the band wheel (No. 22), bull wheels (No. 27), calf wheel (No. 30), sand reel (No. 31) and crown block (No. 16). These wheels provided braking surfaces and a means of applying power in the various operations of hoisting and lowering the tools, casing, and bailer. They were built of wooden segments, cants and arms, rigidly nailed or bolted together. They were bolted to cast-iron gudgeons which provided a means of fastening them to the wooden or metal shafts on which they revolve.

Cables used in the early rigs were either hemp, manila sisal, or steel wire. The most important cable in the standard rig was the drilling cable which served to connect the drilling tools in the well with the power at the surface.

The string of cable drilling tools consisted of several parts securely fastened together by tapered screw, or pin joints. The rope socket (A) which connects the tools with the drilling cable is screwed to the top of a pair of massive telescoping metal links called "jars" (B). These in turn connect at their lower end with a long cylindrical steel "drill stem" (C), and the latter is screwed to the top of the drilling bit (D). The total length of the string of cable tools so connected was usually about 40 feet. The aggregate weight depended on the size of the hole to be drilled; for a 10-inch hole it averaged about 3,600 pounds.

Cable drilling bits were of several types differing slightly from each other in form and purpose. The bit is made of a heavy bar of steel or iron, from 4 to 11 feet long, and somewhat wider than it is thick. It is dressed to a blunt edge on one end and terminates in a tapered "tool joint" at the other. In the course of normal operations, the workers would drill for a foot or two, then exchange the then dull bit for a bigger reaming instrument, sharpen the bit, and pump out the hole with a bailer or pump. Stationary cable tool drilling rigs with their pyramid-shaped wooden derricks were used from ca. 1900 to the mid-1920s when the portable cable tool rig became standard.



(After J. E. Brantly in "Elements of the Petroleum Industry," courtesy of Am. Inst. Mining Met. Eng.)

FIG. 44.—General features of the American standard cable drilling rig.

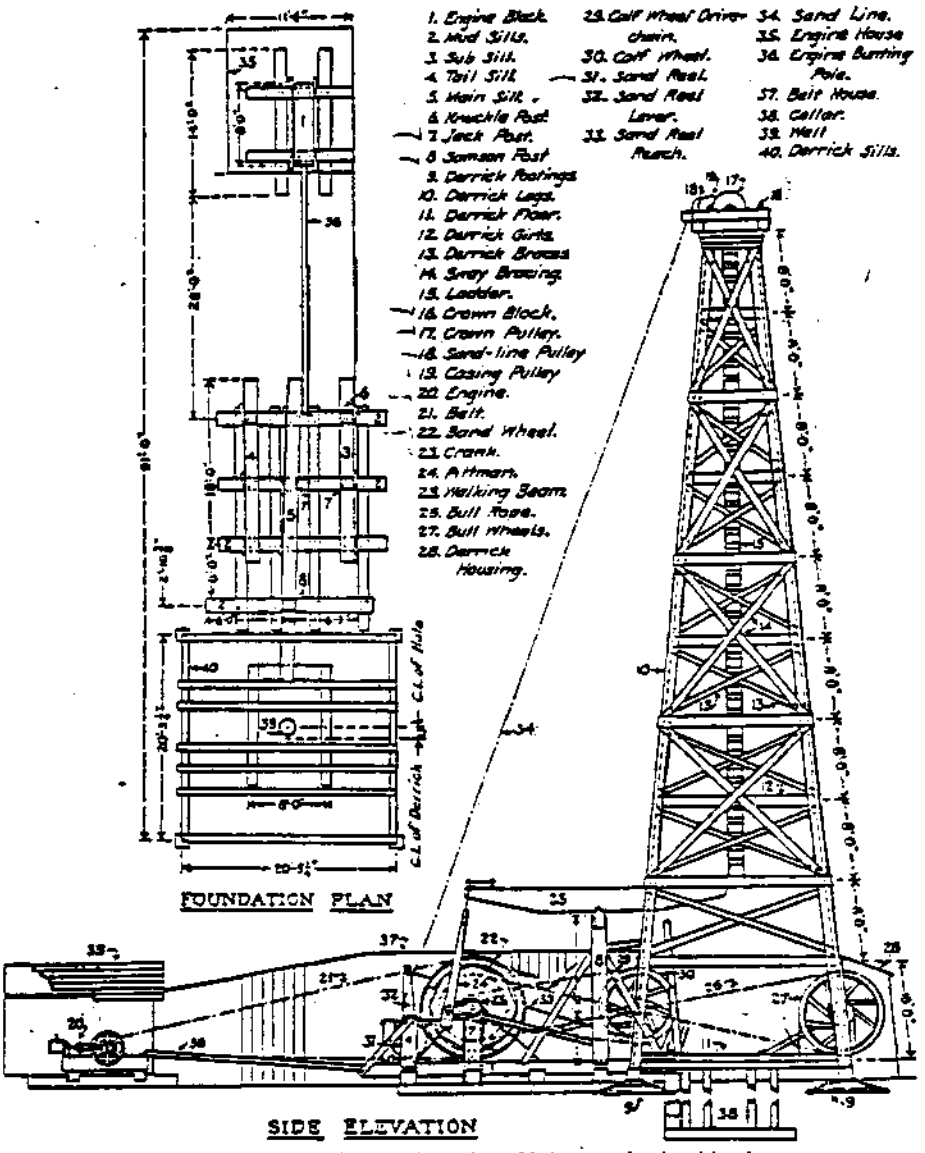
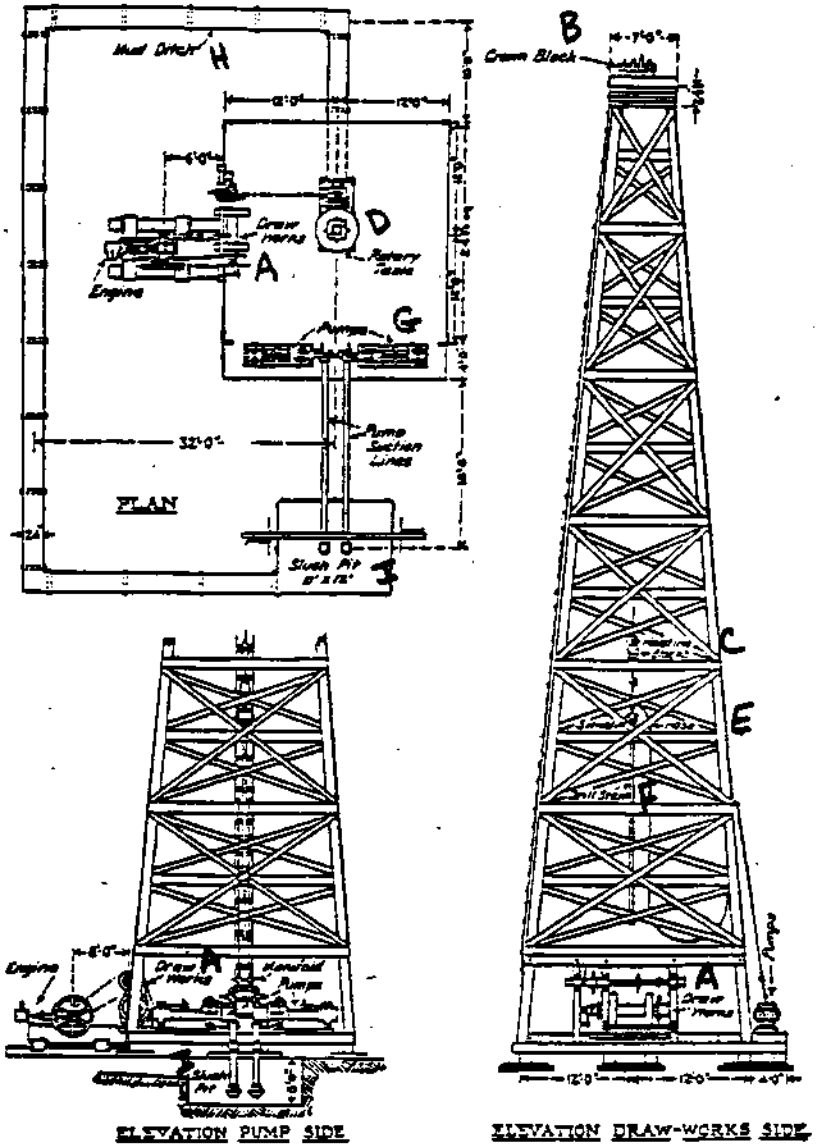


FIG. 24.—Plan and elevation of an 82-ft. standard cable rig.

Rotary drilling rigs were first introduced in the mid-1920s. The components used in supporting the drill column and handling drill pipe included the draw works (A), the crown block (B), the hoisting block and hook (C), and the hoisting cable. A common arrangement of the several elements of the hoisting gear in a conventional rotary rig are shown in Figure 26. The rotating elements of the rotary drilling rig are: (1) the rotary table (D); (2) the swivel (E); and (3) the drill column (F), which includes the "kelly", the rotary drill pipe, its couplings, tool joints and protectors, the drill collar, and drilling bit. The circulating system of the rotary rig is designed to force drilling fluid down through the drill column, back to the surface through the annular space about it, and through various surface facilities designed to separate drill cuttings and to condition and store surplus fluid. The essential elements that are a part of the rotary rig proper include: (1) usually two slush pumps and their suction lines and manifold (G); (2) the rotary hose; and (3) the swivel. Other essential elements, apart from the drilling rig proper, are the mud ditch (H) and the mud pit (I). The major difference between the cable tool rig and the rotary rig was that the rotary method drilled a borehole with a bit attached to a rotary column of steel pipe.

Drilling rigs as a property type were the major pieces of equipment used in the production stage of energy development in Region 3 from 1897 to 1930. The earliest form of drilling rig used in Region 3 fields was the cable tool type powered by various methods of animate and inanimate power sources. Rotary rigs were first introduced in Region 3 in the mid-1920s. Drilling rigs constituted the phase of the petroleum industry which followed the exploration stage. Once it had been determined there was a possibility of petroleum below the surface, drilling rigs were either built or moved to that area in Region 3 and drilling operations began.

To be eligible for listing in the National Register of Historic Places, drilling rigs should retain integrity of design, setting, and materials. For the cable tool type, various components must be present. Included are power source, rig wheels, walking beam, gearing, drilling cables, and drilling tools. For the rotary rig, various elements must be present including hoisting gear, drill column, draw works, crown block, hoisting cable, rotating aspects (table, swivel, kelly, drill pipe, drill collar, and drill bit), and circulation system components (slush pumps and rotary hose). In addition, the cable tool rigs must be constructed of the original materials including wooden rig wheels; cast-iron gudgeons; wooden or metal shafts, cable lines of manila sisal, hemp, or steel wire; and drilling bits of steel or iron. Cable tool rigs were usually built with wooden derricks (redwood was preferable) and wooden derrick floors. Walking beams of cable tool rigs were also of redwood or oak. Rotary rigs were of steel construction. The rig must be situated over a well hole on an oil lease. The rig should be located in a field where it was used prior to 1930. However, as these devices were portable in nature, they may have been moved several times.



(Redrawn, with additions, from illustration in National Supply Co.'s catalogue.)

FIG. 26.—Plan and elevations of a rotary rig.

Derricks

Derricks as property types associated with energy development are an integral part of the drilling operations in the production of oil and gas. All systems of drilling require the use of some type of derrick or mast to support the drilling equipment in working position and to provide some form of overhead structure from which may be suspended hoisting gear with which to lift the heavy tools and casing.

A derrick is a four-sided, truncated pyramidal structure of square horizontal cross section, comprising four upright legs forming the corners of the structure, tied together by a series of horizontal girts and inclined braces. The four sides of the derrick are battered to a slope of from 1 in 5 to 1 in 12, depending upon the height and size at top and bottom. The derrick in mounted on a substructure comprising a series of sills supported on short posts, which rest in turn upon timber footings or concrete walls or piers. The working floor of the derrick, also fastened to the derrick sills, is of heavy plank. The larger and heavier items of drilling equipment rest on special supports incorporated in the substructure.

Derricks may be constructed either of wood or steel. Common pine or hemlock was generally used in the construction of early wooden derricks. Harder woods, such as oak, beech, or maple, were used at times in certain posts, sills, wheels, and other members subjected to great strain or wear. Steel derricks may be constructed either of the usual structural steel angles, channels, I beams, or of tubular forms. For housing the lower part of the rig to protect the crew and equipment against the weather, galvanized corrugated sheet-iron or wooden sheathing may be used.

Derrick types are classified according to construction materials: timber derricks, structural steel derricks, tubular steel derricks, turnbuckle rigs, and drilling masts. Practice in the construction of timber derricks in the early days of drilling was based largely upon precedent (Figure 30). Little or no scientific design, in which different members are proportioned to the loads applied, entered into their construction. Legs of wooden derricks were usually constructed by nailing 2-inch planks together to form a right-angled trough-shaped member. In heavy derricks each leg was often constructed of one 2 X 10 inch plank and five 2 X 12 inch planks. The horizontal girts and inclined braces are also of 2 inch material, 6, 8, 10 or 12 inches wide, depending upon the place of the member in the structure. The engine and belt house are built of 1 X 12 inch lumber on a light timber frame. For the walk connecting the derrick and enginehouse and the flooring throughout the structure, 2-inch planks were used.

Wooden derricks ranged in height from 74 feet to 136 feet. A 74 foot derrick requires about 20,500 board feet of lumber, a 122 foot timber derrick about 26,000 board feet, and a 136 foot derrick about 30,000 board feet.

Structural steel derricks were constructed of mild, low-carbon steel (Figure 35 and 36). The legs were constructed of heavy angles, the 6 x 6 x 3/8 inch and 5 x 5 x 3/8 inch sizes being used in the larger and heavier structures, while the girts are steel angles ranging from 5 x 5 x 3/8 inch to 2 1/2 x 2 1/2 x 3/16 inch in size, depending upon their position in the structure. A 24 x 122 foot derrick of this type weighs about 61,000 pounds.

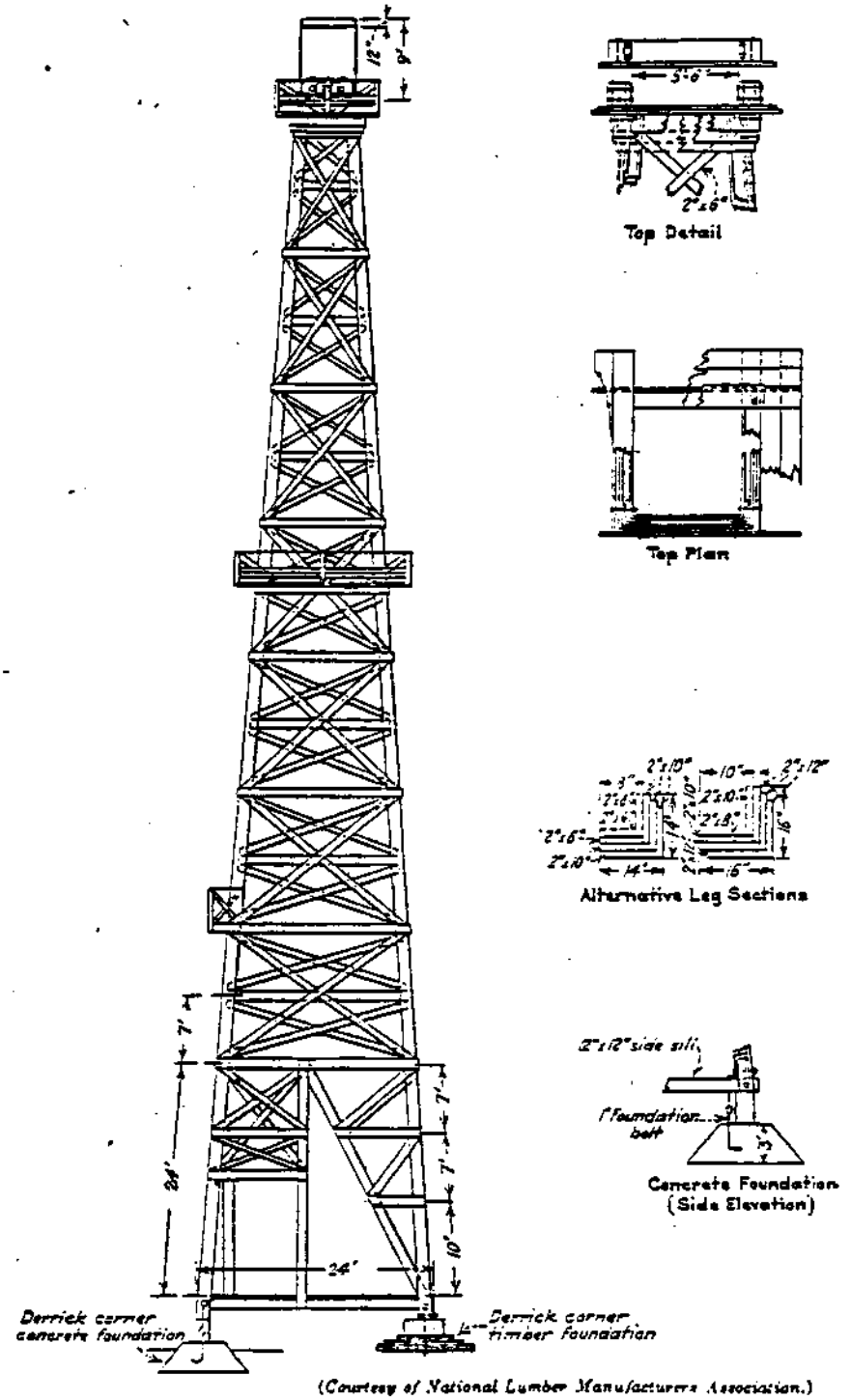
Tubular steel derricks made use of pipe forms in all parts of the structure. In heavy rigs, 4 inch 15 pound or 4 inch 27 pound pipe is used. The girts and braces were of 2 or 2 1/2 inch pipe. A 24 x 120 foot rig of this type weighs as much as 83,500 pounds.

Turnbuckle derricks are constructed of various combinations of wood and steel. Legs and girts are constructed of timber with braces made of round steel rods. At the leg joints all members are bolted together through metal angle plates.

Drilling masts vary from a simple A-frame structure supported in working position by cables to elaborate framed structures erected on their own supporting bases. Usually the mast will be designed to facilitate disassembly or folding of component parts, small and light enough to be moved on trucks. The mast was available in four sizes, the largest of which is 126 feet high, mounted on a base 16 feet square. A steel subbase 18 x 30 feet in size assists in elevating the mast and in providing the necessary well-head connections. The entire unit, mast and subbase, weighs about 40,000 pounds and is dissassembled in eight sections (see accompanying figures for various sizes and designs of derrick types).

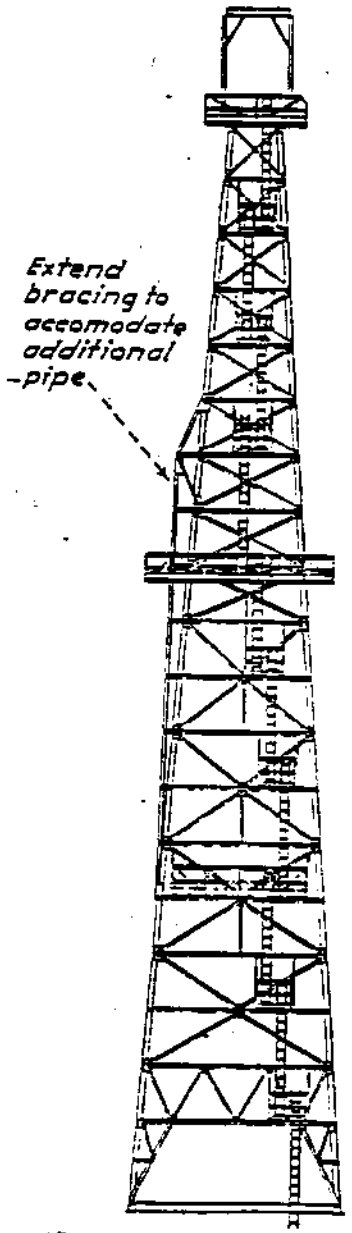
Derricks were an important property type in Management Region 3 prior to 1930 because they provided support for drilling oil and gas wells. Furthermore, this property type was a necessary piece of petroleum equipment for raising and lowering drillpipe and casing. Chronologically, timber derricks were first used in Region 3 and remained the standard rig until the 1920s when structural steel derricks became common. Until about 1930 size and construction materials of derricks in Region 3 varied according to depths of oil and gas wells. The American Petroleum Institute, as a phase of its standardization program, adopted standard specifications for a variety of sizes of oil-field derricks. Periodic revisions were made from 1930 to 1942 and now only nine types of derricks are recognized as standard. Prior to 1930, the petroleum industry had developed the practice of maintaining certain standard sizes for the bases of derricks, generally 20, 22, or 24 feet. Heights of derricks ranged from 66 feet to 178 feet depending upon the depth of the hole.

To be eligible for listing in the National Register of Historic Places, derricks should retain integrity of design, materials, and setting. Prior to about 1930, derricks varied in size according to the depth of the oil and gas well, however, the design of derricks should include the basic elements of four sides, pyramidal shape, and joined together by a series of horizontal girts and inclined braces. The four sides of the derrick should be battered to a slope depending upon the height and size at top and bottom. Some type of substructure with derrick floor must also be present on all types of derricks. In addition, derricks must be constructed of original materials which for timber derricks must be wood of various kinds ranging from pine to oak, steel derricks of mild, low-carbon steel, tubular derricks of 2 1/2 to 4 inch pipe of 15 to 27 lb. weight, turnbuckle derricks of wood and steel combination (legs and girts of wood and braces of steel), and drilling masts of steel. The derrick must be situated over a well hole on an oil lease and should be located in a field where it was used prior to 1930. Because some of the derricks used in the 1920s could be disassembled into sections, they may have been moved several times, especially the drilling mast types.



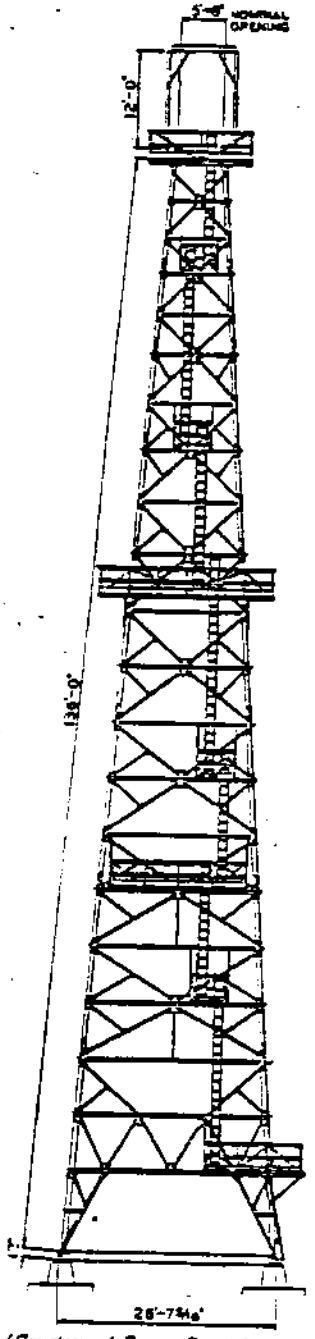
(Courtesy of National Lumber Manufacturers Association.)

FIG. 30.—Side elevation and structural details of a 122- by 24-ft. timber derrick.



(Courtesy of Emsco Derrick and Equipment Co.)

FIG. 35.—Bulge type of structural steel derrick.



(Courtesy of Emsco Derrick and Equipment Co.)

FIG. 36.—Standard 138-ft. A.P.I. structural steel derrick, illustrating *K*-type bracing.

WELL SITES

Producing wells may be classified in accordance with the method adopted for lifting the oil and gas to the surface. When formation pressures are sufficiently high, wells may be free-flowing, i.e., the oil and gas are produced by virtue of natural energy latent within the fluids as they exist within the reservoir rock. When gas pressures and volumes have declined so that the wells can no longer be made to flow their production through application of formational energy alone, it is possible to continue operation by flow methods by supplementing the formational energy with compressed gas forced into the well at the surface. The gas lift, gas displacement pump, or ejector, operate on this principle. Artificially stimulated methods of flowing wells require that the wells be equipped with a column of tubing inside the well casing. Compressed gas is forced into the well at the casing head under sufficient pressure to cause it to flow down between the casing and tubing. At the lower end of the tubing, it becomes a part of the stream of formational oil and gas, flowing with the latter up through the tubing to the surface. The gas so introduced into the ascending stream of fluid becomes entrained in the oil, lightens or aerates the oil column, and by its efforts to expand, carries the oil with it to the surface. In this type of artificial stimulation, pneumatic pumps, valve mechanisms, accumulation chambers, and additional auxiliary tubing must be a part of the well head equipment.

When natural and induced flow methods of production fail, the producer must resort to the use of artificially developed energy in lifting oil to the surface. Among the mechanical devices employed for this purpose are the various types and styles of oil well pumps which may be broadly classified into three groups: rod-actuated plunger-displacement pumps, fluid-actuated plunger-displacement pumps, and centrifugal pumps. A large percentage of all producing wells prior to 1930 were equipped with rod-operated plunger pumps. Pumps of this type, adaptable to a wide variety of conditions, were used during the latter period of productivity of wells when the rate of production declined.

Prime movers used in pumping early oil wells included steam and internal-combustion engines. Transmission of power from the prime mover may be a belt or chain drive or gearing, with various intermediate countershafts, sprockets, wheels, crank pitman and walking-beam mechanisms available in many different designs. Each well may be equipped with its own individual power plant, or during the years prior to 1930, a multiple pumping system called a central power was used.

In the earlier years of production, the producer relied almost entirely upon the steam engine for development of power used in pumping wells. The horizontal single-cylinder reversible slide-valve type of engine of 15 to 25 hp. was used quite commonly in pumping early wells. Boilers used in steam development were portable or semi-portable and came in many types and sizes. Natural gas, fuel oil or crude oil was used as fuel. Boiler capacities of 30 to 40 rated hp. were sufficient for pumping service in most cases.

In terms of gas engines, a separate engine was most often used at each well, operating on gas drawn from a gas gathering and distributing system connecting all the wells. The most common type of gas engine used in pumping wells was the single horizontal-cylinder engine of either two-or-four cycle type of from 15 to 50 hp. A portable multicylinder gas engine of from

two to six cylinders was also used in early fields. They were available in units ranging from 25 to 150 hp., but the smaller sizes ranging up to 60 hp. were the most appropriate for pumping wells.

Well sites varied according to the natural environment surrounding them. Most generally, oil and gas wells were located in open, gently sloping, hill areas referred to by geologists as anticlines. The oil was trapped in sand layers beneath these dome-shaped hills. Up to 8-10 sand formations might be found in a producing area.

Well holes likewise varied in depth. In Oklahoma, oil and gas wells have ranged from 1,000 to 30,000 ft., however, most of the early wells in Region 3 were at depths ranging from 2,400 to 4,000 ft. Thicknesses of the formations also varied from 10-60 ft. Some of the major producing horizons included the Bartlesville, Oswego, Burgess, Mississippi, Sylvan, Red Fork, Glenn, Taneha, Dutcher, Layton, Viola, and Wilcox sands. Age of the rock formations were dated to the Pennsylvania and Permian geologic time periods.

Well sites were a significant property type in Region 3 because they were sources for oil and gas production. Exploration for wells in Region 3 began in the late nineteenth century and continued to 1930, the chronological termination for this project. The major wells in Region 3 were found primarily in the Cleveland, Red Fork, Glenn Pool, Osage, Cushing, and Okmulgee Fields.

To be eligible for listing in the National Register of Historic Places, well sites should retain integrity of setting and historical significance in the region. Although thousands of well sites existed prior to 1930, those well sites which were of prominent nature in terms of discovery and amount of production should be given top priority. Discovery wells in major fields or those with outstanding production records must be given strong consideration. The well site must be located on an oil lease and should be visible either in terms of a pump jack over a producing well or some form of past production such as a capped well with accompanying foundation for prior pumping unit. The property would be enhanced if one of the earlier types of pumping units was still present.

STORAGE FACILITIES

When first discharged from the well head, oil enters a "flow tank", two small tanks of this property type being placed at each well, with facilities for switching flow from one to the other. The size of these tanks will vary according to daily production of the well or wells and the frequency of the pipeline runs. Total storage capacity is usually production of three to seven days. From the flow tanks, oil is usually moved to a central dehydrating plant where larger "stock tanks" are provided for temporarily storing "wet" oil before it is admitted to "treatment tanks." Here it is heated or subjected to chemical treatment to remove water. After dehydration, the oil, freed of its impurities sufficiently to meet pipeline requirements, may be moved to "storage tanks", where the product is accumulated for a time before it is transferred to a pipeline company or other purchaser. At such times, the oil is gaged through a "shipping tank", especially arranged to facilitate sampling and measurement of oil volumes. Storage must also be provided by the shipping concern or refiner at the delivery end of the pipeline. Large "tank farms" designed for this purpose provide storage capacity for millions of barrels of oil.

Small-capacity tanks suitable for use as flow tanks were made of galvanized sheet steel, either corrugated or plain. Small and moderate-sized tanks used for lease storage purposes were also manufactured of sheet steel, the steel plates being riveted together to form sections with flanged joints, which can be bolted together in the field. These tanks ranged in capacity from 100 to 2,500 barrels.

The larger sizes of steel tanks, used for tank farm storage of petroleum, are constructed with steel plates assembled in the field. Such tanks are built of horizontal "rings" riveted together, one above another, and with bottom and roof plates also riveted. Two flanges made by bending structural-steel angles to the shell radius are used, one for connecting the cylindrical shell with the bottom and the other for connecting the shell with the roof. The shell, roof, and bottom are securely riveted to these flanges, and all joints are carefully caulked to prevent leakage. As standardized by the American Petroleum Institute, capacities of riveted-steel tanks range from 240 to 134,000 barrels. Prior to adoption of the A.P.I. standards, many tanks of 55,000 and 80,000 barrel capacity were constructed and are still in use. Diameters of these tanks range from 12 to 144 feet and heights range from 12 to 48 feet (See Figure 315 for 55,000 barrel riveted steel tank).

Another type of tank used for storage of crude petroleum in older fields is the wood-stave tank. Capacities of wood-stave tanks seldom exceeded 2,000 barrels, and the 500 and 800 barrel sizes were most common. The material is either pine or redwood, which was shipped to the site on which the tank was to be erected in the form of staves, so shaped that on being placed side by side around a circular wooden bottom they form a tank as high as the staves were long. The staves are held firmly together by metal hoops or bands that encircle the tank on its outer circumference. Tension in the metal bands is adjustable by means of turnbuckles or simple screw devices. The joint between the staves and bottom is mortised, tongue-and-groove fashion, and the normal design provides that the tank is slightly smaller at the top than at the bottom.

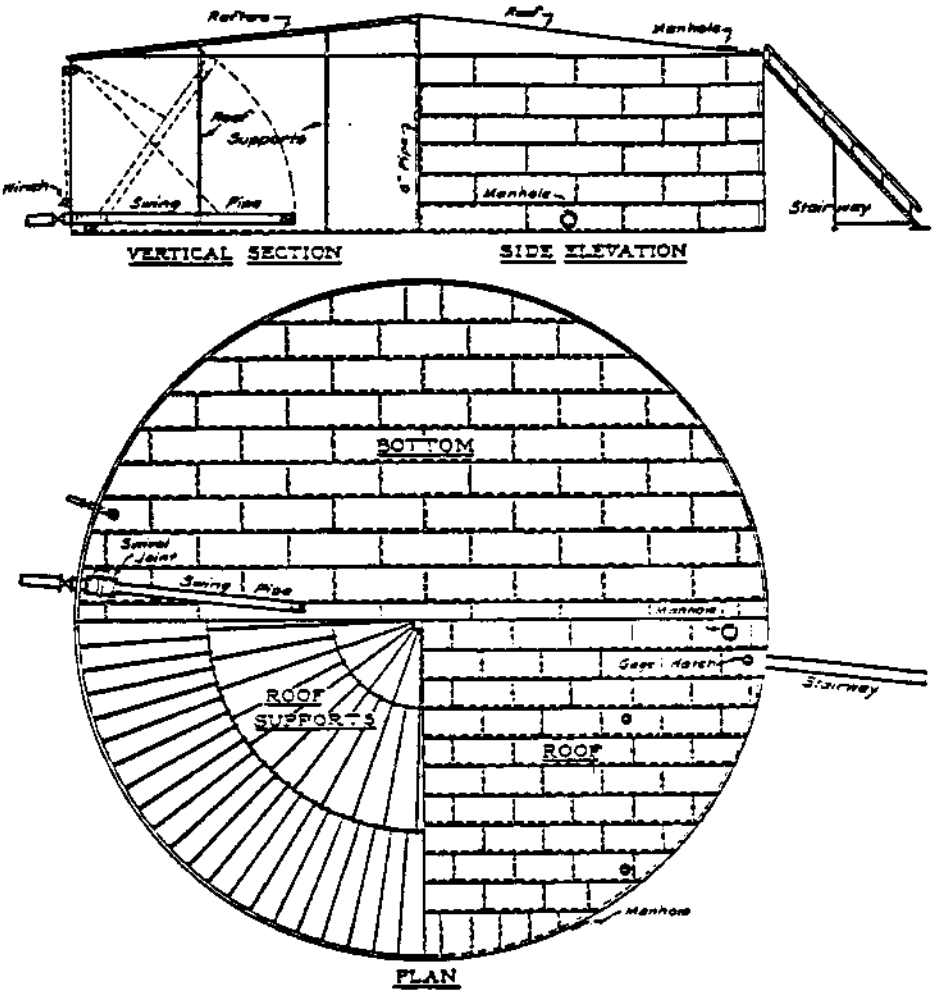


Fig. 315.—Plan and elevation of 55,000-bbl. riveted steel tank.

Storage tanks of all varieties were necessary items of equipment in Management Region 3 prior to 1930. Earthen reservoirs were used as temporary places of storage until tankage could be provided in most of the petroleum fields of Region 3. However, these storage facilities were inadequate and inefficient because of seepage losses and accumulation of ground and rain water. Petroleum producers in Region 3, therefore, found it imperative to provide permanent storage facilities to properly care for oil after it reached the surface. Necessity for provision of storage facilities arose as soon as the oil is discharged at the surface and continues throughout the various stages of settling, gathering, dehydrating, gaging, and shipping.

To be eligible for listing in the National Register of Historic Places, storage facilities should retain integrity of design, materials, and setting. In terms of design, the wood stave tanks should not exceed 2,000 barrels with the most common types being the 500 and 800 barrel capacity. They should be circular in shape with the tank slightly smaller at the top than at the bottom. The height of the wood stave tank will vary according to the length of the staves used.

Steel tanks range in size from the smaller flow tanks of up to 2,500 barrels to the tank farm type ranging from 55,000 to 134,000 barrels. Diameters and heights also varied, but usually fell within a range of 12 to 144 feet in diameter and from 12 to 48 feet high. The storage facilities must be constructed of original materials including redwood or pine usually for the wood-stave tanks, galvanized sheet steel for the smaller tanks, and riveted steel plates for the larger capacity tanks. Storage facilities must be located in a field or near a refinery where they were used prior to 1930. Flow tanks, or tank batteries, should be located near a well or wells drilled prior to 1930. Other storage facilities (stock tanks and tank farms) should be situated near a shipping concern, treatment plant, or refinery in use prior to 1930.

PIPELINES AND PIPELINE STATIONS

The most important factor in the transportation of crude petroleum is the pipeline. Pipelines prior to 1930 ranged in diameter from 2 to 12 in., most of the trunk lines being 6 to 12 in., whereas the gathering lines ranged from 2 to 6 in., depending upon the capacity required. Much of the pipe used in early lines was so-called "line pipe", a lap-welded steel pipe with threading coupling joints and longer-than-normal collars. Such lines were capable of withstanding operating pressures of 800 lb. or more. Individual joints averaged 20 ft. in length. After 1930, seamless and electrically welded pipe, capable of withstanding 1,200 lb. operating pressure, was widely adopted. Capacities of individual pipe lines ranged up to 50,000 barrels per 24 hours, depending upon the pipe diameter, oil viscosity, and pump pressure imposed. Pipe lines were usually buried 1 to 3 ft. deep in an earth-filled trench and were customarily painted or wrapped with corrosion-resistant material.

Pipeline booster or trunkline stations were necessary to force the liquid product along its pipeline route to the next station or terminal. These stations were spaced at distances apart ranging from 12 to 60 miles, depending upon the resistance to flow offered by the pipeline. The booster station complex generally consisted of one or more engine rooms, graphometer building, water tower, and pipelines. Buildings were either of brick or wood frame covered with corrugated metal, rectangular-shaped floor plan, and had gabled roofs. Oil pumps used at the booster stations may be either of the reciprocating or centrifugal type and were driven by steam, gas, or diesel engines or electric motors. Centrifugal pumps were used only in pumping the less viscous oils. Individual pumps ranged from 12,000 to 48,000 bbl. in daily capacity. Pump pressures imposed seldom exceeded 800 lb. per square inch. Rates of travel of oil through the pipeline ranged from 1 to 5 miles per hour. When reciprocating pumps were used, facilities were provided for storing oil at each pumping station along the pipeline. Pumps and engines were located in the engine room. Attached to the engine room exterior walls were breather/muffler facilities connected to the engines on the inside. Graphometer buildings housed instruments to measure and record density, temperature, specific gravity, and pressure needed to calculate flow. These buildings also contained control valves and meters to control flow of liquids. Booster stations served pipelines of varying size from 6 to 12 in. in early years, and up to 30 in. in later years. A variety of liquid products were pumped through the stations including crude oil, kerosene, and refined gas and oil.

Pipelines and pipeline stations became the major source of transporting oil and gas in Region 3 after 1905 when the first long distance pipeline was constructed connecting the Glenn Pool Field with Gulf Coast refineries. Within two decades, the region was crisscrossed with pipeline. They were the most economical means of transporting crude oil over either short or long distances. Most of the major companies in Region 3 had their own pipelines and booster stations including Prairie, Cosden, Sinclair, Empire, Magnolia, and Phillips.

To be eligible for listing in the National Register of Historic Places, pipelines and pipeline stations should retain integrity of design, materials, and setting. Pipelines may vary in diameter, although most of the historic lines would be 6 to 12 in. Materials should consist of lap-welded steel with threaded coupling joints and long collars. Pipelines should be located in

areas connecting wells with storage facilities or refineries. Pipeline booster stations should consist of an engine house, graphometer building, water tower, and pipeline system. They should be located along a pipeline running from an oil field to storage facilities or refinery. The booster station buildings should be one-story, of brick or wood construction materials, and possess certain features such as roof ventilators and breather/muffler facilities on exterior walls.

REFINERIES AND PROCESSING PLANTS

Collected crude oil and gas are of little use unless they can be transformed into usable products such as refined oils, solvents, fuels, and petrochemicals. The refining and processing phase of the petroleum industry is highly technical, which to the layman, appears to be a strange setting of illuminated towers and structures at night and an equally strange maze of pipes and tanks during the daytime. In reality, a refinery or processing plant is an organized and coordinated arrangement of manufacturing processes designed to produce physical and chemical changes in crude oil and gas, resulting in salable products. A refinery or processing plant includes the nonprocessing facilities, such as tankage for storage of crude oil and products, maintenance, and others, in order to maintain continuous operation.

Refineries and processing plants generally included a variety of buildings where numerous processing functions occurred. They included one or more engine rooms, a generator room, tool and work shop, boiler room, and office. In addition, there were structures used for distillation, cracking, treating, and blending. Finally, there were structures devoted to storage of crude oil and products, water towers, cooling towers, and pipelines.

The buildings in the complex were one-story, rectangular-shaped, and had gabled roofs with poured concrete foundations. Construction materials were wood frame covered with corrugated metal. Buildings generally contained roof vents, flexivent windows, and either sliding or double door openings. Engine and boiler houses always have breather/muffler systems attached to exterior walls.

Refineries and processing plants were vital industrial resources in Region 3 because they provided the necessary facilities for converting crude oil and gas into marketable products. Although crude oil and gas of Region 3 in the early years was transported to distant refineries for processing, numerous refineries and plants were eventually constructed in the area for providing salable products to be used in Oklahoma or shipped via pipeline to out-of-state markets.

To be eligible for listing in the National Register of Historic Places, refineries and processing plants should retain integrity of design and materials. Setting varies because the refinery or processing plant may be located in the field, in a nearby city, or at a distant market place. Refineries and processing plants should consist of certain buildings designed for various functions in the processing of oil and gas: engine rooms, boiler houses, generator rooms, tool and work sheds, and an office. In addition to buildings, the complex should include structures devoted to processing, treating, and blending as well as storage of crude and finished products. Refinery and processing plant buildings should be constructed of original materials including wood frame covered with corrugated metal, follow basic floor plans (usually linear, rectangular-shaped dimensions), possess one-story, and have certain features such as roof vents, flexivent windows, and double door openings. The water towers, treating units, converting and blending towers, and storage tanks are generally of structural steel plates riveted together. However, some of the early refineries used wood in these structures.

POWER HOUSES (CENTRAL POWER)

Power houses are a group of historic resources associated with energy development because they housed well-pumping installations consisting of an engine powering a large diameter, horizontal bandwheel with shackle-rod lines attached to its circumference. The bandwheel is an eccentric and as it revolves on a vertical axle a reciprocating motion is imparted to the shackle rods. The shackle rods are jointed steel rods, approximately 25 ft. long and 3/4 to 1 inch in diameter, which connect the central power with a well's pumping unit or pumping jack. Shackle-rod lines are supported on metal posts, usually made of 2 inch line pipe topped with wooden guide blocks which are lubricated with a heavy grease. A central power may pump from 10 to 25 wells on a lease.

The power house building is a one-story structure usually with corrugated metal siding and roofing materials. The main section of the building is rectangular with a "round" or circular, section approximately 40-50 ft. in diameter. The rectangular section has a gable roof and the round section a conical-shaped roof. There are generally wood plank doors and a shed-type porch in front. Wood louvered windows are located in sides of the building. There are roof ventilators to expell heat from the central power engine. Additional openings include the rectangular-shaped slots for the shackle-rods which lead from the power house to the well pumping units.

Power houses and the central power systems were significant historic resources in Region 3 because they were an efficient method of powering several oil wells on an oil lease, especially in a field where oil wells were clustered in close proximity to one another. Power houses are an important set of energy-related resources because they have become obsolete and few remain intact. Those which do remain standing are inoperative because central power equipment was not produced after about 1930.

To be eligible for listing in the National Register of Historic Places, power houses and central powers should retain integrity of design, materials, and setting. The central power must consist of a bandwheel with shackle rods attached to its circumference. The bandwheel must be powered by some type of engine. Some of the shackle-rod lines must be present. The power house must be constructed of original materials including a wood frame building with wood plank siding. Generally the building was covered with corrugated metal siding. The design of the building consisted of rectangular and circular sections which must be present. The power house and central power should be located near a series of oil wells on an oil lease where use occurred prior to 1930.

LOADING RACK

Loading racks were a specialized property type associated with the transportation of oil by railroad tank car. When oil was regularly shipped in large quantities by tank car, a loading rack was constructed to facilitate the filling of the cars. The loading rack system consisted of a pipe line at one side of and paralleling the railroad track and elevated so that it is a few feet above the tops of the turrets on the cars. Connections with suitable value controls were provided at intervals along the pipe, spaced apart to conform with standard length of the cars, usually about 32 1/2 ft. By this means, an entire train of tank cars could be loaded from the same pipeline at one time. Connections made of loose sleeves and elbows made possible the necessary adjustments to conform with slight variations in the position of the cars and turrets. The rack proper consisted of an elevated walkway, usually constructed of wood, that supported the vertical filling lines and valves for filling the tank cars from the top. The loading rack complex included loading arms which were vertical standpipes connected to the pipe line. Each standpipe had a swivel-jointed extension that reached the hatch of the tanker. Usually a small wooden "dog house", or shed, was constructed along the walkway for protection of the workers (see accompanying photo).

The flow of oil into the cars was accomplished by gravity if the storage tank connecting with the pipeline is placed on a nearby hill at an elevation above the point of discharge. If the terrain was too level to permit this arrangement, an oil-line pump had to be installed. This property type has become obsolete due to the use of long distance pipelines for transporting crude oil and the decline of railroads in Oklahoma.

Loading racks were significant elements of the petroleum history of Management Region 3 because of the large quantities of crude oil shipped from the area and also because railroads were a major source of transportation in the region. Loading racks were generally constructed by the larger companies in Oklahoma such as Sinclair, Phillips, and Getty.

To be eligible for listing in the National Register of Historic Places, loading racks should retain integrity of design, setting, and materials. Design elements must include vertical filling lines and values (vertical standpipes), loading arms extending from the standpipes, an elevated walkway that supports the loading system, possibly a "dog house" on the walkway, and a stairwell for reaching the walkway. In all probability, the pipeline has been removed if the loading rack is no longer in use. Wood materials for the walkway and "dog house" must be present as well as steel pipe for the loading arm system (vertical pipes). The loading rack must be situated along a railroad track that was used prior to 1930. The presence of a storage tank or oil-line pump is not necessary for the loading rack to be considered for eligibility.

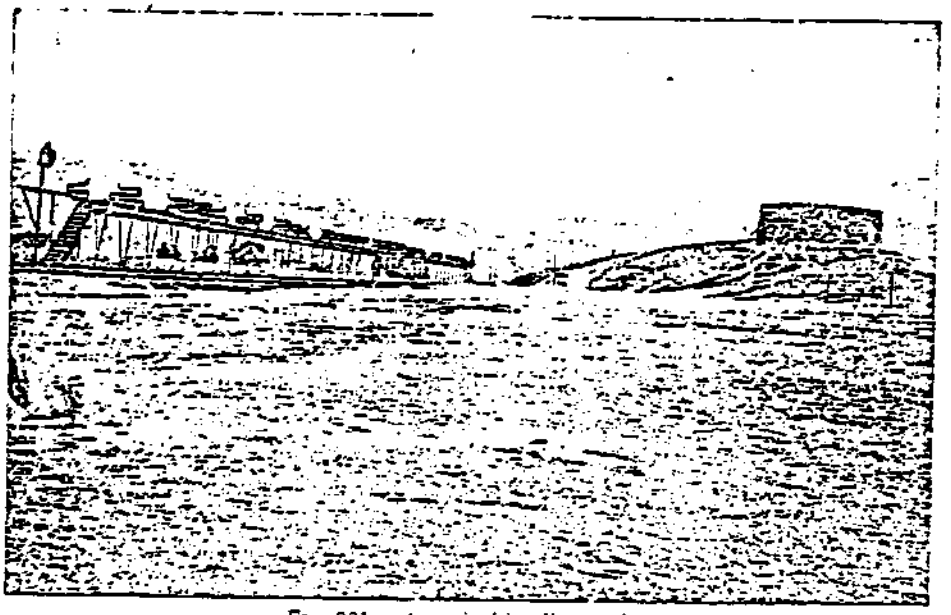


FIG. 361.—A typical loading rack.

PETROLEUM PRODUCTION CAMPS

Once petroleum has been discovered, and oil was being produced from wells, it was quite common for production camp complexes to be built to serve a series of wells owned by the same company. Camp complex buildings usually included a machine shop, forge shop, carpenter shop, electrical shop, boiler shop, pipe-fitting shop, tool-sharpening shop, an office, several "doghouses", and a lab building. The buildings were one-story, rectangular or square shaped floor plans, were of wood frame covered with corrugated metal, and had poured concrete foundations. Most had gently sloping gabled roofs.

Machine shops were the focal point for production camp activities because they housed a variety of functions including repair and manufacture of drilling tools and tool parts; repair of engines, pumps, and pumping equipment; and other construction work. The machine shop housed one or more lathes, planers, drill presses, milling machines, and bolt cutters.

The forge shop is equipped with gas or oil-heated forges with a steam hammer for heavy forging. The major function carried on in the forge shop is tool sharpening, the dulled bits being brought from the drilling rigs to the shop for that purpose.

The pipe shop should be equipped for cutting threads of all kinds of pipe of all sizes. There should also be equipment for cutting, bending, and straightening pipe.

A carpenter shop should provide machines for framing rig timber and other woodwork. A wood lathe, a band saw, and a circular saw are necessary pieces of equipment.

The office building should provide private offices for the manager, various superintendents, chief engineer, resident geologist, and purchasing agent. There should also be office space for clerical staff.

The laboratory should be equipped with instruments to determine the physical properties of oils and natural gases as well as chemical equipment used in routine analytical work.

Oil field production camps became an important class of historic resources in Region 3 because it was necessary to establish and equip facilities on the petroleum producing properties. The production camp was an independent unit and very little assistance was needed from the outside, except for supplies and equipment. The oil companies viewed this complex as a more efficient and economical method of coordinating local production.

To be eligible for listing in the National Register of Historic Places, production camps should retain integrity of design, materials, and setting. The production camp should consist of a group of buildings designed to meet the needs of a large series of producing oil wells. Necessary buildings would include a machine shop, forge shop, pipe shop, office, and lab. The latter might be incorporated into the office building. A carpenter shop might not be present depending upon the nature of rigging materials. Production camp buildings must be constructed of the original materials including wood frame or brick. If wood frame buildings are present, they are usually covered with corrugated metal siding. Buildings should be one-story and possess gable roofs. Production camps should be located in an oil field where several wells have been in production prior to 1930.

COMPANY HOUSING

Company housing was constructed on oil lease sites whereby workers would be located near production facilities. The houses were generally located in production company camps and were situated in rows on oil leases and often painted according to company colors. Company housing usually consisted of two types of vernacular dwellings: shotgun house and pyramidal house. Shotgun houses were simply designed dwellings, one room wide and three to four rooms deep. They were often twice as long as wide (12' X 24' or 14' X 28'). Other characteristics included gable roofs; front and rear doors so aligned that one could fire a shotgun through the house without hitting anything; side windows; and either clapboard or board-and-batten siding. On oil lease sites, all rooms were used for sleeping. There were no bathroom or kitchen facilities. The pyramidal house usually had four small rooms with a roof shaped in pyramidal form with roof ridges running from the four corners of the house to a central peak. The dimensions of the house were such that it was square shaped and each of the four rooms were square. Generally the pyramidal was covered with clapboard or board-and-batten siding. Number of houses in a production camp varied according to size of the lease, but the norm was twelve to twenty.

Company housing played an important role in the petroleum history of Management Region 3 because it allowed workers to stay at the production sites to work around the clock. Company housing was generally used by only men at the outset of production and they were working 8-hour shifts while others slept in the houses. In some cases, men, who had families, moved them into company housing and sleeping rooms were converted into kitchens.

To be eligible for listing in the National Register of Historic Places, company housing should retain integrity of design, materials, and setting. The houses must be located in a production camp on an oil lease developed prior to 1930. The houses generally follow either the shotgun or pyramidal basic design plan, however, other simple designs may also be found. Variations in color and roofing materials may also occur. Wood must be dominant construction material, and the siding should be either clapboard or board-and-batten. It should be noted that shotgun houses were sometimes disassembled and moved to other oil lease sites by railroad flat car.

Company/Corporate Buildings

Company/corporate buildings as a class of historic resources associated with energy development depended largely on the size of the petroleum company, was influenced by the urban setting in which they were constructed, affected by the time period of construction, and influenced by geographical area where they were located. The small to medium sized city with company headquarters, usually built during the pre-skyscraper era, featured a one-three story building of modest decorative elements. The most common petroleum company building constructed in the 1880-1915 era was the commercial brick-front type. It consisted of one-three stories, three-five bays, brick siding, and flat roof with parapet. Decorative elements included a brickwork frieze, brick dentils, brickwork corbeling, and geometric patterns of brickwork. The upper level, featured a combination of options, including single or double oriel windows, brick friezes and cornices, tin cornices with elaborate patterns, parapet walls of various profiles, and string courses or sections of belt courses that divided the wall laterally. These buildings were narrow and deep, access was from the street through a separate entrance or front door, and adjoined by other buildings of similar size and design. The facade's design centered on the overall framing of the shape: the structural system, post and beam, the large lateral panels, and the cornice. The cornice functioned as a cap under which other elements were arranged and balanced.

Corporate headquarters constructed in the large urban settings during the first three decades of the twentieth century included two types: commercial and Sullivanesque skyscrapers. The Commercial Style petroleum buildings were five to sixteen stories with straight fronts, flat roofs, and level skylines. The character of the facades was derived from the fenestration to which any ornamentation was subordinate. The fenestration pattern was rectangular, very large, and variously divided; sometimes referred to as the Chicago window. It was characterized by a broad central light of plate glass, fixed, and narrow side lights with opening sash. The total area of glass normally exceeded that of the brick, which was most common, or other facing material. A cornice of moderate projection was the most common termination of the facade. The Commercial Style was most popular in the 1900-1915 time period.

The Sullivanesque building was a simple, clearcut form of skyscraper terminated with flat roof and boldly projecting cornice. Windows were arched or linteled or both in the same building. Windows were organized into vertical bands between piers that rose unbroken through the greater part of the elevation and were stopped under the bold cornices. Spandrels under the windows were recessed. Doorways were generally arched. Relief ornamentation of terra cotta or plaster appeared almost anywhere on the building, but most often on cornices, spandrels, and doorways. The ornamentation consisted of a combination of naturalistic and stylized foliage with a variety of linear interlaces and other repeating motifs. Sullivanesque corporate headquarters became most prominent in the 1915 to 1930 era.

Company and corporate buildings were a valuable class of historic resources in Region 3 prior to 1930 because they provided the needed office space for company officials, lease buyers, land men, attorneys, and other occupations associated with energy development. In Region 3, the 1-3 story headquarters building was the center of activity for petroleum companies in small to medium-sized towns like Cleveland, Cushing, and Shidler. These company buildings usually housed a variety of occupations and enterprises

associated with energy development. In many cases, these companies were small and independent. The skyscraper which housed corporate headquarters was more likely found in larger cities of Region 3 like Tulsa or Bartlesville. These multistoried complexes were usually financed and constructed by large companies like Skelly in Tulsa and Phillips in Bartlesville.

To be eligible for listing in the National Register of Historic Places, company and corporate buildings should retain integrity of setting and materials. In addition, the building should have been financed and constructed by a petroleum company prior to 1930. Although the size of the urban place may vary, it should be located in a community known for energy development. Construction materials and design may vary according to size of town, geographic area, time period, and preferences of the oil company. However, this property type should be of original materials and should have housed businesses and occupations associated with energy development prior to 1930.

Homes Associated With Petroleum Executives

In contrast to company housing which followed vernacular lines, the houses associated with petroleum executives was generally of the high style architectural design. The styles employed in these homes most often followed those which were popular in the late nineteenth century up to 1930 and varied according to wealth of the individual owner and geographic area. The Revival Styles were popular among oil families especially Georgian. Spanish Colonial, and Colonial. Occasionally a modified Prairie or large Bungalow was found.

The homes were usually large, massive buildings of more than one story. Construction materials varied, however, brick and stone were quite common. In addition to the massive nature, the homes were applied with numerous decorative features to reflect the wealth and prosperity of the owner. In most cases, a well-known architect and construction company were employed to design and build the house so that its design correctly followed one of the academic architectural styles. In addition to the home, the grounds generally included several outbuildings such as carriage houses and servant's quarters, and was landscaped by a professional landscape architect in a particular design.

Most of these homes were located in a neighborhood with other houses owned by petroleum executives so that a historic district was created.

Historic homes associated with petroleum executives in Region 3 were an important class of resources because they provided housing for a class of entrepreneurs who had risen to the top of the petroleum industry. Their success in the petroleum industry was reflected in the types of homes they financed and built. They provided a group of homes designed and built to be permanent and have stood as historic reminders of an era when petroleum was a major force in the economic history of the region.

To be eligible for listing in the National Register of Historic Places, homes associated with petroleum executives should retain integrity of setting and materials. In addition, they should have been financed, built, and resided in by petroleum officials who were prominent prior to 1930. They should be constructed of original materials although variation may occur. The home should be located in an urban neighborhood where other homes of similar size, decorative elements, and social class were present. Finally, the home should reflect the success and wealth of the petroleum executive. This would be displayed in the size, decoration, out buildings, and landscaping of the property.

ANNOTATED LISTING OF PROPERTIES IN MANAGEMENT REGION 3 (O.L.I. and REGION 3 SURVEY)

I. ADAIR COUNTY - NONE

II. CHEROKEE COUNTY

A. Tahlequah

(1) Texaco Service Station

Location: 326 South Muskogee, Lot 7, Block 96, O. T.
Date: ca. 1915
Condition: Excellent
Significance: This one-story, commercial building was the first Texaco service station in Tahlequah and has retained that function for more than 62 years. It is also architecturally significant because it is the only English Tudor style service station in Tahlequah. Region 3 Survey.

III. CRAIG COUNTY

A. Vinita

(1) Tom Buffington Home

Location: Block 57, Lot 7, O.T.
Date: 1910
Condition: Excellent
Significance: This dwelling was the home of Tom Buffington, an oil man in the Vinita area. He was also Cherokee leader, mayor of Vinita, and district judge. O.L.I. Resurvey.

(2) Vinita Service Station

Location: Block 72, Lot 12, O. T.
Date: 1925
Condition: Good
Significance: This commercial building was one of the first service stations in Vinita and is also architecturally significant because of its decorative brickwork. O.L.I. Resurvey.

IV. CREEK COUNTY

A. Bristow

(1) National Supply Company

Location: 118 East Sixth
Lot 7, Block 60, O.T.
Date: ca. 1930
Condition: Deteriorated

Significance: This one-story, commercial building was one of the first major suppliers for oil companies in Creek County. It has a corrugated metal roof and siding with gabled roof. Alterations include brick facing on front. Region 3 Survey.

(2) Sinclair Pipeline Company

Location: 200 First Street, Lots 1-8, Block 101, O.T.
Date: ca. 1920
Condition: Fair
Significance: This one-story industrial building was one of the first pipeline companies operated by Sinclair oil in the Bristow Oil Field. It has wood panel siding with corrugated metal, gabled roof. Currently used by Morton Oil Services. Region 3 Survey.

(3) R. E. L. Jones Mansion

Location: SE¼, Section 19-T16N-R9E
Date: 1917
Condition: Excellent
Significance: This two-story dwelling was the residence of one of the prominent oil executives in the Bristow Oil Field. It is also architecturally significant because of several Prairie Style decorative elements. It remains as a private residence. O.L.I. Resurvey.

B. Drumright

(1) J. W. Fulkerson Building

Location: 200 West Broadway, Lot 20, Block 4, O.T.
Date: 1915
Condition: Excellent
Significance: This property was one of the first permanent commercial buildings constructed in the oil boom town of Drumright. Of native sandstone, it housed the A. J. Reid Oil Company, Drumright Daily News, and Wells-Fargo. National Register of Historic Places.

(2) First United Methodist Church

Location: 115 North Pennsylvania
Lots 1-5, Block 48, Jones Addition
Date: 1927
Condition: Excellent
Significance: This church played an important religious and social role in the boom town era of Drumright. A large portion of the financing came from oil field wealth. It is architecturally significant because of its elaborate Gothic design. National Register of Historic Places.

(3) Harley Fulkerson Building

Location: NE corner of Ohio and Broadway
Lots 1-17, Blocks 2-3, Reservation Addition
Date: 1916
Condition: Good
Significance: This two-story, commercial building was built as one of the first permanent structures during the oil boom era of Drumright and housed a variety of attorneys and physicians. Has metal doors and windows. O.L.I. Resurvey.

(4) Santa Fe Depot

Location: NE corner of Broadway and Harley Streets
Lots 5-7, Block 7, Reservation Addition
Date: 1916
Condition: Excellent
Significance: This property was the first railroad terminal in the Cushing Oil Field. It served Drumright as a freight and passenger station for almost 50 years. National Register of Historic Places.

(5) Drumright State Bank/Commercial Building:

Location: 101-103 East Broadway
Lots 1-2, Block 7, Reservation Addition
Date: 1914
Condition: Excellent
Significance: This two-story, red brick building served as one of two first permanent banks in the boomtown of Drumright. Housed attorney offices on second floor. Used today as O. G. and E. building. O.L.I. Resurvey.

(6) Aaron Drumright Building:

Location: 105-107 East Broadway
Lots 2-3, Block 7, Reservation Addition
Date: 1914
Condition: Good
Significance: This two-story, commercial building is a native sandstone structure erected as one of the first permanent buildings in the boomtown of Drumright. Housed a variety of businesses and was financed by co-founder of the town. O.L.I. Resurvey.

(7) First Citizen's Bank

Location: 153 East Broadway
Lots 23-24, Block 7, Reservation Addition
Date: 1916
Condition: Good
Significance: This two-story Greek Revival building served as one of the two first permanent banks in the boomtown of Drumright. O.L.I. Resurvey.

(8) Tharel Hotel

Location: 115 North Ohio
Lots 1-11, Block 5, Reservation Addition
Date: 1917
Condition: Good
Significance: This property was one of the first oil boom town hotels in Drumright. It is the only remaining building of its type still intact. Built by Buck and Mary Tharel, it served the city for over 50 years as a hotel. O.L.I. Resurvey.

(9) Drumright Gas Plant

Location: NW¼, SE¼, Section 28-T18N-R7E
Date: 1917
Condition: Excellent
Significant: This property is the oldest natural gas processing plant in operation in the United States and represents the founding of the Sinclair Oil and Gas Company. National Register of Historic Places.

(10) Jackson Barnett No. 11 Oil Well

Location: SE¼, SE¼, Section 5-T17N-R7E
Date: 1916
Condition: Fair--well is capped.
Significance: This well was the first million barrel producer in the Cushing Field and established a new state record for daily production from a single well (18,000 barrels). The well resulted in southern expansion of the Cushing Field and opened up a new sand layer in the Cushing Field known as the Tucker zone. National Register of Historic Places.

(11) Tidal School

Location: SE¼, SE¼, Section 8-T17N-R7E
Date: 1916
Condition: Excellent
Significance: This property was built by the Tidewater Oil Company as a "company school." This type of school provided vital educational services in an era when many of the town schools could not accommodate the sudden over population of school-age children. National Register of Historic Places.

(12) Wheeler No. 1 Oil Well

Location: Beginning at a point 530' south of the center of Oklahoma Highway 99 Bypass and 1060' west of the center of North Smather Street of Drumright, proceed east approximately 100' to edge of timber, then proceed north 100' to NE corner of nominated property. Then proceed due west 100', then south 100' to point of beginning.
Date: 1912
Condition: Excellent

Significance: This was the discovery well for the Cushing Oil Field drilled by Tom B. Slick on the Frank Wheeler farm. This property started the Cushing oil boom. National Register of Historic Places.

C. Kellyville

(1) Bank of Kellyville

Location: Block 12, Lot 12, O.T.
Date: 1907
Condition: Fair
Significance: This property was the first bank in the boom town of Kellyville and was built during the year of statehood. Region 3 Survey.

(2) Cooper Central Power

Location: SE¼, Section 21-T17N-R10E
Date: ca. 1928
Condition: Good
Significance: This property was one of the first central powers in the Kellyville area. Includes an Oklahoma pump jack and wood redwood storage tanks. Excellent resource for depicting an early Oklahoma central power complex. Region 3 Survey.

(3) Oklahoma Gas Company Compressor Station

Location: SE¼, Section 22-T17N-R7E
Date: ca. 1925
Condition: Deteriorated
Significance: This district was one of the original compressor stations in Kellyville area which pumped natural gas to Tulsa from nearby oil fields. Complex includes pipeyard, storage tank, and two buildings. Region 3 Survey.

D. Oilton

(1) Meacham Building

Location: Block 24, Lots 17-18, O.T.
Date: ca. 1915
Condition: Excellent
Significance: This property is the only three-story building remaining on Main Street in Oilton, an oil boom town, which emerged from a cotton farming area to a city of 3,000 residents in a period of seven weeks in 1915. The building was a hub of business activity during peak production of the Cushing Oil Field serving the oil field workers as both a hotel and furniture store. It is the only remaining boom town hotel in Oilton still intact. National Register of Historic Places.

(2) First Baptist Church

Location: Block 25, Lots 8-9, O.T.
Date: 1918
Condition: Excellent
Significance: This property is the only remaining oil boom era church in Oilton. It was constructed by rig builders from nearby oil camps and plans were drawn by the first minister of the church, Reverend L.L. Scott. O.L.I. Resurvey.

(3) Parker Building/Masonic Lodge

Location: Block 26, Lots 3-4, O.T.
Date: 1916
Condition: Good
Significance: This property housed one of the first businesses in Oilton in the first floor and the first permanent meeting place for the Oilton Masons in the second floor. Located on Main Street, it is one of the few remaining oil boom era commercial buildings still intact. O.L.I. Resurvey.

(4) Phil Hall Building

Location: Block 26, Lot 14, O.T.
Date: 1916
Condition: Excellent
Significance: This building housed Phil Hall's Dry Goods in the first floor and Mable's Entertainment Center in the second from 1916 to 1932. Both businesses were significant during the boom years of Oilton. O.L.I. Resurvey.

(5) Oilton Gas Building

Location: Block 26, Lots 17-18, O.T.
Date: 1915
Condition: Good
Significance: Oilton Gas Building is the oldest commercial structure in Oilton and it housed the first natural gas distributorship in the area which provided vital services for homes and businesses during the oil boom period from 1915 to 1925. During the 1920s, the building was also used by the telephone exchange offices which also provided needed services for the community. O.L.I. Resurvey.

(6) Miller No. 6 Wooden Pumper

Location: SE¼, SW¼, Section 7-T18N-R7E
Date: 1915
Condition: Good
Significance: The Miller No. 6 Oil Pumper is significant because it represents the only remaining unit left in the Cushing Field which includes a wood walking beam and a tight gear box, both symbolic of the early petroleum industry in Oklahoma. The unit was placed on the well in 1915 and continuously operated until 1972. O.L.I. Resurvey.

(7) Markham School

Location: SW¼, SE¼, Section 6-T18N-R7E
Date: ca. 1915
Condition: Fair
Significance: Markham School is significant because it is the only remaining building left in the oil boom "ghost town" of Markham and because of its role in the educational and social history of the Markham community. National Register of Historic Places.

(8) Okmar Oil Derrick

Location: SE¼, Section 17-T18N-R7E
Date: ca. 1935
Condition: Fair
Significance: This property is the only metal derrick remaining in the Cushing Oil Field. Region 3 Survey.

D. Sapulpa

(1) Berryhill Building

Location: Block 47, Lot 2, O.T.
Date: ca. 1910
Condition: Excellent
Significance: This multistoried commercial building was significant because it housed several oil companies, lease brokers, and petroleum attorneys during the 1920s boom era in Sapulpa. O.L.I. Resurvey.

(2) Sapulpa Refining Company

Location: Block 47, O.T.
Date: ca. 1911
Condition: Fair
Significance: This district includes two processing buildings and refining smokestack. It was one of the first refinery complexes to be constructed in Creek County having been built in 1911 shortly after the discovery of oil in the area. Region 3 Survey.

(3) Clayton Building

Location: Block 49, Lot 2, O.T.
Date: ca. 1910
Condition: Fair
Significance: This property was significant during the oil boom era in Sapulpa because it housed a variety of businesses and occupations associated with energy development such as lease brokers, attorneys, and petroleum companies. Region 3 Survey.

(4) Bovaird Home

Location: Block 70, Lots 7-8, O.T.
Date: 1919
Condition: Excellent
Significance: This dwelling was the first home for the Bovaird Family, one of the first suppliers to oil companies in the Tulsa area. Region 3 Survey.

(5) Frisco Depot and Harvey House

Razed in 1963 - O.L.I. Resurvey.

(6) Rock Creek Bridge

Location: NE¼, Section 3-T17N-R11E
Date: ca. 1905
Condition: Fair
Significance: Girder-and-post bridge which was one of the first structures of its kind to be built by oil companies to connect oil field leases in Creek County during the boom era. Region 3 Survey.

E. Shamrock

(1) Shamrock Boomtown Historic District

Location: Block 12, O.T.
Date: ca. 1916
Condition: Fair
Significance: This district includes six commercial buildings, a jail, and water tower; all dating from the oil boom era in Shamrock. The district was non-existent in 1914 when oil was discovered in the southern portion of the Cushing Oil Field. The district was constructed as a result of the need for goods and services by the population of Shamrock which grew to an estimated 10,000 by 1916. O.L.I. Resurvey.

(2) Shamrock Community Church

Location: Block 14, Lot 21, O.T.
Date: 1919
Condition: Good
Significance: This property is the only remaining boomtown church left in Shamrock. It was originally the Methodist Episcopal (South) Church of Shamrock and still serves the same function as it did when constructed, only the religious affiliation has changed. O.L.I. Resurvey.

V. DELAWARE COUNTY - NONE

VI. MAYES COUNTY

A. Strang

(1) Gulf Refinery

Location: SW¼, SW¼, Section 28-T22N-R20E
Date: ca. 1930
Condition: Good
Significance: This district includes a boiler room, pump house, and two storage tanks. It is significant because it is the only refinery still intact in Mayes County and retains the original structures associated with the Gulf Oil Company's first venture in the county. Region 3 Survey.

VII. McINTOSH COUNTY - NONE

VIII. MUSKOGEE COUNTY

A. Haskell

(1) Nancy Taylor No. 1 Oil Well

Location: SE¼, E½, Section 20-T16N-R15E
Date: ca. 1912 (1916)
Condition: Fair
Significance: This property was significant because it was the first well of J. Paul Getty, was instrumental in making him a millionaire, and helped in the founding of the Getty Oil Company. The well has been capped with only a wooden tank battery at the site of the well. Region 3 Survey.

B. Muskogee

(1) Escoe (Simmons) Building

Location: Block 4, Lot 1, O.T.
Date: 1908
Condition: Excellent
Significance: This property has housed a variety of black-owned enterprises including the Simmons Oil Company, one of the few black-owned petroleum companies in the United States. National Register of Historic Places.

(2) Mobil Oil Bulk Station

Location: Block 368, Lot 13, O.T.
Date: ca. 1936
Condition: Good
Significance: This property is one of the original bulk stations for Mobil in the Muskogee area. Region 3 Survey.

IV. NOWATA COUNTY

A. Alluwe

(1) Alluwe Oil Field - Flooded (no information) O.L.I. Resurvey.

B. Chelsea

(1) Texas Empire Pumping Station

Location: SW¼, Section 30-T25N-R17E
Date: ca. 1933
Condition: Deteriorated
Significance: This property was the largest pumping station in Nowata County in the 1930s. It pumped oil from Wichita Falls, Texas to Chicago, Illinois on the Texas Empire Pipeline, one of the longest pipelines running through Oklahoma. Region 3 Survey.

C. Nowata

(1) Pittzenburg Lease and Tank Battery

Location: SW¼, Section 21-T25N-R17E
Date: ca. 1920
Condition: Good
Significance: This property is one of the oldest oil leases in Nowata County. Property includes tank battery of riveted steel. Region 3 Survey.

(2) Transcontinental Oil Company Pumping Station

Location: SE¼, Section 27, T-26N-R16E
Date: ca. 1919
Condition: Deteriorated
Significance: This property was first pumping station in Nowata County. Region 3 Survey.

X. OKFUSKEE COUNTY

A. Okemah

(1) Franks (Doak and Hughes) Steel Derrick and Rig

Location: NW¼, Section 29-T12N-R10E
Date: ca. 1930
Condition: Good
Significance: This district includes the only remaining cable tool drilling rig in Okfuskee County and one of two remaining steel derricks. Cable tool drilling rigs were used prior to 1920 and the walking beam is still present. The structural steel derrick is in reasonably good condition and stands over well hole near the rig. Region 3 Survey.

(2) Warrington Steel Derrick

Location: SE¼, Section 29-T11N-R9E
Date: ca. 1931
Condition: Excellent

Significance: Although the property was moved from the Seminole Oil Field near Cromwell to Okemah in the late 1920s, this structural steel derrick is one of two remaining structures of its kind in Okfuskee County. It retains integrity of materials, however, not on original site--it stands near a service station.

XI. OKMULGEE COUNTY

A. Okmulgee

(1) Ad Cochran Home

Location: 522 South Seminole - Block 2, Lot 3, O.T.
Date: ca. 1925
Condition: Good
Significance: This two-story, brick dwelling was the residence of Ad Cochran, co-founder of the Veirson and Cochran Oil Company, one of the original oil companies in Okmulgee during boom period. Region 3 Survey.

(2) E.T. Noble Home

Location: 1700 East 6th Street
Block 8, Lots 1-10, Rebold Addition
Date: 1921
Condition: Excellent
Significance: This two-story brick dwelling was the residence of E.T. Noble, son of one of the pioneer oilmen of Oklahoma. Noble was one of the early oil field investors and petroleum broker in the Okmulgee area. Region 3 Survey.

(3) Sam Vierson Home

Location: 1724 East 6th Street, Block 16, Lots 1-3, O.T.
Date: 1930
Condition: Excellent
Significance: This two-story, brick dwelling was the residence of Sam Vierson, co-founder of the Vierson and Cochran Oil Company, one of the original companies in the Okmulgee fields. Region 3 Survey.

(4) McCulloch Building

Location: Fifth and Grand, Block 81, Lot 1, O.T.
Date: 1926
Condition: Excellent
Significance: This six story, commercial building housed many of the first oil companies in Okmulgee including Noble Oil and Vierson and Cochran Oil. It was originally constructed as on office building for petroleum companies. Region 3 Survey.

(5) Petroleum Building

Location: 408-410 Sixth Street, Block 87, Lot 2, O.T.
Date: ca. 1920
Condition: Good
Significance: This five story, brick commercial building was constructed in 1920 during the peak of the Okmulgee oil boom to house oil company offices. Region 3 Survey.

(6) Parkinson and Company Building

Location 110 South Morton Avenue, Block 89, Lot 1, O.T.
Date: 1901
Condition: Excellent
Significance: This three-story, brick, commerical building was constructed in the Territorial Period of Okmulgee. It was an important office building during the boom period as it was occupied by several oil companies including Kingwood Oil Company. Region 3 Survey.

(7) Empire Refinery

Location: SE¼, Section 6-T13N-R13E
Date: 1924
Condition: Good
Significance: This district consists of cooling tower, storage tanks, administrative unit, and boiler room. It was the first alcohol plant in Oklahoma and the original Empire Refining Company complex in Okmulgee area. It was one of three alcohol plants in the United States in 1924. Region 3 Survey.

(8) Thompson Pump Company

Location: SE¼, Section 12-T13N-R12E
Date: 1919
Condition: Excellent
Significance: This industrial district includes four buildings, two of which are original. One of the first pump manufacturers in Oklahoma and the only remaining pump manufacturer in Okmulgee area. Still retains same function after 68 years. Region 3 Survey.

(9) Barnsdall Refinery Smokestack

Location: NW¼, Section 29-T13N-R13E
Date: ca. 1925
Condition: Excellent
Significance: This property includes an 80' brick smokestack with letter "B" on side and a small brick testing lab building. Barnsdall Refining was one of the oldest companies in Oklahoma having been founded prior to statehood. These properties represent the last remaining structures associated with Barnsdall Oil in the Okmulgee area. O.L.I. Resurvey.

(10) Katie Fixico Home

Location: SE¼, Section 32-T13N-R13E
Date: ca. 1925
Condition: Excellent
Significance: This two-story, brick dwelling was the residence of Katie Fixico who owned the land where the Seminole Oil Field boom began. Fixico No. 1 was the first well to hit the Wilcox sand and it flowed at 10,000 barrels per day at the outset. O.L.I. Resurvey.

XII. OSAGE COUNTY

A. Avant

(1) Shell Oil Dravage Barn

Location: NE¼, Section 24-T24N-R11E
Date: ca. 1918
Condition: Good
Significance: This two-story, wood and native sandstone barn was constructed by Shell Oil Company to be used for housing horses and mules. The animals were used for pulling equipment to and from the surrounding oil fields near Avant. Region 3 Survey.

(2) KWB #4 Central Power

Location: NE¼, Section 17-T23N-R12E
Date: ca. 1921
Condition: Excellent
Significance: This operational central power includes cooling tank, power building, and pumpers. It is the only operating central power in Region 3 having been in use for 66 years. Region 3 Survey.

(3) McBride Gas Plant

Location: Lot 73-Section 18-T23N-R12E
Date: ca. 1925
Condition: Good
Significance: This industrial district consists of four buildings which housed the original McBride Gas Processing Plant Complex. Includes pump house, engine room, evaporation tank, and equipment building. Located in the KWB lease near Osage City, it was one of the first plants of its kind in the Osage fields. Region 3 Survey.

B. Barnsdall

(1) Main Street Oil Well

Location: NW¼, Section 18-T24N-R11E
Date: 1914
Condition: Excellent

Significance: First well drilled by Barnsdall Oil Company in the Osage field. Reported to be the world's only Main Street oil well. Continues to be operational for more than 73 years. O.L.I. Resurvey.

(2) Bareco/Petrolite Refinery

Location: NW¼, Section 18-T24N-R11E
Date: 1913
Condition: Excellent
Significance: This complex was one of the first refineries in Osage County and has operated continuously for over 74 years. The district includes cooling tower, office building, boiler room, and equipment shed. Built in 1913 by the Cosden Oil Company, one of the first Oklahoma companies in the Osage fields. Region 3 Survey.

C. Hominy

(1) Pure Oil Company

Location: NE¼, Section 8-T23N-R8E
Date: 1913
Condition: Fair
Significance: This district was Pure Oil Company's first production camp in Osage County. The company town was known as Arondale and existed from 1921 to 1935. The complex is now owned by Union 76. Region 3 Survey.

(2) Hominy Central Power

Location: SW¼, Section 26-T22N-R7E
Date: ca. 1918
Condition: Deteriorated
Significance: This property includes a central power building and bandwheel. The bandwheel is wood which predates the metal type. The power was used for only one well and is in poor condition. Region 3 Survey

(3) Ingersoll Lease Tanks

Location: NE¼, NW¼, Section 36-T22N-R8E
Date: 1920
Condition: Fair
Significance: This property includes two storage tanks, one redwood and one metal that were used in the 1920s oil boom. The wood 1,000 barrel tank was the first storage facility on the Ingersoll Lease. Region 3 Survey.

(4) Red Eagle/Gusman Lease Central Power

Location: SE¼, Section 36-T22N-R8E
Date: ca. 1925
Condition: Ruins
Significance: This property was the first central power on the Red Eagle/Gusman Lease. Region 3 Survey.

D. Pawhuska

(1) Million Dollar Elm

Location: Part of the Osage Agency nomination
Date: ca. 1912
Condition: Fair
Significance: This site was historically significant because it was where the Osage Indian oil lease sales were held in Pawhuska. The lease sales were conducted by Colonel Walters under the tree just north of the Osage Agency. It is estimated that more than three hundred million dollars was paid the Osage tribe for leases in the area. O.L.I. Resurvey.

(2) Triangle Building

Location: Blocks 83-84, O.T.
Date: ca. 1914
Condition: Excellent
Significance: This five-story, brick commercial building housed attorney's, leasemen, and oil companies during the 1920s boom era. Sun Ray DX had its offices in the building. It is architecturally significant because it is the only flat iron style building in Pawhuska. O.L.I. Resurvey.

(3) O.S.U. Central Power

Location: SW¼, Section 24-T25N-R9E
Date: 1918
Condition: Fair
Significance: This structure was one of the first central powers in Osage County. It operated from 1918 to 1966. Property includes laminated wooden bullwheel, clutch assembly, engine, belts, and other equipment. Walls and roof of power house are in poor condition. Region 3 Survey.

E. Shidler

(1) Masonic Lodge

Location: Block 22, Lot 12, O.T.
Date: ca. 1921
Condition: Good
Significance: This two-story, brick commercial building played an important role in the economic history of Shidler. It is the only remaining bank from the boom period in Shidler. O.L.I. Resurvey.

(2) Central Garage

Location: Block 23, Lot 13, O.T.
Date: ca. 1921
Condition: Fair
Significance: One of the first automobile service garages in Shidler. Region 3 Survey.

(3) Strand Hotel

Location: Block 34, Lot 18, O.T.
Date: ca. 1921
Condition: Good
Significance: This two-story, brick commercial building is the only boomtown hotel still intact in Shidler. Currently serves as the Senior Citizen's Center for Shidler. Region 3 Survey.

(4) Bank of Shidler

Location: Block 37, Lot 7, O.T.
Date: ca. 1920
Condition: Good
Significance: This two-story, brick commercial [illegible]n the only remaining boomtown bank in Shidler. Currently [illegible]ccupied by the Shidler Review newspaper. O.L.I. Resurvey.

(5) Forbes No. 1 Oil Well

Location: NE¼, Section 34-T27N-R6E
Date: 1926
Condition: Good
Significance: This site was the discovery well for the Forbes Oil Field near Shidler. By using secondary recovery methods, the well is still producing after 61 years. Region 3 Survey.

(6) Roach No. 1 Oil Well

Location: NW¼, Section 34-T27N-R6E
Date: 1926
Condition: Good
Significance: This site was the discovery well for the Roach Field near Shidler. Drilled as the number one well in the field by Kewanee Oil Company. Now owned by Chevron and still in production after 52 years. Region 3 Survey.

(7) Kewanee Pipeyard

Location: NW¼, Section 34-T27N-R6E
Date: 1926
Condition: Good
Significance: This was the original pipeyard for Kewanee Oil Company. It was one of the first pipeyards in the Burbank Oil Field and still serves that function for Chevron Oil, present owner. Region 3 Survey.

(8) Texaco Bulk Station

Location: NW¼, Section 34-T27N-R6E
Date: ca. 1920
Condition: Good
Significance: This district consists of one building and several storage tanks and represents Texaco Oil Company's first operation of this type in Osage County. Region 3 Survey.

F. Tallant

(1) Cities Service Petrochemical Plant

Location: SE¼, Section 35-T24N-R10E
Date: ca. 1925
Condition: Fair
Significance: This district consists of two processing buildings and an administrative unit. It was the first petrochemical plant built by Cities Service in Oklahoma. Region 3 Survey.

XIII. OTTAWA COUNTY

A. Afton

(1) Painter Oil Company Service Station

Location: Block 58, Lot 1, O.T.
Date: 1926
Condition: Excellent
Significance: This property is one of the last remaining original service stations in Afton. Architecturally significant because of its diamond-shaped floor plan. Region 3 Survey.

XIV. PAWNEE COUNTY

A. Blackburn

(1) Bank of Blackburn

Location: Block 18, Lot 10, O.T.
Date: ca. 1904-1905
Condition: Deteriorated
Significance: This one-story, native sandstone commercial building was constructed in the pre-statehood era and played an important economic role in the town of Blackburn during the boom era of the 1920s. It was the first bank in Blackburn. Region 3 Survey.

B. Cleveland

(1) Odd Fellows Lodge

Location: Block 6, Lot 7, O.T.
Date: 1888
Condition: Excellent
Significance: This two-story, brick building was built during the Territorial Period and became a significant social institution during the boom era of the 1920s. Region 3 Survey.

(2) Ralph Johnson Home

Location: Block 4, Lots 11-12, Rogers Second Addition
Date: 1923
Condition: Excellent
Significance: This 1½ story, weatherboard dwelling was the home of Ralph Johnson, founder and owner of the Johnson Oil Refinery in Cleveland. Region 3 Survey.

(3) Mullendore Mansion

Location: NE¼, NE¼, Section 8-T21N-R8E
Date: ca. 1910
Condition: Excellent
Significance: This property was the home of E.C. Mullendore who was a petroleum operator, rancher, and banker in north central Oklahoma. Dwelling is architecturally significant because of Greek Revival Style applied to a country home. National Register of Historic Places.

(4) Uncle Bill Lowery No. 1 Oil Well

Location: SE¼, Section 7-T21N-R8E
Date: 1904
Condition: Excellent
Significance: This oil well opened the Cleveland Oil Field and was one of the first wells drilled after the turn of the century in pre-statehood Oklahoma. O.L.I. Resurvey.

(5) Johnson Refinery

Location: NW¼, Section 17-T21N-R8E
Date: ca. 1909
Condition: Fair
Significance: This district was one of the original Cleveland Oil Field refineries and the only one with remaining buildings intact. Includes two metal buildings, two pump houses, and four storage tanks. O.L.I. Resurvey.

XV. ROGERS COUNTY

A. Chelsea

(1) Milam-McSpadden Home

Location: Block 38, Lot 1, O.T.
Date: ca. 1920
Condition: Excellent
Significance: This two-story, clapboard dwelling was the original Milam home. The Phillip Milam Family was associated with petroleum industry in Chelsea. O.L.I. Resurvey.

(2) Herbert McSpadden Building

Location: Block 39, Lot 4, O.T.
Date: ca. 1920
Condition: Good
Significance: This two-story, brick commercial building housed oil company offices during the 1920s including Phillip Milam and Herbert McSpadden, two of the leading oilmen in Chelsea. Region 3 Survey.

(3) Travis McSpadden Home

Location: Block 70, Lot 15, O.T.
Date: ca. 1921
Condition: Good
Significance: This two-story, weatherboard dwelling was the original home of Travis McSpadden, a prominent oilman in Chelsea. Region 3 Survey.

(4) Chelsea Refinery Office

Location: Block 1, Lot 1, New Fairgrounds Addition
Date: ca. 1920
Condition: Fair
Significance: This one-story, brick structure is the only remaining property of the Chelsea Refinery, the only industrial complex of this type in Chelsea. Region 3 Survey.

(5) Shell Oil Pump Station

Location: SE¼, Section 16-T24N-R17E
Date: ca. 1920
Condition: Deteriorated
Significance: This district consists of three buildings which housed the original Shell Oil Pump Station, the only one of its type in Rogers County.

(6) Tom J. McSpadden Home

Location: NW¼, Section 30-T24N-R18E
Date: 1933
Condition: Excellent
Significance: This 2½ story, weatherboard dwelling was the original home of Tom J. McSpadden, one of Chelsea's prominent oilmen. O.L.I. Resurvey.

XVI. SEQUOYAH COUNTY - NONE

XVII. TULSA COUNTY

A. Broken Arrow

(1) Diamond Jo Wilson Home

Location: Block 5, Lot 8, Highway Addition
Date: 1925
Condition: Excellent
Significance: This dwelling was the original home of J.R. Wilson, a prominent oil man in the Tulsa area. I.N.C.O.G. Resurvey.

(2) Minchall Gas Company

Location: Block 59, Lots 1-2, O.T.
Date: 1906
Condition: Deteriorated
Significance: This property was the first gas company in Broken Arrow. It was one of the original permanent buildings in the town having been constructed during the Territorial Era. I.N.C.O.G. Resurvey.

(3) Transcontinental Oil Company

Location: Block 59, Lots 10-12, O.T.
Date: 1928
Condition: Good
Significance: One of the first bulk stations in Broken Arrow. Later became a Sunray DX bulk station. Has Spanish tile roof. Region 3 Survey.

B. Glenn Pool

(1) Ida Glenn No. 1 Oil Well

Location: E½, W½, SE¼, Section 10-T17N-R12E
Date: 1905
Condition: Fair
Significance: This property was the discovery well for the famous Glenn Pool Oil Field which helped Oklahoma become the leading oil producing state in 1906. As a result of this oil well, the town of Glenn Pool was formed. I.N.C.O.G. Resurvey.

(2) Ida Glenn Homesite

Location: NW¼, NW¼, SE¼, Section 11-T17N-R12E
Date: Prior to 1905
Condition: Fair
Significance: Contains the original 160 acre homestead of Ida Glenn, a cistern, and grave of one of Mrs. Glenn's sons. It is believed Mrs. Glenn could look out of her home and view the Ida Glenn No. 1 well, which opened the Glenn Pool Field. I.N.C.O.G. Resurvey.

C. Jenks

(1) Plummer's Service Station

Location: Block 12, Midland Addition
Date: 1917

Condition: Excellent
Significance: This building was originally a Cities Service Bulk Station. Architecturally significant because of the use of polychromatic brick, decorative brickwork, and Spanish tile roof. Region 3 Survey.

(2) Perryman Pump Station

Location: NW¼, SW¼, Section 25-T18N-R12E
Date: ca. 1910
Condition: Fair
Significance: One of the first pumping stations in Jenks. District includes two storage tanks and shed for equipment. Combination of brick and stucco wall finish makes for some architectural importance. Region 3 Survey.

(3) Gulf Oil Pump Station

Location: SE¼, SW¼, Section 36-T18N-R12E
Date: ca. 1920
Condition: Good
Significance: One of the first pumping stations in Tulsa County. It pumped oil and gas from Jenks oil fields to Tulsa refineries. District includes pump house, outbuildings, and pipe lines. Region 3 Survey.

D. Sand Springs

(1) Sinclair-Arco Refinery

Location: NE¼, Section 14-T19N-R11E
Date: ca. 1930
Condition: Excellent
Significance: This group of buildings and structures constituted one of the first Sinclair refineries in Tulsa area. O.L.I. Resurvey.

(2) Sinclair-Prairie Refinery

Location: Lots 3-4, Section 13-T19N-R11E
Date: 1925
Condition: Good
Significance: One of the oldest refinery complexes still in use in Tulsa area. District consists of multiple buildings and structures. Operated by two of the oldest oil companies in Oklahoma. I.N.C.O.G. Resurvey.

E. Skiatook

(1) Greenwood Gas and Oil Company

Location: Block 23, Lots 1-2, O.T.
Date: 1926
Condition: Excellent

Significance: This two-story commercial structure was one of the first oil field supply houses in Tulsa County. Stands on original site and is of brick and stucco wall finish. Region 3 Survey.

F. Sperry

(1) Mac's Oil Field Supply

Location: Block 7, Lot 2, O.T.
Date: ca. 1925
Condition: Fair
Significance: This one-story, brick commercial building is the only remaining oil field supply house in Sperry and was one of the first buildings of its kind in Tulsa County. Region 3 Survey.

G. Tulsa

(1) McFarlin Building

Location: Block 1B, Lots 4-5, O.T.
Date: 1918
Condition: Good
Significance: Building was financed by Robert McFarlin who was co-founder of the McMan Oil Company. Florentine Style architecture. Housed oil enterprises during 1920s.

(2) Cosden-Feller Building

Location: Block 6, Lots 1-2, O.T.
Date: 1912
Condition: Good
Significance: This property housed numerous oil companies during the 1920s boom era. Partially financed by Joshua Cosden Oil Company. Housed J.A. Chapman Oil Company.

(3) Western Supply

Location: Entire Block 9, O.T.
Date: ca. 1913
Condition: Fair
Significance: This company made equipment for cable tool drilling rigs until 1930s. Region 3 Survey.

(4) Black, Sivalls, and Bryson

Location: Block 10, Lot 4, O.T.
Date: 1913
Condition: Good
Significance: This building housed oil tank management equipment dealer during the oil boom era in Tulsa. Region 3 Survey.

(5) Parkersburg Rig and Reel

Location: Block 15, Lot 5, O.T.
Date: 1928
Condition: Fair
Significance: This property housed one of Tulsa's oil field supply houses during the late 1920s. Region 3 Survey.

(6) National Refinery

Location: Block 17, Lot 1, O.T.
Date: ca. 1930
Condition: Deteriorated
Significance: This building was occupied by offices of one of Tulsa's refineries during the 1930s. Region 3 Survey.

(7) Robinson Packer Company

Location: Block 29, Lot 3, O.T.
Date: ca. 1928
Condition: Fair
Significance: This building housed one of Tulsa's oil field suppliers in late 1920s and 1930s. Region 3 Survey.

(8) DX Gas Station

Location: Block 38, Lot 6, O.T.
Date: ca. 1924
Condition: Deteriorated
Significance: This building was occupied by one of Tulsa's first service stations and one of the few remaining gas stations associated with Sunray DX Oil Company. Region 3 Survey.

(9) Oil Company Building

Location: Block 43, Lot 1, O.T.
Date: 1928
Condition: Deteriorated
Significance: This two-story, brick building housed several oil companies and suppliers in Tulsa during the 1930s. Region 3 Survey.

(10) Oil Well Supply

Location: Block 67, Lots 1-3, O.T.
Date: 1922
Condition: Fair
Significance: This building housed oil well supply firm during the 1920s. Region 3 Survey.

(11) Public Service Company

Location: Block 68, E 50' of Lots 1-2, O.T.
Date: ca. 1920

Condition: Excellent
Significance: Housed Tulsa's first city utility complex. Art Deco Style.

(12) Happy Belting Company

Location: Block 93, Lot 5, O.T.
Date: ca. 1926
Condition: Fair
Significance: This building housed one of Tulsa's oil field suppliers during late 1920s. Region 3 Survey.

(13) Post Office Building

Location: Block 103, Lots 1-4, O.T.
Date: 1912
Condition: Good
Significance: This property housed several oil companies during the 1920s. Four-story building which is now Federal Building in Tulsa. Region 3 Survey.

(14) Wright Building

Location: Block 103, Lot 5, O.T.
Date: 1917
Condition: Good
Significance: This eight-story, brick skyscraper housed a variety of petroleum enterprises during the 1920s. Building's exterior remains in excellent condition, except for thermopane windows. Region 3 Survey.

(15) Blue Dome Gas Station

Location: Block 107, Lot 1, O.T.
Date: ca. 1920
Condition: Fair
Significance: This two-story, brick building was Tulsa's first service station. O.L.I. Resurvey.

(16) Gallais Building

Location: Block 118, Lot 5, O.T.
Date: 1917
Condition: Excellent
Significance: This ten-story, brick skyscraper housed multiple oil companies during the 1920s. Retains architectural integrity except for original windows. O.L.I. Resurvey.

(17) Exchange National Bank

Location: Block 119, Lot 4, O.T.
Date: 1917
Condition: Excellent
Significance: This nine-story, granite block building housed different oil companies in the 1920s. Five additions detract from overall integrity of exterior. Region 3 Survey.

(18) Skelly Building

Location: Block 120, Lot 4, O.T.
Date: 1912
Condition: Excellent
Significance: This nine-story, brick skyscraper was financed by Skelly Oil Company and was one of the first skyscrapers to be erected in downtown Tulsa during the oil boom. Housed Skelly Oil and several other petroleum companies during boom period. Region 3 Survey.

(19) World-Lorton Building

Location: Block 120, Lots 5-6, O.T.
Date: 1918
Condition: Good
Significance: This multi-storied office building housed oil companies in upper stories in 1920s. Top four floors added in 1926. Region 3 Survey.

(20) McBirney Building

Location: Block 120, Lot 7, O.T.
Date: 1927
Condition: Excellent
Significance: This building of ten stories provided office space for oil companies in upper stories. Entire facade redone in 1973. McBirney was a banker and oil field investor. Region 3 Survey.

(21) Castle-Young Building

Location: Block 121, Lot 8, O.T.
Date: 1922
Condition: Good
Significance: This three-story, brick building housed multiple oil companies during the 1920s. Original glass windows have been replaced. Region 3 Survey.

(22) Mid-Co Building

Location: Block 122, Lot 1, O.T.
Date: 1919
Condition: Good
Significance: This two-story, brick building housed Mid-Continent Petroleum, one of Tulsa's largest and first oil companies. Region 3 Survey.

(23) Petroleum Building

Location: Block 134, Lot 4, O.T.
Date: 1921
Condition: Good
Significance: This 10-story, office building was erected by the Mayo Family. Pre-Art Deco architecture. Used by variety of oil companies and for social functions.

(24) Mayo Hotel

Location: Block 134, Lot 5, O.T.
Date: 1925
Condition: Good
Significance: This eighteen-story hotel is one of the surviving hotels of Tulsa's oil boom era. Reflected the commercial growth of Tulsa during the 1920s. Built by the Mayo Family, early enterpreneurs of Tulsa.

(25) Adams Hotel

Location: Block 134, Lot 8, O.T.
Date: 1928
Condition: Excellent
Significance: This property was constructed to capitalize on the 1928 International Petroleum Exposition held in Tulsa. Built by Mincks Family. Combination of architectural styles. Name changed to Adams in 1935. National Register of Historic Places.

(26) Mayo Building

Location: Block 135, Lot 4, O.T.
Date: 1914
Condition: Excellent
Significance: Eleven story brick and granite building which provided office space for oil companies during Tulsa's boom era. Window replacement detracts from integrity of building. Region 3 Survey.

(27) Cosden Building

Location: Block 137, Lot 1, O.T.
Date: 1918
Condition: Good
Significance: Built by Joshua Cosden, oil field entrepreneur. Used by Cosden Oil Company as well as several other petroleum companies in the 1920s. Tulsa's first skyscraper. One of the early reinforced concrete buildings in United States.

(28) Philtower

Location: Block 137, Lot 4, O.T.
Date: 1927-28
Condition: Excellent
Significance: This building was constructed by Waite Phillips of the famous Phillips petroleum family of Bartlesville. A 23-story structure which housed petroleum businesses and occupations in the late 1920s and 1930s. Architecturally significant because of Rococo elegance.

(29) Atlas Life Building

Location: Block 137, Lot 5, O.T.
Date: 1922
Condition: Good
Significance: This 12-story, brick commercial building housed many oil companies during the 1920s. O.L.I. Resurvey.

(30) Philcade

Location: Block 147, Lots 5-7, O.T.
Date: 1931
Condition: Fair
Significance: This building was constructed by Waite Phillips to complete Philtower. Thirteen stories of brick over reinforced concrete. Architecturally significant because it represents important phase of Art Deco Style in Tulsa.

(31) Sinclair Building

Location: Block 148, Lot 8, O.T.
Date: 1922
Condition: Excellent
Significance: This 8-story, brick building was constructed by Sinclair Oil and according to 1922 Tulsa City Directory housed several other oil companies in addition to the Sinclair offices. Region 3 Survey. Windows have been replaced.

(32) Thompson Building

Location: Block 148, Lot 1, O.T.
Date: 1922
Condition: Excellent
Significance: This 15-story, brick commercial building was originally owned by Mid-Continent Oil Company and housed many oil companies in the 1920s in addition to Mid-Continent offices. O.L.I. Resurvey.

(33) Oklahoma Natural Gas Building

Location: Block 163, Lot 4, O.T.
Date: 1928
Condition: Good
Significance: This 10-story commercial building housed O.N.G. offices as well as other petroleum companies. Art Deco Style.

(34) Harwelden

Location: Block 1, Lot 1, Harwelden Addition
Date: 1923
Condition: Excellent
Significance: Built by Earl Palmer, oil businessman, who helped found McMan Oil Company. He sold interests to Magnolia Oil (Mobil) Company in 1923. Architectural style is English Tudor designed by Wright and Wright of Kansas City. National Register of Historic Places.

(35) McBirney Home

Location: Block 12, Lots 2-20, Childers Heights Addition
Date: 1927-28
Condition: Excellent
Significance: Built by James McBirney, one of Tulsa's leading bankers and petroleum investors. Tudor Gothic architectural style.

(36) Philbrook

Location: Block 1, Philbrook Amended
Date: 1926-27
Condition: Excellent
Significance: Tulsa home of Waite Phillips of Phillips Petroleum Company. Italian Renaissance Style. National Register of Historic Places.

(37) Skelly Mansion

Location: Block 8, Lots 1-2, Sunset Park Amended
Date: 1923
Condition: Good
Significance: Three-story dwelling was Tulsa home of William G. Skelly, oil producer and refinery owner. Skelly played important role in development of Tulsa.

XVIII. WAGONER COUNTY - NONE

XIX. WASHINGTON COUNTY

A. Bartlesville

(1) American National Bank

Location: Block 19, Lot 11, O.T.
Date: 1902
Condition: Excellent
Significance: This 6-story, commercial building housed more than a dozen oil companies in its upper stories during Bartlesville's boom era including Foster Petroleum Corporation, Foster and Davis Inc., and Osage Development Company. Entire building altered beyond original recognition. Region 3 Survey.

(2) Simmons-Foster Building

Location: Block 19, Lot 12, O.T.
Date: 1906
Condition: Excellent
Significance: This two-story, brick and sandstone, commercial building housed offices of one of Bartlesville's first torpedo companies. Bell-Stratton Oil Company was also located in the building. Region 3 Survey.

(3) Keeler Building

Location: Block 20, Lot 11, O.T.
Date: 1905
Condition: Excellent
Significance: This two-story, brick commercial building housed the Prairie Oil Company in second floor. Prairie Oil was started by Henry Sinclair in Bartlesville and became one of the largest petroleum companies in Oklahoma. Region 3 Survey. Built by Keeler Family of Bartlesville, one of the families associated with Phillips Petroleum Company.

(4) Johnstone Building

Location: Block 20, Lot 13, O.T.
Date: ca. 1910
Condition: Excellent
Significance: This 3-story, brick and stone commercial building was constructed by William Johnstone, one of Bartlesville's prominent oil entrepreneurs. This building housed more than fifteen oil companies during boom era including Ashland Oil and Barnsdall Oil. Region 3 Survey.

(5) Akin Oil Company/Oklahoma Tool and Supply Company

Location: SE Corner of Block 23, O.T.
Date: 1907
Condition: Excellent
Significance: This 1½ story, brick commercial building housed Akin Oil Company from 1907 to 1918; then was home of Oklahoma Tool and Supply Company from 1919 to 1930s. Metal windows detract from integrity. Region 3 Survey.

(6) Leidecker Tool Supply Company

Location: Block 27, Lot 1, O.T.
Date: 1905
Condition: Good
Significance: This 2-story, brick building housed Cudahy Oil Company when it was first built. Then in 1908 it was occupied by Leidecker Tool Supply, one of the first oil field suppliers in Bartlesville during boom era. Region 3 Survey.

(7) Bradley-Bryant Building

Location: Block 29, Lot 1, O.T.
Date: 1907-1908
Condition: Excellent
Significance: This 2-story commercial building housed Mecca Oil Company during boom era in Bartlesville. Region 3 Survey.

(8) Pioneer Building

Location: Block 29, Lot 2, O.T.
Date: ca. 1919

Condition: Fair
Significance: This 3-story, brick commercial building was occupied by Almeda Oil Company and G.C. Carner, oil contracting firm, during boom era. Region 3 Survey.

(9) Trust McDaniel Building

Location: Block 29, Lot 3, O.T.
Date: 1905
Condition: Excellent
Significance: This two-story commercial building was home of first offices of Phillips Petroleum on top floor in 1917. Also housed five other oil companies during boom era. Region 3 Survey.

(10) Bryant Building

Location: Block 29, Lot 4
Date: 1914
Condition: Good
Significance: This 2-story, brick commercial building housed G.C. Clark, oil company, Thad O. Day, oil contractor, and Western Drilling Company during Bartlesville's boom era. Region 3 Survey.

(11) Masonic Building:

Location: Block 38, Lot 1, O.T.
Date: ca. 1919
Condition: Excellent
Significance: This 8-story, brick skyscraper housed approximately 40 oil companies on upper stories during the period 1919-1930 including Empire Gas and Fuel, Empire Petroleum Company, Indian Territory Illuminating Oil Company, and Osage Development Company; all of which were influential in Bartlesville boom era. Region 3 Survey.

(12) Standard Oil

Location: Block 38, Lot 6, O.T.
Date: ca. 1921
Condition: Excellent
Significance: This 3-story, brick commercial building housed offices of Standard Oil during boom era in Bartlesville. Region 3 Survey.

(13) Burlingame Building/Phillips Hotel

Location: Block 39, Lot 1, O.T.
Date: ca. 1910
Condition: Excellent
Significance: This 5-story, Sullivanesque-type skyscraper was used by Phillips Petroleum as a hotel during boom era. Also housed 5 oil companies after its use as a hotel in the 1920s. Region 3 Survey.

(14) First Phillips Home

Location: Block 82, Lot 1, O.T.
Date: ca. 1915
Condition: Excellent
Significance: This two-story dwelling was the first home of famous Phillips petroleum family in Bartlesville. O.L.I. Resurvey.

(15) Waite Phillips Home

Location: S. 25' Lot 3, N. 37.5' Lot 4, Block 3 Johnstone Heights Addition
Date: 1907
Condition: Excellent
Significance: This was Waite Phillips' first home in Oklahoma. After helping found Phillips Petroleum in Bartlesville, Waite left the firm in 1914 and started the Waite Phillips Oil Company. O.L.I. Resurvey.

(16) Johnstone Home

Location: Block 8, Lot 15 and Less 5.10' of Lot 14 Johnstone Heights Addition
Date: 1885
Condition: Excellent
Significance: This was the first home of William Johnstone, who helped found Bartlesville and drilled the first commercial oil well in Oklahoma, Nellie Johnstone No. 1, named for his daughter. O.L.I. Resurvey.

(17) Mancill Home

Location: Block 9, Lot 1, Johnstone Heights Addition
Date: 1918
Condition: Excellent
Significance: This two-story dwelling was home of H.G. Mancill, proprietor of Frick-Reid Oil Supply Company. Region 3 Survey.

(18) Kane Home

Location: Block 9, Lot 6, Johnstone Heights Addition
Date: 1913
Condition: Excellent
Significance: This 2½ story, stucco dwelling was home of J.H. Kane, a vice-president for Phillips Petroleum Company. Region 3 Survey.

(19) Young Home

Location: Block 9, Lot 7, Johnstone Heights Addition
Date: 1910
Condition: Excellent

Significance: This 2½ story, weatherboard dwelling was original home of L.W. Young, Jr. who was manager of Barnsdall Oil Company. Later it was residence of W.N. Davis, a vice-president of Phillips Petroleum Company. Region 3 Survey.

(20) Burlingame Home

Location: Block 9, Lot 7, Johnstone Heights Addition
Date: 1915
Condition: Excellent
Significance: This 2½ story, brick dwelling was home of C.E. Burlingame, owner of Burlingame Hotel, one of Bartlesville's boomtown hotels. Later Herbert Straight, president of Cities Service Oil Company owned property. O.L.I. Resurvey.

(21) John Phillips Home

Location: Block 2, Lots 7-9, Pember Heights Addition
Date: 1915
Condition: Excellent
Significance: This was home of John Phillips, only son of Frank Phillips. Upon reaching adulthood, John served as a member of the Board of Directors of Phillips Petroleum. O.L.I. Resurvey.

(22) L.E. Phillips Home

Location: Block 2, Lots 7-9, Pemberton Heights Addition
Date: 1910
Condition: Excellent
Significance: This 2½ story, brick dwelling was home of L.E. Phillips, co-founder of Phillips Petroleum Company from 1922 til 1940s. Originally built for John Brennan, an attorney who assisted in acquiring oil leases in the Osage Nation. O.L.I. Resurvey.

(23) Armais Arutunoff Home

Location: Block 5, Lot 12, Pemberton Heights Addition
Date: 1927
Condition: Excellent
Significance: This 2-story, brick and stone dwelling was home of Armais Arutunoff, a Russian inventor, who helped found the Reda Pump Company. O.L.I. Resurvey.

(24) Tyler Home

Location: Block 4, Lot 1, McDaniel First Addition
Date: ca. 1914
Condition: Excellent
Significance: This 3½ story, stucco dwelling was home of Herbert Tyler, a prominent oil man in Bartlesville during boom era.

(25) LaQuinta

Location: Begin at a point 1.7 miles S. of Adams Road along Silver Lake Road, then .2 mile N., then .2 mile W., then .2 mile S., then .6 mile E., then 1.7 miles N. to point of beginning
Date: 1932
Condition: Excellent
Significance: Home of H.V. Foster, founder of Indian Territory Illuminating Oil Company. One of the best large scale examples of Spanish Colonial Revival architecture in Oklahoma. National Register of Historic Places.

(26) Nellie Johnstone No. 1 Oil Well

Location: NE¼, NE¼, Section 12-T26N-R12E
Date: 1897
Condition: Excellent
Significance: Oklahoma's first commercial oil well drilled by William Johnstone and Cudahy Oil Company. Named for Johnstone's daughter. Derrick, drilling operations, and rest of rig are reproductions. National Register of Historic Places.

HISTORIC CONTEXT BIBLIOGRAPHY

Beal, Carl H. "Geologic Structure in the Cushing Oil and Gas Field, Oklahoma, And Its Relation to the Oil, Gas, and Water." United States Geological Survey Bulletin No. 658 (1917).

Beckwith, H.T. "Osage County." Oklahoma Geological Survey Bulletin No. 40, Vol. 3 (July, 1930).

Buttram, Frank, "The Cushing Oil and Gas Field." Oklahoma Geological Survey Bulletin No. 18, (December, 1914).

Clark, J. Stanley. The Oil Century: From the Drake Well to the Conservation Era. Norman: University of Oklahoma Press, 1958.

Dille, Glen S. "Oil and Gas in Tulsa County." Oklahoma Geological Survey Bulletin No. 69 (1952).

Fath, A.E. "Structure of the Northern Part of the Bristow Quadrangle, Creek County, Oklahoma, With Reference to Petroleum and Natural Gas." United States Geological Survey Bulletin No. 661-B.

Forbes, Gerald. Flush Production: The Epic of Oil in the Gulf-Southwest. Norman: University of Oklahoma Press, 1942.

Franks, Kenny A. The Oklahoma Petroleum Industry. Norman: University of Oklahoma Press, 1980.

_____. The Rush Begins: A History of the Red Fork, Cleveland, and Glenn Pool Oil Fields. Oklahoma City: Oklahoma Heritage Association, 1984.

Frazier, J. Vere, Jr. "History of the Glenn Pool Field." Master's Thesis, University of Oklahoma, 1951.

Fundamentals of Petroleum. Austin: Petroleum Extension Service, University of Texas, 1981.

Glasscock, Carl B. Then Came Oil: The Story of the Last Frontier. New York: Bobbs-Merrill, 1938.

Greene, Frank C. "Pawnee County." Oklahoma Geological Society Bulletin No. 40 (July, 1930).

Heald, K.C. "The Oil and Gas Geology of the Foraker Quadrangle, Osage County, Oklahoma." United States Geological Survey Bulletin No. 641-B (1917).

_____. "Geologic Structure of the Northwestern Part of the Pawhuska Quadrangle, Oklahoma." United States Geological Survey Bulletin No. 691-C (1918).

Lagenkamp, Robert D. The Illustrated Petroleum Reference Dictionary. Tulsa: Petroleum Publishing Company, 1980.

Lloyd, Heather M. "Oklahoma's Cushing Oil Field." Master's Thesis, Oklahoma State University, 1976.

Mills-Bullard, Bess, ed. "Digest of Oklahoma Oil and Gas Fields." Oklahoma Geological Survey Bulletin No. 40, Vol. 1 (July, 1928).

Morris, John W. Ghost Towns of Oklahoma. Norman: University of Oklahoma Press, 1981.

Morris, John W. and Goins, Charles R. Oklahoma Homes: Past and Present. Norman: University of Oklahoma Press, 1980.

_____. Historical Atlas of Oklahoma. Norman: University of Oklahoma Press, 1986 (3rd Edition).

Morris, John W., ed. Drill Bits, Picks and Shovels: A History of Mineral Resources in Oklahoma. Oklahoma City: Oklahoma Historical Society, 1982.

Rister, Carl C. Oil! Titan of the Southwest. Norman: University of Oklahoma Press, 1949.

Rubey, W.W. "Progress Report on a Subsurface Study of the Pershing Oil and Gas Field, Osage County, Oklahoma." United States Geological Survey Bulletin No. 751-B (1923).

Sinclair Oil and Gas. A Great Name in Oil: Sinclair Through Fifty Years. New York: McGraw-Hill, 1966.

Smith, Carl D. "The Glenn Pool Oil and Gas Pool and Vicinity, Oklahoma." United States Geological Survey Bulletin No. 541-B (1914).

The Composite Catalog of Oil Field and Pipe Line Equipment. Houston: The Oil Weekly, 1930.

The Tulsa Historic Preservation Plan Report. Tulsa: Tulsa Historic Preservation Planning Division, 1980.

Tulsa County Historic Sites. Tulsa: Community Planning Division, Indian Nation Council of Governments, 1982.

Uren, Lester Charles. Petroleum Production Engineering: Oil Field Development. New York: McGraw-Hill, 1946.

Energy Development in Northeast Oklahoma (Region 3) :

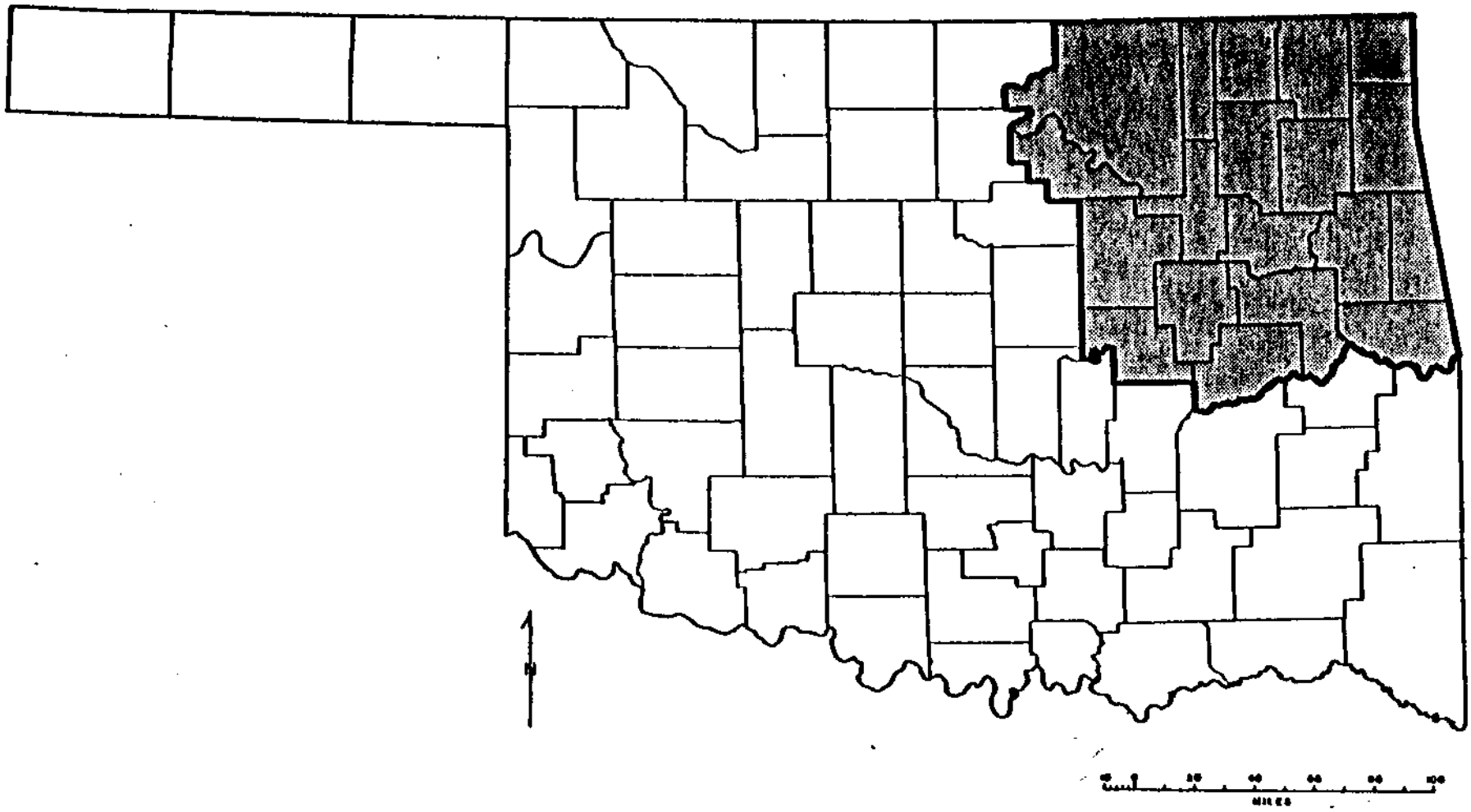


Figure 6

LOCATIONS OF NATIONAL REGISTER AND OLI PROPERTIES RELATED TO ENERGY

REGION 3

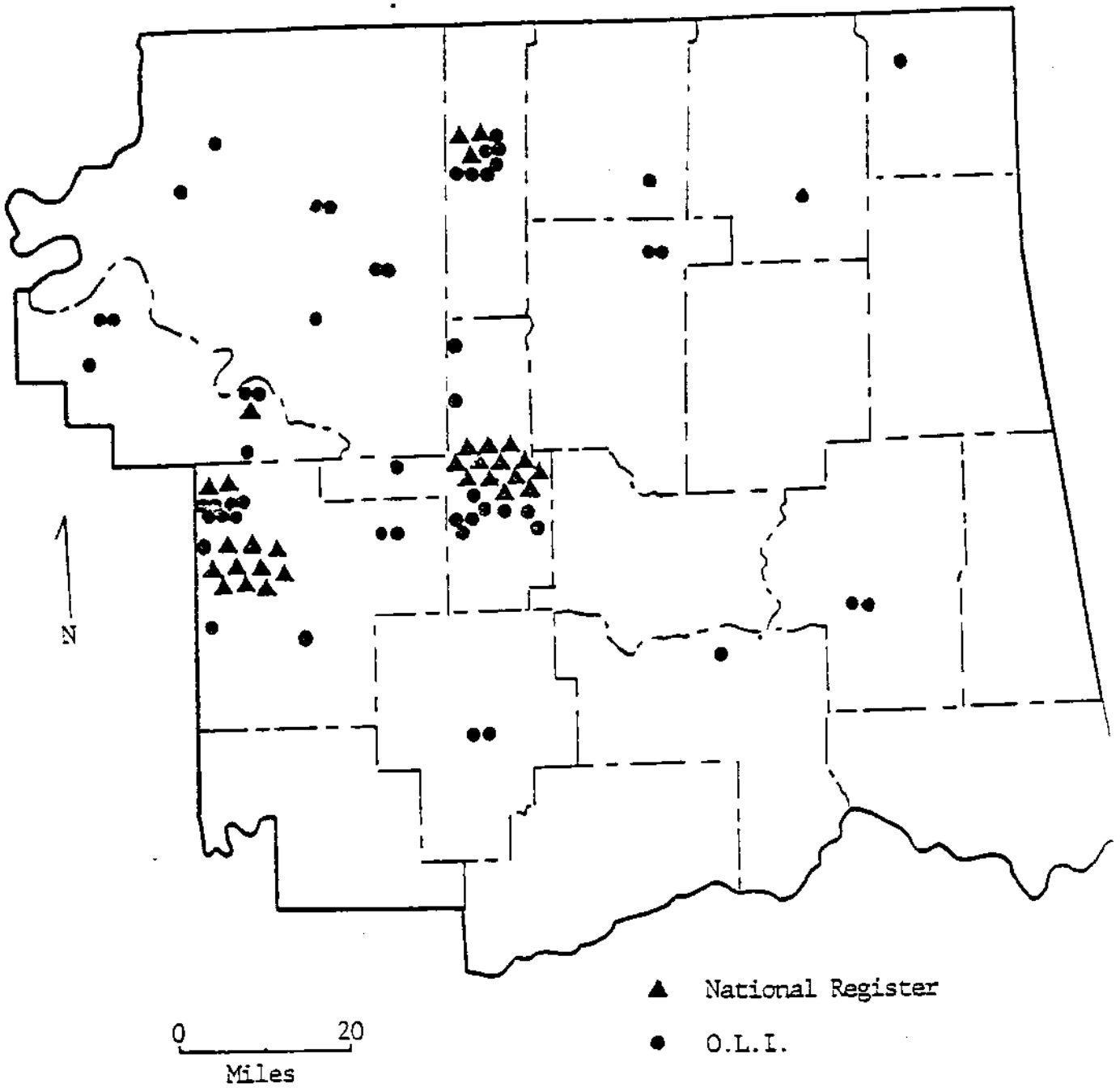


Figure 7

APPENDIX "A"

O P E R A T I N G P L A N

THREATS TO RESOURCES

The development of the petroleum industry is one of the most important aspects of Oklahoma's past. Without the oil and gas industry, Oklahoma's history would have been quite different. Because of this special importance, preservation of energy related resources is essential.

There are threats to those resources that remain. Many of the properties, such as derricks, were not designed as permanent structures. Few examples remain of many of the resource types identified in the context and subsequent survey. Changes in technology have made some properties obsolete. Some facilities, such as refineries, must be upgraded if they are to continue to be used in energy production. When this must occur, the physical elements of energy development history are lost.

Another threat is simply lack of awareness that industrial properties should be considered for preservation. While Oklahomans will agree to the importance of the energy industry, they tend to think of the mansions of oil executives and major buildings housing corporate offices when they think of preservation. It is for this reason that the conduct of surveys and nomination of properties to the National Register of Historic Places is critical. These efforts will help call attention to the significance of these resources.

Houses, commercial buildings, and other similar properties may also be threatened due to neglect and insensitive rehabilitation work. Again, increasing public awareness of these resources will aid in their preservation. Additionally, the Certified Local Governments Program can be an important factor in their preservation. For example, those cities with particularly strong associations with energy production have an opportunity to facilitate preservation of related resources through local zoning efforts. The CLG program can support these endeavors.

GOALS AND PRIORITIES FOR RESOURCE PRESERVATION

The resources discussed in this historic context represent significant aspects of Oklahoma's past. Following are the priorities established to foster the highest possible levels of preservation for these properties. Estimated time frames for completion are also set forth. It is fully anticipated that additional priorities will be established as the context is updated to address changes in attitudes, changes in available financial incentives, developments in technology, and the simple passage of time.

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PRIORITIES	PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	METHOD OF ACCOMPLISH-MENT
Identification/ Evaluation:			
Thematic Survey of Energy Related Resources in Management Region #3	1987	1987	SHPO/Subgrant

PRIORITIES	PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	METHOD OF ACCOMPLISH-MENT
Registration:			
Multiple Property Nomination for Energy Related Resources in Management Region #3 (cover form)	1989		SHPO/ In-House
National Register of Historic Places Nominations for:	1989		SHPO/ In-House
a. Shell Drayage Barn			
b. R.E. Jones Home			
c. Nancy Taylor #1			
Prepare Individual nominations to accompany the Multiple Property cover form	1990		Subgrant Contract
Recordation (HABS/HAER):			
Rock Creek Bridge/ HAER Documentation			
Barnsdall Main Street Weel/HAER Documentation			
Shell Oil Drayage Barn/ HABS Documentation			

PRIORITIES	PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	METHOD OF ACCOMPLISH-MENT
OSU Ag Experimental Station Central Power and Bull Wheel/ HAER Documentation			
KWB #4 Central Power/ HAER Documentation			
Nancy Taylor #1 Oil Well and Tank Battery/ HAER Documentation			
Franks/Oak and Hughes Derrick and Pumper/ HAER Documentation			
Uncle Bill Lowery #1 Oil Well/HAER Documentation			
Protection:			
Promote the CLG Program in the City of Tulsa	1990		SHPO
Encourage the City of Okmulgee to become a CLG	1990	1989	SHPO/City

PRIORITIES	PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	METHOD OF ACCOMPLISH-MENT

PRIORITIES	PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	METHOD OF ACCOMPLISH-MENT
Public Education and Awareness:			
One presentation on energy related properties at the statewide historic preservation conference (Shotgun Houses)	1989	May 1989	Presented by G.O. Carney, OSU
Publish Energy Context document	1991		SHPO/ In-House
Present a conference session on preservation of Oklahoma's significant energy-related resources at the statewide preservation conference	1990		Presentors to be Identified

PRIORITIES	PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	METHOD OF ACCOMPLISH-MENT

Public Education and Awareness (cont.)

INCORPORATION INTO BROADER PLANNING PROCESS

As the Oklahoma Historical Society develops an agency-wide plan, materials generated from the historic context development, survey efforts, and National Register nominations, as well as HABS/HAER documentation will be available to those designing museum exhibits or preparing other public programs. Energy has been identified as one of the major themes of study for the Society's overall planning effort.

Additionally, the State Historic Preservation Office will provide a copy of the energy context document to each community in Region #3 that becomes a Certified Local Government (as well as other contexts as they are developed) so that the local governments can use the regional information as they develop local plans for preservation of historic sources. The local contexts will follow the same format as that established by the SHPO for regional context documents.

Finally, through regular workshops on the preservation planning process, the SHPO will make information available to federal, state, and local agencies on the resources identified and their significance in the history of energy development in Oklahoma so that these properties will be considered in other planning efforts.

REFINING THE CONTEXT

Every three years the context will be reviewed. Additional information about scholarly research in the field will be incorporated. Data obtained as the results of other survey efforts through subgrants, CLGs, and review and compliance activities will be included in the list of known properties. The public was asked in the Fall of 1988 to participate in the development of the operating plan for this context. Similar efforts will be repeated during the tri-annual context review. The revised document will be distributed as described above.

As the context document and survey were developed through a subgrant, publicly advertised, public input has been a major factor in this planning effort. The revised context will be submitted to professionals for review.