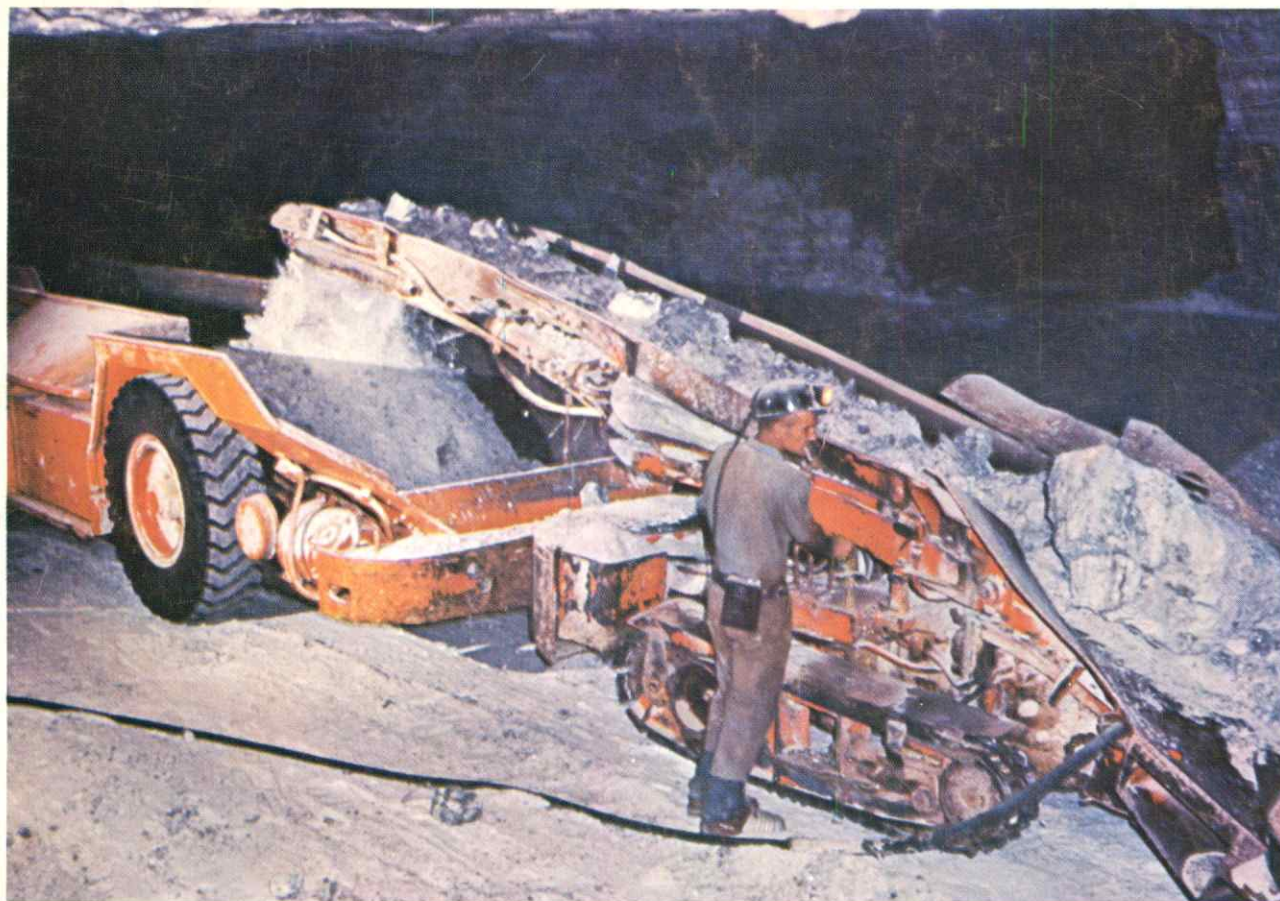




Kansas Mineral Industry Report 1969

with Directory of KANSAS MINERAL PRODUCERS

Special Distribution Publication 51

State Geological Survey of Kansas

University of Kansas , June 1970

by Allison L. Hornbaker

Robert F. Walters

James Berberick

Jess Willoughby

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KANSAS MINERAL INDUSTRY REPORT...1969

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KANSAS MINERAL INDUSTRY REPORT...1969

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Front Cover: Loading Salt in the Carey Salt Mine, Hutchinson,
Kansas. Photo by A. L. Hornbaker and Truman C.
Waugh.

COMMENTS

The tables in the report following speak for themselves and show the status of mineral production for 1969. We have gained some and we have lost some over the previous year. The raw statistics do not reflect the efforts of the Geological Survey to bring information and research to bear on additional production of the state's mineral resources.

No single breakthrough has appeared in the Survey's research during 1969, but much progress has been made in continuing research. The Survey has been concerned, along with the State Water Resources Board, in cooperation with the U. S. Geological Survey, in research on recharge of ground water. Experimental work has taken place that gives promise of significant information. It is still not possible to give water a precise dollar value but water is undoubtedly the most valuable of our mineral resources.

The Survey continues its studies on non-metallic mineral resources with greatest emphasis on bentonite and volcanic ash. New materials have been developed in the laboratory using bentonite and expanded volcanic ash as an additive. These materials show promise as diluents and carriers for herbicides and pesticides. Expanded volcanic ash has many desirable properties as filler in various plastics, and is expected to become increasingly important in the development of a wide range of new building materials.

The Geochemistry Section of the Geological Survey is continuing exciting research on minor elements in Kansas brines. The addition of an organic geochemist to the staff makes possible more interesting research in organic materials.

The Geological Survey is maintaining its position of leadership in application of the computer to geologic resource development and to the retrieval of basic data.

A major effort of the Survey is in the field of Environmental Geology. The environment and ecology are now popular terms and the words at least are known to the public in general. Because the impact of geology on the environment is not well understood by the public, the Survey is concerned with new ways of presenting geologic information, particularly for urban areas.

This report offers opportunity to introduce the Mineral Industries Council of the Geological Survey.

Harold J. Born, Pres. of H. J. Born Stone Co., Wichita, and
member of the National Stone Producers Assn.

Richard C. Byrd, member of the law firm Anderson, Byrd,
Richardson, and Jones, Ottawa. Now serving as general
counsel for the Interstate Oil Compact Commission and
for several committees of the Federal Power Commission.

Howard Carey, Jr., Pres. of Carey Salt Co., member of the
Executive Committee of the Salt Institute, trustee of
the Midwest Research Institute, and director of FLOAIR,
Wichita.

John J. Conard, former editor, now recently appointed Director of University Relations and Development, University of Kansas. Served five terms as a state representative and was Speaker of the House in 1962.

Richard Cook, Concordia, General Manager of Cloud Ceramics. He is vice president and director of General Finance, Inc., Concordia, and a member of the K.U. School of Business Board of Advisors.

Stuart Eurman, Fairway, Executive Director of the Kansas City Regional Metropolitan Planning Commission, former director of the Area Planning Commission for Little Rock.

Morris Kay, Lawrence, a member of the House of Representatives. He was elected the Outstanding Young Man of the Year by the Lawrence Junior Chamber of Commerce last year and is now president of the Lawrence Chamber of Commerce.

Roland Lehr, Kansas City, Mo., investments, former president of Black, Sivals & Bryson, grain and petroleum equipment manufacturers, formerly associated with American Metals Products Company of Chicago and Germany.

George Mackie, Pittsburg, President of the Clemens Coal Company and of Buildex, Inc. He is a director of the First State Bank of Pittsburg and of Foodtown Supermarkets, Inc.

Perry Miller, Topeka, retired General Manager of Kansas Electric Cooperatives, Inc., organized and is a member of the Board of Trustees of Victory Electric Cooperative, Dodge City. He also is chairman of the Nuclear Energy Council of Kansas.

Clifford Stone, El Dorado, President of the Walnut Valley State Bank, member of the Executive Committee of the American Bankers Association Marketing/Savings Division.

Robert F. Walters, Wichita, President of Walters Drilling Company, past president of the Kansas Geological Society, and recipient of the President's Award for Outstanding Paper (1956) of the American Association of Petroleum Geologists.

Frank C. Foley, Director

REVIEW OF THE MINERAL INDUSTRY IN 1969

Allison L. Hornbaker¹

Estimated value of mineral production in Kansas in 1969 reached an all time high of \$605,044,000, exceeding all previous records and surpassing the 1968 mark by 1.9 percent. Products of the petroleum industry, including crude oil, natural gas, natural gasoline and LPG, and helium account for 82.2 percent of the total mineral value. These four commodities are also the leading contributors to the total mineral value in the order listed above, crude oil accounting for nearly half, 47.9 percent, of the total, despite a loss of 1.6 percent in value and an even greater loss in production from 1968. This loss represents a continuation of the gradual decline in crude oil production and value that started in 1957.

Changes and proposed changes in the political and economic climate as they affect oil producers, as pointed out by Mr. Walters later in this report, will have a marked influence on the growth and strength of the petroleum industry in the years ahead.

That the petroleum industry remains a viable part of the total mineral industry is reflected in the large proportion of the total value and in the strength shown by its natural gas and LPG segments, both of which had declined in 1968, but bounced right back in 1969 showing increased values of 8.1 percent and 7.2 percent respectively. Helium remains relatively unchanged from 1968.

Seventeen percent or \$107,628,000 of the total mineral value is attributed to the non-petroleum sector of the mineral industry. The non-metals, once considered the door mat of all minerals, are capturing an ever-increasing share of the total value, but even more significant is the increasing importance of these minerals and mineral products for the well-being of the total economy. They are essential for increased growth in construction, agriculture, and manufacturing, and are rapidly gaining in stature due to their important use in controlling pollution of our environment--air and water.

Of the non-metals, those commodities used for construction materials are most important. Cement accounts for 5.4 percent or \$32,635,000, stone for 3.8 percent or \$23,040,000, sand and gravel for 1.8 percent or \$11,146,000, and clay and shale products for 1.7 percent or \$10,500,000 of the total value which, combined, amounts to 12.7 percent or \$77,301,000 of the total mineral value. These are the basic raw materials that go into construction of our homes, private and public buildings, streets and highways.

¹Geologist, Head of Industrial Minerals Division, State Geological Survey, Lawrence, Kansas

The cement industry set a new record in production and value of its products in both the state and nation despite plaguing problems of low prices, high costs, and over-capacity. The industry has experienced slow but steady rise in production in a decade beset with problems of price-cutting and lowering of the production/capacity ratio, due in part to increased capacity from plant expansions not offset by increased sales. Cement imports sharply increased during the decade and further complicated and aggravated the problems of low prices and rising costs besetting the industry.

The 5.1 percent increase in value of cement produced in 1969 is attributed in part to increases in price, but mostly to increased use of cement in concrete paving on major highway projects which more than offset losses in building construction.

Within the state, Lone Star Cement Company at Bonner Springs installed a Koppers single-chamber precipitator on one kiln and is installing two additional ones to serve three other kilns. On the negative side, however, is the permanent shut down of one of the oldest and most continuously operating plants in the state. Fort Scott Hydraulic Cement Company officially ceased operation early in 1970 after 102 years of nearly continuous operation.

Production of cement, gypsum, crushed rock and sand and gravel are closely correlated with activity in the construction industry because they are the basic raw materials for all types of construction. During the next decade, the most optimistic note for the cement/concrete/aggregates industries is the "Operation Break-through" program sponsored by the Department of Housing and Urban Development. The program is designed to provide low-cost housing for people of low and moderate income levels, through a partnership of private industry, labor, consumers, and local, state, and federal government. The call for and evaluation of "housing systems" utilizing new construction techniques and concepts appears to be highly favorable to concrete and aggregates of various kinds. As soon as there is a relaxation of high interest rates and tight money, the current slowdown in residential and commercial construction should be followed by a great surge in construction, especially residential, due to the backlog in demand.

The production and value of all the basic construction materials, so closely correlated with construction, usually follows the trend set by construction activity. Stone production increased more than other aggregate materials primarily because of the increased demand for agricultural limestone. All of the aggregates increased proportionately more than would be expected based on total contract awards, probably because of the larger than usual proportion of highway awards for paving projects which used large amounts of these basic raw materials. Some increases in price structures helped account for a portion of the increase in value in crushed rock and sand and gravel.

Clay and shale products increased 3.8 percent in value during 1969. One of the strongest gains among the group was registered by light-weight aggregate (expanded shale). Strong market demand plus strong price structure kept both plants

in Kansas producing at or near full capacity during the entire year. The market demand for sewer tile and brick remained about the same as in 1968.

Salt production showed little change in 1969 but increased somewhat in value due to a slightly improved price structure. Rock salt production was weak during the year. However, fine rock salt that is usually slow to move was in considerable demand because of increased feed lot consumption. Evaporated salt was slow in the early part of the year but demand increased near the end of the year, especially in December.

Among the minerals grouped as miscellaneous, to avoid disclosure of confidential data, coal, gypsum (raw and calcined), carbon black, and salt brine are the major contributors in order of dollar value. Coal is steadily increasing in production and value because of increased use in power generation. An example is the Kansas Power & Light Company plant expansions at Lawrence, which consumes more than 5,000 tons of coal per day, all produced in Cherokee County. New plants, such as the plant being built jointly by Kansas City Power & Light Company and Kansas Gas & Electric Company at LaCygne will further strengthen the demand for coal.

The big news in the old Tri-State lead-zinc mining district is the development of the Swalley-Paxson incline mine complex of Eagle-Picher Industries west of Baxter Springs, Cherokee County. Production is expected to start in early 1970 with an initial employment of 30 to 40 men. The ore will be milled at Eagle-Picher's central mill near Cardin, Oklahoma.

A vigorous mineral industry is extremely important to the local community as well as to the county and state economy. With this in mind, the Geological Survey is seeking various methods to improve and strengthen the mineral industry throughout the state. Research on beneficiation of raw minerals and on materials development from the processing of low unit value minerals, especially those for which there has been little or no demand, is continuing with good results. New building materials having high thermal and acoustical insulating properties and made from expanded volcanic ash with suitable plastic binders show great promise for use in decorative wall panels, pre-hung doors, windows, and even entire wall sections.

Bentonite research is continuing and prospects are good for the development of a high sorptive toxicant carrier granule. Demand for high quality granules is increasing and our intent is to develop granules made from Kansas minerals which will be able to capture a sizable portion of the expanding market.

It is appropriate to call attention to the importance of the mineral industry to the economy and well being of every community in the state. With this in mind, we again urge local planning and zoning commissions to protect non-renewable prime-mineral resources, to study the desirability and potential value of multiple land use, and to resolve land-use conflicts in the most reasonable and equitable way possible.

TABLE 1. Mineral Production and Value in Kansas

Commodity	Unit	1968		1969*	
		Quantity	Value, \$1,000	Quantity	Value, \$1,000
Cement					
Portland	1,000 bbl. (376 lb.)	9,680	29,898	10,164	31,406
Masonry	1,000 bbl. (280 lb.)	383	1,177	400	1,229
Clay and Shale			10,100		10,500
Crude Oil	1,000 bbl. (42 gal.)	94,505	294,856	88,716	290,102
Helium					
Refined	1,000 cu. ft.	291.7	7,292	312	8,279
Crude	1,000 cu. ft. (14.7 psia; 70°F)	2,749.7	33,600	2,665.7	32,548
				2977.7	
Natural Gas	1,000,000 cu. ft. (14.65 psia; 70°F)	848,380	106,047	888,038	115,445
Natural Gas LPG	1,000 bbl. (42 gal.)	25,184	47,346	27,150	51,042
Salt	1,000 short tons	1,128	15,520	1,100	15,730
Sand and Gravel	1,000 short tons	12,427	10,559	14,290	11,146
Stone	1,000 short tons	14,402	20,714	16,000	23,040
Miscellaneous (diatomaceous marl, lime, gypsum, carbon black, salt brine, natural cement, volcanic ash, coal, lead, zinc)			16,271		14,577.3
Total Value			593,380		605,044

*The figures for 1969 are year-end estimates and should not be used as final figures. Final figures for 1969 production and value will be available later in 1970.

OIL AND GAS PROSPECTING AND PRODUCTION
IN KANSAS DURING 1969

Robert F. Walters¹

What Happened to the Oil Business

Although statistical summaries state tersely what was accomplished by the oil industry in Kansas in 1969, the figures give no indication of what happened to the oil industry in Kansas. Changes, and threatened changes, in the political and economic climate caused oil operators to proceed cautiously. This was true on a national basis, and not peculiar to Kansas. As stated by Dr. Frank B. Conselman, Past President of American Association of Petroleum Geologists:

In any year the search for new oil and gas has two complementary facets: the technologic and scientific problems of discovery, and the economic and political factors that determine profitability. The year 1969 will go down as one in which the latter has been more critically unpredictable than at any previous time in the history of the modern petroleum industry, and any review of petroleum exploration during the past twelve months must necessarily be more concerned with what was done to it than by it.

These words of Dr. Conselman provide an introduction to the business climate in which Kansas oil operators worked during 1969. By mid-1969 it was apparent that the 7% Investment Credit (a tax credit for equipment) originally instigated as a "tax incentive" for industry was being rescinded as a "tax loophole" to be plugged. While lessening profitability, this factor was not critical to the oil business. It indicated, however, that the other "tax incentives" now, too, were labeled "loopholes" and were in jeopardy. For example, the U. S. statutory depletion allowance of 27 1/2% of gross income (not exceeding 50% of the net income) which served historically as a means of recovery of capital in the risky business of prospecting for new oil reserves, was under attack for all of the last half of the year. It is always difficult to play the high-risk business game of prospecting for oil and gas; it becomes almost impossible to do so without knowing the rules of the game--what items are an expense, what items are capital (invested but not spent) and what the tax consequences of a given act may be. Even though it was mid-December before Congress actually reduced the depletion allowance from 27 1/2% to 22 1/2%, the uncertainty provided a smog cover under which the operators moved hesitantly throughout the last half of 1969. Also under surveillance, but with no actual change during the year, were the tax rules which allow the intangible cost of drilling oil wells to be expensed in the year drilled. The threat of change of this tax rule was a

¹Managing partner, Walters Drilling Co., Wichita, Kansas; Chairman, Mineral Industries Council, State Geological Survey

deterrent to prospecting but actually encouraged 1969 development drilling to beat the possible rule change. (See data, comparative success ratio, p.) The most basic threat to the Kansas oil and gas business was the proposal strongly advocated by New England Congressmen in the name of "Consumer Protection" to drastically revise the oil import regulations with the avowed purpose of reducing the price of domestic crude oil. Such action could spell doom for the inland refineries such as the twelve refineries operating in Kansas, and along with their demise, the business of prospecting for oil and gas reserves in Kansas would cease suddenly, and producing wells in the state would become non-commercial long before depletion of their crude oil. Fortunately, the President has deferred receiving the report of his investigating committee, and no actual change in import or crude oil prices took place during 1969. The attacks on the oil business by Congress proved to be more effective in deleting optimism (the "soul" of prospecting) than the actual tax changes made, for once businessmen know the actual rules of the game they immediately adapt to them whether such adaptation means business survival or means quitting business rapidly to minimize losses. The oil business in Kansas will probably never fully recharge its optimism cells, so severely scarred by the 1969 "Tax Reforms."

Within the oil business during 1969 the great change in modus operandi was the surging movement by operators to "go public" or to operate as a "fund." This method of operating is not new, but has been so successful from the operator's point of view that 1969 saw the "fund" or "public" companies dominating the exploration, development business and involved in major purchases of properties.

In first place for volume of drilling activity in 1969 was Theodore I. Leben's company with 127 holes drilled, 41 exploratory (7 producers or 17%) and 86 pool wells (58 producers or 67.4%) for an overall "success ratio" of 51%. In a close second place was Rick Clinton's Clinton Oil Company with 107 holes drilled including 23 exploratory tests (8 producers or 34.8%) and 84 pool wells (52 producers or 62%) or overall "success ratio" of 56%. In third place numerically, is Mesa Petroleum Company of Amarillo, Texas, a "public" company listed on the New York Stock Exchange with, they say, 91 tests in Kansas consisting of 91 producing or shut-in gas wells for a 100% success record that may long remain unchallenged. Tactfully listed are six test holes drilled by Mesa as "Geological Wildcats" and not included in their 91 tests total, thus preserving their record.

The "public" or "fund" companies have in common their corporate structure and their method of operating through a prospectus (usually reviewed by the Securities Exchange Commission) stating the terms of participation in each year's oil and gas program. Their strength is that they bring much needed risk money and capital funds into the oil business in large amounts and their weakness is that the first quarter of each year is commonly spent in preparation, the second quarter in waiting for SEC, or selling, the third quarter (only) in orderly business, and the fourth quarter in a frantic effort to do a whole year's exploration. For the investors, the appeal of such companies is that the investor can place a fixed

and known amount of money for a fixed time interval in the hands of professional oil operators, as opposed to the uncertainties and risks of a larger interest in fewer wells on a strictly personal basis, and can operate under written terms and conditions stated in the prospectus reviewed by the Securities Exchange Commission. The explosive growth of such companies in Kansas during 1969 is the most important thing that happened during the year in the oil business in Kansas.

The year 1969 saw a continuation of the trend in the oil business toward the demise of the Kansas operations of "major" oil companies. This trend was reviewed by James P. Porter, Consulting Geologist, in a paper presented before the Kansas Geological Society in December 1969, the abstract of which was published informally by two commercial oil information services.

Porter lists 14 "major" oil companies, named below, and their daily runs for one month in 1946. He compares this with each company's daily runs for one month in 1969 and finds that only four "major" companies have daily runs in 1969 that are about the same as or larger than their daily runs 23 years previously. These companies are:

	<u>1946</u>	<u>1969</u>
Champlin	2,795 BOPD*	2,575 BOPD
Coop Refining Assn.	2,794	3,528
Sun DX (Sunray)	5,042	5,037
Texaco (The Texas Co.)	<u>6,197</u>	<u>7,406</u>
	16,328	18,546
10 other companies	<u>177,209</u>	<u>50,746</u>
Total	133,537	69,292

*BOPD = barrels of oil per day

The ten other companies whose Kansas oil production declined 61% are: Atlantic Richfield (Sinclair), Cities Service Oil, Continental Oil, Gulf, Humble (Carter), Mobil (Magnolia), Phillips, Shell, Skelly, Pan American (Stanolind). Of the 14 named companies, only Champlin Petroleum Company continues to maintain an exploration office in Kansas, and that company was sold in 1969 by its previous purchaser, the Celanese Corporation, to the Union Pacific Corporation of which diversified holding company it is a wholly-owned subsidiary.

In keeping with the trend for major companies to make their exit from Kansas, one of the largest transactions in the oil business in Kansas in 1969 was the purchase by Clinton Oil Company of certain oil and gas producing properties from Pan American Petroleum Company for approximately \$50,000,000. Properties included in the sale have daily net production of about 14,000 barrels of oil and 95 million cu. ft. of gas with wells located in 14 states. All of Pan American's Kansas oil production was included. A more detailed look at what has happened during the past year is presented in the following statistical displays.

Comparative Drilling Statistics (Data - Petroleum Information)

	<u>1968</u>	<u>1969</u>
Exploratory Wells (wildcat)	946	839
Development Wells (pool)	1,861	1,850
Shallow East Kansas	<u>775</u>	<u>765</u>
	3,582	3,454

These figures show a 3.6% decrease in the number of wells drilled for oil and gas in Kansas in 1969. There is a small uncertainty factor involved due to incomplete scouting of shallow test holes in eastern Kansas (usually under 1,000 feet deep and stratigraphically not reaching Mississippian rocks), but the data are comparable for the two years and the percentage decrease is certain. As may be seen, the decrease is due to 11% less exploratory drilling which in turn is partly due to the economic climate prevailing during the year as discussed under the heading "What Happened to the Oil Business."

Comparative Success Ratio (Data - Petroleum Information)

<u>1968</u>	<u>Oil</u>	<u>Gas</u>	<u>Sub</u> <u>Total</u>	<u>Dry</u>	<u>Service</u> <u>Wells</u>	<u>Total</u>	<u>Success</u> <u>%</u>					
Exploratory Wells	137	+	26	=	163	+	783	+	0	=	946	17.2%
Development Wells	<u>889</u>	+	<u>87</u>	=	<u>976</u>	+	<u>776</u>	+	<u>109</u>	=	<u>1,861</u>	<u>52.4%</u>
Total Wells	1,026	+	113	=	1,139	+	1,559	+	109	=	2,807	40.6%
<u>1969</u>												
Exploratory Wells	118	+	23	=	141	+	698	+	0	=	839	16.8%
Development Wells	<u>898</u>	+	<u>174</u>	=	<u>1,072</u>	+	<u>681</u>	+	<u>100</u>	=	<u>1,853</u>	<u>57.9%</u>
Total Wells	1,016	+	197	=	1,213	+	1,379	+	100	=	2,692	45.1%

These data do not include results of drilling 775 (1968) and 765 (1969) shallow holes in eastern Kansas but do include known re-entry of old dry holes.

As in previous years, approximately one exploratory test well in six succeeded in finding oil or gas in Kansas. A little over one-half of the development, or pool, wells resulted in producers. It is thought that the changes from 1968 to 1969, on the whole, indicate no trend. The decrease in exploratory drilling, and the increased interest in developing gas properties, as discussed elsewhere in this report, are evident in the 11% decrease in exploratory wells drilled, from 946 to 839, and the 74% increase in number of gas wells completed, from 113 to 197.

Re-entry of Old Holes (Data - Petroleum Information)

<u>1968</u>	<u>Oil</u>		<u>Gas</u>	<u>Sub Total</u>		<u>Dry</u>	<u>Total</u>	<u>Success %</u>
Exploratory Wells	11	+	8	= 19	+	40	= 59	32.2%
Development Wells	<u>58</u>	+	<u>15</u>	= <u>73</u>	+	<u>40</u>	= <u>113</u>	<u>64.6%</u>
Total Wells	69	+	23	= 92	+	80	= 172	53.5%

<u>1969</u>								
Exploratory Wells	16	+	2	= 18	+	44	= 62	29.0%
Development Wells	<u>50</u>	+	<u>11</u>	= <u>61</u>	+	<u>32</u>	= <u>93</u>	<u>65.5%</u>
Total Wells	66	+	13	= 79	+	76	= 155	51.0%

The re-entry of old dry holes has become an appreciable part of the total drilling operation, averaging about 5% of the total holes drilled during both 1969 and 1968. It is interesting to note that operators found oil or gas in approximately one-third of the wildcat or exploratory holes re-entered and the operators found oil or gas in approximately two-thirds of the pool or development wells re-entered. The percentage success figures are skewed in the direction of too high a success ratio as all successful re-entries are included (the operators filed with the Corporation Commission for an oil or gas allowable) whereas some unsuccessful re-entries may have been unreported as such re-entry work only requires from one to three days.

It is significant that approximately one-half of the total old holes re-entered find oil or gas in sufficient amount to be considered as commercial by operators. The high success ratio is due in part to the fact that nearly all holes re-entered are done so after geological study of oil shows, and partly because of in the past phase of structural prospecting, stratigraphically trapped oil was often overlooked. The key to re-entry work is the permanent well cutting sample collection maintained for the public by the Kansas State Geological Survey in Wichita and Lawrence.

Wells Plugged in Kansas (Data - Kansas Corporation Commission)

<u>Kind of Well</u>	<u>1968</u>	<u>1969</u>
Dry Holes	1,599	1,378
Oil Wells	1,652	1,747
Gas Wells	68	58
Other	<u>289</u>	<u>314</u>
Total	3,608	3,497

Wells are plugged in Kansas under the supervision of the state with a requirement for filing of plugging reports, hence the availability of this data.

Significant is the plugging of 1,652 oil wells in 1968 when 1,026 new oil wells were added or a net loss of 626 oil wells. Similarly in 1969, 1,747 old oil wells were plugged while 1,016 new oil wells were added for a net loss of 731 oil wells.

In the case of gas wells, the opposite is true as more new gas wells were added than old wells plugged. The year 1968 had 113 new gas wells, plugged 68, or a net gain of 45 gas wells. Likewise the year 1969 had 197 new gas well, plugged 58 gas wells for a net gain of 139 gas wells.

The figures given for dry holes check closely with but not exactly with the dry hole figures given in a previous table, suggesting that the well plugging figures for dry holes in this Kansas Corporation Commission table include few if any shallow tests in eastern Kansas.

Crude Oil Production (Data - Kansas Corporation Commission)

	<u>1968</u>	<u>1969</u>
Daily average production in barrels of 42 gallons	258,211	243,058
Number of days	<u>x 366</u>	<u>x 365</u>
Barrels of crude oil produced	94,505,298	88,716,135
Price per barrel (estimated)	<u>\$3.12</u>	<u>\$3.27</u>
Value of crude oil	\$294,856,000	\$290,102,000

It is significant that crude oil production in Kansas during 1969 decreased 6.1% from the 1968 production. In turn, the 1968 production was approximately 5% less than the amount of crude oil produced in 1967 and that in turn was approximately 4% less than 1966. We thus have a trend of decrease with an acceleration of 1% per year. From this it may reasonably be assumed (if economic and political factors remain reasonably constant) that Kansas crude oil production during 1970 will be approximately 7% less than 1969 or will be about 82,000,000 barrels.

Because of a small non-inflationary price increase due to a strong demand for crude oil, the dollar value of the crude oil produced declined only 2.1% even though the production decreased 6.1%.

The decline in crude oil production rate is particularly significant in view of the generous production allowables established by the Kansas Corporation Commission ranging from 40 barrels of oil per day to 112 barrels of oil per day as shown by the following two examples:

Allowed Daily Oil Production, December 1969 (Data - Kansas Corporation Commission)

Well Depth (examples)	Approved well spacing-acres/well			If qualified for discovery allowable Approved well spacing-acres/well		
	10-20	40	80	10-20	40	80
3,600'	40 BOPD*	51	75	53 BOPD	69	98
4,400'	46 BOPD	59	85	61 BOPD	81	112

*BOPD = barrels of oil per day

Secondary Recovery Projects (Data - State Geological Survey)

	<u>1967</u>	<u>1968</u>
<u>Projects</u>	1,234	1,234
Total oil from project areas	32,666,394 bbls.	32,423,923 bbls.
Oil recovered by secondary methods	19,324,007 bbls.	20,292,810 bbls.
Oil wells	11,313	10,374
Injection wells	6,693	5,938
Producing area	249,458 acres	244,676 acres

These data are derived from questionnaires circulated each January by the Kansas Corporation Commission to oil operators and analyzed for the previous year by the State Geological Survey. Pressure maintenance projects are included.

It is significant that over 32 million barrels of oil were produced from wells in secondary recovery projects in 1968, or over one-third (34.3%) of the state's total oil production. Each operator is asked to estimate how much of the oil produced is directly due to secondary recovery and would not have been recovered otherwise. The total of such subjective estimates of over 20 million barrels of oil is 21.5% of the year's total oil production for Kansas.

The average daily production per well in secondary recovery projects is 8.5 BOPD (barrels of oil per day) of which 3.25 BOPD is considered by the operators as due to secondary recovery. Many wells in secondary recovery projects therefore fall in the "stripper" class (defined as less than 10 BOPD).

Use of Crude Oil in Kansas (Data - Kansas Corporation Commission)

	<u>1968</u>	<u>1969</u>
Crude oil produced in Kansas	94,505,298*	88,716,135
Crude oil exported from Kansas	<u>12,545,572</u>	<u>14,473,180</u>
Kansas crude oil run to stills in Kansas	81,959,726	74,242,955
Crude oil imported into Kansas	<u>53,816,490</u>	<u>61,999,210</u>
Total crude oil run to stills in Kansas	135,776,216	136,242,165

*Figures in 42-gal. bbls.

The significant factor in these data is the almost alarming decrease in percentage of crude oil run to stills in Kansas which comes from oil wells within the State of Kansas. During the year 1968 Kansas oil wells supplied 60.4% of the total crude oil run to stills in Kansas. By 1969 the figure had decreased to 54.5% and it appears likely that the figure will further diminish in the future.

Natural Gas Production (Data - Kansas Corporation Commission)

	<u>1968</u>	<u>1969</u>
Total production in 1,000 mcf (million cu. ft.)	848,380	888,038
Estimated average value per 1,000 cu. ft.	<u>.125</u>	<u>.130</u>
Estimated value at well head in \$1,000	\$106,047	\$115,445

The increase in volume of gas produced and sold in 1969 is 4.7%. This increase is mostly due to the larger purchases by Cities Service Gas Company in the Hugoton area with the completion of their larger gas lines. The biggest project in the gas industry in Kansas during 1969 was a development program still in process which has not yet affected the production figures. The Mesa Petroleum Company, headquartered in Amarillo, Texas took over operation of the Hugoton Production Company through a merger. Mesa announced plans to spend \$5,000,000 on development work within the greater Hugoton field and elsewhere. The program could include as many as 200 new tests. Mesa completed 91 wells during 1969 as shut-in gas wells. The company has announced the signing of an agreement with Kansas Power & Light Company through which KP&L will buy gas over a period of twenty years under a well head delivery price of approximately 23 1/2¢ per mcf. This is almost double the figures used for the estimated average price of natural gas in Kansas in 1968 and 1969. Note that the increase in total dollar volume from 1968 to 1969 for gas sold at the well head in Kansas was 8.9%.

Natural Gasoline and LPG (Data - Kansas Corporation Commission)

	<u>1968</u>	<u>1969</u>
Total production in barrels of 42 gallons	25,183,729	27,150,178
Estimated value per barrel	<u>\$2.20</u>	<u>\$2.20</u>
Total estimated value, \$1,000	\$55,404	\$59,730

With a value of nearly sixty million dollars in 1969, the production of natural gasoline and liquid petroleum gases continues to increase in importance each year. The dollar value and volume of these products increased 7.8% in 1969 as compared with 1968. A considerable amount of these products, perhaps as much as two-thirds

of the total, is a by-product of helium extraction. The helium itself, although a product extracted from natural gases, is the subject of a separate report and not included in the present figures.

Combined Value - Oil, Gas, and LPG (Basic Data - Kansas Corporation Commission)

	<u>1968</u>	<u>1969</u>
Oil - in \$1,000	\$294,856	\$290,102
Gas - in \$1,000	106,048	115,445
LPG etc. - in \$1,000	<u>55,404</u>	<u>59,730</u>
	\$456,308	\$465,277

These figures, based on estimated average prices, are subject to considerable modification but do show a relative position change from 1968 to 1969 of an increase in value of 1.3%. The relative importance of oil, gas, and LPG as percent of total is:

	<u>1968</u>	<u>1969</u>
Oil	64.5%	62.4%
Gas	23.3%	24.8%
LPG	<u>12.2%</u>	<u>12.8%</u>
	100.0%	100.0%

Significant Developments, Western Kansas, 1969

GANO SOUTHEAST POOL, Graham County, was discovered by Murfin Drilling Company's #1 Manz in Section 12, Township 10 South, Range 24 West. At the year end there were 16 wells on 20-acre spacing producing from the Lansing-Kansas City limestones at a depth of 4,000 feet. Oil sales were about 30,000 barrels of oil per month.

CAHOJ POOL, Rawlins County, an important extension of the ten-year-old Cahoj Pool in Township 1 South, Range 34 West, ranks as one of the more prolific developments during 1969 even though not classed as a new oil field. At the year end there were 11 new Lansing-Kansas City oil wells on 40-acre spacing with a depth of approximately 4,350 feet. These wells were selling approximately 15,000 barrels of oil per month.

WILSON CREEK POOL, in Township 14 South, Range 10 West, Ellsworth County, and extending westward into Township 14 South, Range 11 West, Russell County, although discovered prior to 1969, was the scene of extensive development and at the year end there were 40 wells on 10-acre spacing producing in excess of 40,000 barrels of oil per month from multi-pay zones, largely limestones, in the Wabaunsee, the Tarkio, the Topeka, and the Lansing-Kansas City at depths ranging from 2,400 to 2,900 feet.

Significant Developments, Eastern Kansas, 1969

BRANSON POOL, Cowley County, is the site of what appears to be a significant discovery by Gralapp and Everly at the #1 Branson, Section 32, Township 32 South, Range 7 East where production was found in the Bartlesville Sand at a depth of 2,800 feet. At the end of 1969 six wells, on 20-acre spacing, were selling over 10,000 barrels per month.

KEIGHLEY and KEIGHLEY NE POOLS, Township 26 South, Range 8 East, Butler County, were the scene of important developments with the drilling of many wells on 10-acre spacing to the Cattleman Sand near 2,600 feet and the Bartlesville Sand near 2,700 feet. These are new wells in an old area, unprorated, hence production figures are not readily available from the Kansas Corporation Commission. All wells are completed for a nominal 25 barrels of oil per day, although production capacity is thought to considerably exceed that amount.

Forecast for the Future

Many operators in the exploration phase of the oil business feel that the short term (one year) and longer term (five to ten years) forecast is in the direction of a lower price for a barrel of crude oil produced in Kansas, notwithstanding the ever-increasing difficulty of finding new substantial reserves within the state and the ever-increasing cost of exploration and lease operation, together with the general inflationary trend. On the other hand many of the same operators feel that the short term to long term trend for gas is in the direction of gas becoming more valuable per mcf. It is recognized that it may be necessary to market future gas within the State of Kansas because of the price ceiling imposed by the Federal Power Commission on gas transported across the state lines. Their "consumer protection" is proving to be effective in "protecting" the price of gas used by consumers, but totally ineffective in protecting supply; as a consequence industry is migrating into areas of gas supply. Kansas may well expect some industrial growth as its new gas supplies will be too valuable to export out of the state at FPC prices for interstate gas.

The trends apparent in the data for 1969 are expected to continue in the future. They include:

- (1) Decrease in oil production
- (2) Decrease in drilling activity
- (3) Increased interest in exploring for gas reserves
- (4) Increased use by Kansas refineries of oil produced outside of the state
- (5) Decreased profitability for the overall oil business, including exploration, production, and refining.

References

Sources of data and references:

- (1) Open file records of the Kansas State Corporation Commission, Conservation Division, 500 Insurance Building, Wichita, Kansas 67202.
- (2) Data published by Petroleum Information, a subsidiary of A. C. Nielsen Company, headquartered at 1640 Grant Street, Denver, Colorado.
- (3) Conselman, Frank B., 1970, Petroleum Exploration, 1969 in Review, Geotimes, published by the American Geological Institute, v. 15, no. 1, pp. 21-22.
- (4) Porter, James P., 1969, A 25 year review of the Kansas oil industry, lecture presented before the Kansas Geological Society in December 1969, abstract published informally by Petroleum Information and by Independent Oil & Gas Service, 816 Wichita Plaza Building, Wichita, Kansas 67202.
- (5) Dilts, Robert L., 1969, Secondary Recovery and Pressure Maintenance Operations in Kansas 1968, State Geological Survey, Special Distribution Publication 46.

THE KANSAS SALT INDUSTRY¹

James Berberick and Jess Willoughby

The National Industry

The salt industry in the U. S. ranks among the largest in the nonmetals field. Domestic salt production in 1968 totaled about 41.3 million tons and apparent consumption, including net imports, was approximately 42.9 million tons. These data are consistent with a 4.6% average annual growth rate for the industry over the past twenty years. In the near term, salt producers expect the annual consumption growth rate to increase to around 6% due to increasing demand from the chemical industry and highway departments.

There are many salt producers in the U. S. and these can be differentiated into two types--the captive salt producer who consumes his own production in the manufacture of chemicals, and the merchant salt producer who sells his salt on the open market. About two-thirds of annual production is consumed by the chemical industry, so it is natural that chemical firms are among the largest salt producers. In fact, only four companies account for over 70% of merchant salt production. In light of this breakdown, it can be seen that a relatively small proportion of total salt production is accounted for by the small, privately owned salt company. In 1963, there were nearly 40 such companies in operation throughout the U. S.

The Kansas Salt Industry

In 1967 there were seven salt producers in the State of Kansas. Six of these were merchant producers and one company consumed all of its production in the manufacture of chemicals. Of the six merchant producers, two were national firms with fairly wide distribution, and the remaining four were small, privately-owned companies with relatively local distribution. Three companies produced evaporated salt only, one company produced rock salt only, and two companies produced both evaporated and rock salt. All of the salt produced by the chemical firm was in the form of brine.

¹The portion of this paper dealing with the over-all national and Kansas stature of the salt industry was prepared by Mr. Jess Willoughby, advertising manager of the Carey Salt Company, Hutchinson, Kansas. Additional comments about the future prospects for the salt industry and its potential for petro-chemicals was prepared by Mr. James Berberick, Research Assistant, University of Kansas School of Business. The comments by James Berberick are a result of a study being carried on by the State Geological Survey of Kansas, funded by the U. S. Bureau of Mines, dealing with regional mineral resource advantage and its estimation.

Including brine production, the total output of the Kansas salt industry in 1967 was 1,069,000 short tons valued at \$14,686,000. This represented about 6.3% of the national output in 1967, excluding brine.

Production for 1968 increased to 1,128,000 short tons valued at \$15,520,000 and this again represented slightly more than 6% of national production. The preliminary estimate of 1969 production is 1,100,000 short tons for a value of \$15,730,000. These data reflect an average growth rate of about 7.4% for Kansas salt production over the past three years.

Major Uses of Salt

As mentioned earlier, the chemical industry is by far the largest consumer of salt in the United States. Chemical manufacturers consumed 64% of all the salt sold or used in the nation in 1967. More specifically, 42% was used for production of chlorine and its co-product caustic soda, 18% for sodium carbonate, and 4% for other chemicals.

The next largest use of salt is in ice and snow removal and road bed stabilization. This constitutes use for 14% of all salt produced in 1967.

Among the other uses of salt are: food processing, which accounted for 10% of 1967 production; table salt, accounting for about 3% of production; and many miscellaneous uses, accounting for the remainder of total salt production.

Economic Considerations

The merchant salt producers are faced with several factors which combine to make the industry a highly competitive, low-margin environment. Because of the relative abundant supply of salt in the U. S. and the world, salt is a very low-priced commodity. (The average minehead value of U. S. rock salt is about \$6.50 a ton.) In view of this, the salt producer must maintain a high-volume, low-unit cost operation to be profitable. This type of operation requires a high capital investment for plant and equipment.

Transportation costs are an extremely important consideration in the salt industry. For salt that is not produced at its end-use point, transportation costs can almost equal the minehead value. In this country, it is estimated that average rail shipment adds about \$5-6/ton to the cost of salt, while trucking adds about \$8/ton and barge about \$2/ton. Salt is transported mainly by rail in the U. S., and profitability depends largely on freight ratio.

Another factor which bothers some producers is the purity of their mined salt. If a high percentage of impurities are present in the raw salt, beneficiation costs can be prohibitive. This is especially true for rock salt merchants who sell to the chemical industry.

Salt Prospects for the Salt Industry in Kansas

Most experts feel that the future growth of salt consumption will be closely tied to demand for chlorine and caustic soda within the chemical industry. There is also evidence of an increasing demand for salt as a de-icing agent. Recent statistics on salt consumption in the U. S. lends support to these projections.

In 1953, 29% of the salt sold or used by producers in the U. S. was consumed in the production of chlorine-caustic soda, compared with 35% in 1958, 39% in 1963, and 42% in 1967. Salt sold or used for snow and ice removal and road stabilization constituted about 5% in 1963, and 14% in 1967.

Presently, there is only one firm in Kansas that produces chlorine-caustic soda from salt. As might be expected, this firm also produces the majority of its salt needs.

On the surface, it would seem that the growing market for these co-products could support more than one such producer.

If we consider the potential product interrelationships between salt and other natural resources of Kansas, namely coal and natural gas, the state would seem to have a vast potential for chemical production, especially petrochemicals. It is not unreasonable to expect that a firm with the necessary capital could profitably utilize these three natural resources in the production of a variety of chemical products. These chemical products could support other light industry within the state. For example, phenol, which can be produced from these resources, could be used as a basic input in a variety of manufacturing processes ranging from special plastics to phenol resins.

In conclusion, we can expect that salt production in Kansas will increase at a rate consistent with the national average. By taking a synergistic viewpoint of the natural resource posture in Kansas, we can foresee a tremendous potential for increased salt production in the present decade.

References

Sources of data and references:

- (1) Petkof, Benjamin, 1969, Salt in 1968, in Mineral Resource Evaluation, Minerals Yearbook V, I-II Preprint.
- (2) McIntyre, George T., and Hornbaker, A. L., 1969, The Mineral Industry of Kansas, U. S. Bureau of Mines, V, III Preprint, pp. 1-18.
- (3) Petkof, Benjamin, 1968, Salt, Minerals Yearbook, U. S. Bureau of Mines, V, I-II, pp. 1003-1012.

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CEMENT PRODUCERS...LISTED ALPHABETICALLY

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
PORTLAND CEMENT					
Ash Grove Cement Co.	Chanute 66720	316-431-4500	Neosho	8-27-18 E 18-27-18 E	
General Portland Cement Co. Trinity Divison	Box 479, Fredonia 66736	316-378-2189	Wilson	24-29-14 E 19-29-15 E	
Ideal Cement Co.	Box 228, Superior, Nebraska 68978	402-879-3267	Jewell	6- 1- 7 W	Ideal Cement
Lehigh Portland Cement Co.	Iola 66749	316-365-3121	Allen	2-25-18 E	
Lone Star Cement Corp.	Box 87, Bonner Springs 66012	913-422-1050	Wyandotte	NW 28-11-23 E	
Monarch Cement Co.	Humboldt 66748	316-473-3211	Allen	SE 9-26-18 E NE 16-26-18 E	Eckert Glover
Universal Atlas Cement Division, U.S. Steel Corp.	Box 428, Independence 67301	316-331-0200	Montgomery	NW 4-33-16 E NE 5-33-16 E NE 32-32-16 E	U. S. Steel U. S. Steel U. S. Steel

CLAY AND SHALE PRODUCERS...LISTED ALPHABETICALLY

BRICK, BRICK & TILE

Acme Brick Company	S. Washington St. Weir 66781 Box 98, Kanopolis 67454	316-396-8217 913-634-5211	Cherokee Ellsworth	SW 17-32-25 E 34-31-24 E W SE 28-15- 7 W SE NE 29-15- 7 W SW 34-16- 8 W W 23-14- 7 W N 25-15- 7 W	Wilkinson Acme Brick Andrews Andrews Boggs Remley Sparks
Cloud Ceramics	Concordia 66901	913-243-1284	Cloud	NE 13- 6- 3 W SW 32- 7- 2 W NW 5- 8- 2 W SE 30- 7- 2 W	

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Excelsior Clay Products, Inc.	Fredonia 66736	316-378-2174	Wilson	4-29-14 E 10-29-14 E 11-29-14 E	
Humboldt Brick & Tile Co.	910 New York, Humboldt 67951	316-473-2211 316-473-2265	Allen (Plant)	34-25-18 E	
Kansas Brick & Tile Co., Inc.	Box 126, Hoisington 67544	316-653-2157	Barton	E 20-18-13 W W 15-16- 9 W	Smith Hochman
LIGHTWEIGHT AGGREGATE					
Buildex, Inc.	Box 62299, Pittsburg 66762	316-231-1050			
	Box 15, Ottawa 66067	913-242-2177	Franklin	23-17-19 E	Buildex, Inc.
	Box 87, Marquette 67464	913-546-2276	McPherson	1-17- 5 W	Buildex, Inc.
POTTERY					
Pittsburg Pottery	Box 5, Pittsburg 66762	316-231-3920	Cherokee	SW 17-32-25 E	Wilkinson, Inc.
SEWER PIPE					
W. S. Dickey Clay Manufacturing Co.	607-617 Commerce Trust Kansas City, Mo. 64105 Pittsburg 66762	816-842-9380 316-231-1400	Crawford	E SE 16-29-25 E NE SW 9-30-25 E W SW 22-30-25 E NE 11-30-25 E SW 17-32-25 E	W. S. Dickey W. S. Dickey Ferguson Simone Wilkinson, Inc.
COAL PRODUCERS...LISTED ALPHABETICALLY					
Cliff Carr Coal Co.	Rt. 1, Mulberry 66756	316-764-3443	Crawford	2-29-25 E	
The Clemens Coal Co.	Box 62299, Pittsburg 66762	316-231-1050	Crawford	21-28-25 E 34-30-25 E	Mine No. 22 Mine No. 25
Fyock Coal Co.	Prescott 66767	913-471-2742	Linn	W NW 11-23-25 E	Fyock
Graham Coal Co.	Reading 66868	316-269-3803	Osage	17-18-14 E	
Pittsburg-Midway Coal Mining Co.	Tenmain Center Kansas City, Mo. 64105	816-842-5430	Cherokee	13-33-21 E 14 & 15-32-22 E 22 & 23-32-22 E 24-32-22 E 19-32-23 E	P & M P & M P & M P & M P & M
Wilkinson Inc.	Weir 66781	316-396-8411	Cherokee	20-32-25 E	Wilkinson

GYPSUM PRODUCERS...LISTED ALPHABETICALLY

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Georgia Pacific Corp. Bestwall Gypsum Division	Blue Rapids 66411	913-226-6331	Marshall	NW 16- 4- 7 E	
National Gypsum Co.	Medicine Lodge 67104	316-886-5613	Barber	9-31-15 W 16-31-15 W	

LEAD AND ZINC PRODUCERS...LISTED ALPHABETICALLY

Eagle-Picher Industries, Inc.	Box 910, Miami, Okla. 74354	918-673-1740	Cherokee	33-34-24 E 34-34-24 E 3-35-24 E 4-35-24 E	
C & H Mining Co.	Box 281, Picher, Okla. 74360	918-542-9403 Miami, Okla.	Cherokee	SE 2-35-23 E N NE 11-35-23 E SE SW 11-35-23 E NW 14-35-23 E	Bilharz Bilharz Mid-Continent Lawyers

MISCELLANEOUS INDUSTRIAL MINERAL PRODUCERS...LISTED ALPHABETICALLY

DIATOMACEOUS MARL

National Lead Co. DeLore Division	Box 158, Edson 67733	913-899-2131	Wallace	W 1-11-38 W 2 & 3-11-38 W NW NE 10-11-38 W 11-11-38 W	Cogswell Cogswell Cogswell Cogswell
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VOLCANIC ASH

Ernest Hanzlicek	Wilson 67490	913-658-4172	Lincoln	SW 27-13-10 W	Hanzlicek
Interpace Corp.	Mankato 66956	913-378-3167	Jewell	32- 1- 9 W	
San Ore Construction Co.	Box 417, McPherson 67460	316-241-2240	Logan McPherson Norton	NW 12-13-35 W NE 32-17- 2 W SE 32- 3-24 W	Schertz Patrick Brunson
State Highway Commission Division III	Norton 67654	913-927-3315	Norton	S 32- 3-24 W	Brunson
Wyandotte Chemical Corp.	Wyandotte, Mich. 48192	313-282-3300	Norton	SW 25- 2-22 W	Miller

SALT PRODUCERS....LISTED ALPHABETICALLY

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
American Salt Corp.	3142 Broadway, Kansas City, Mo. 64105 Lyons 67554	816-753-7100 316-267-2361	Rice	10-20- 8 W	
The Barton Salt Co.	Box 989, Hutchinson 67501	316-663-2141	Reno	23-23- 6 W	
The Carey Salt Co.	1800 Carey Blvd. Hutchinson 67501	316-662-3341	Reno	16-23- 5 W	
Cargill, Inc.	Box 188, Pawnee Rock 67547	316-982-4382	Barton	SW 28-20-15 W	Cargill, Inc.
Independent Salt Co.	Kanopolis 67454	913-634-5221	Ellsworth	NW 29-15- 7 W	Independent
Morton Salt Co.	110 N. Wacker Dr. Chicago, Illinois 60606 Box 753, Hutchinson 67501	312-621-5200 316-662-4441	Reno	14& 23-23- 6 W	
Vulcan Materials Company Chemicals Division	Box 545, Wichita 67201		Sedgwick	20-29- 2 W	Vulcan Mat'ls. Co.

SAND & GRAVEL PRODUCERS....LISTED ALPHABETICALLY

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Abilene Sand, Inc.	Box 524, Abilene 67410	913-263-3492	Dickinson	SE 25-13- 1 E	Wilson
John H. Alsop Sand Co.	11th & M St. Box 345 Belleville 66935	913-527-2248	Clay Republic	SW 2- 8- 2 E SE 7- 3- 4 E	Dittmar Rumft
Alsop Sand Co.	1207 Pinecrest Garden City 67846	316-276-3130	Finney	NE 19-26-32 W	City of Garden City
American Sand & Material Co., Inc.	4600 Speaker Road Kansas City 66106	913-342-4208	Wyandotte	18-11-25 E	Kansas River
Arensman Sand & Gravel Co.	Chase 67524	316-543-2822	Rice	NE 29-20-10 W	Hagen
Arkansas Sand Co., Inc.	Box 742, Great Bend 67530	316-793-9458	Barton	NE 4-20-13 W	Schultz
Clyde Armstrong Sand Co.	1122 E. 6th Pratt 67124	316-672-6292	Pratt	SW 4-28-13 W	
Associated Mat'l & Supply Co., Inc.	6015 N. Broadway Box 4064, N. Wichita Sta. 67204	316-744-0433 316-766-0281	Sedgwick	N N 23-26- 1 W	Clark
Barton Co. Road Dep't.	Box 46, Great Bend 67530	316-453-4571	Barton	5-20-11 W SE 32-19-13 W 32-19-14 W	
Rod Bentley Sand & Gravel	Shields 67874	316-397-5669	Gove	SW 24-15-28 W	Bentley
Bentley Sand Co.	Bentley 67016	316-432-5235	Sedgwick	NW 13-25- 2 W NE 17-25- 1 W	Vogt
Big Three Sand & Gravel Co.	6000 W. 21st St. Wichita 67212	316-943-6361	Sedgwick	SE 3-27- 1 W	Commercial Asphalt
Blue River Sand & Gravel Co.	Box 38, Blue Rapids 66411	913-226-8881	Marshall	SW 19- 4- 7 E	Stryker
Boethin Construction Co.	Stockton 67669	913-425-6580	Rooks	19- 7-17 W	
Bowersock Mills & Power Co.	Box 218, Lawrence 66044	913-843-1051	Douglas	6th & New York	Kansas River
Broce & Smith, Inc.	Box 9, Larned 67550	316-285-2189	Kiowa Pawnee	SE 2-29-16 W SE SE 5-22-16 W	Starkey Bahls

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Bryant Sand & Gravel Co.	Box 218, Burrton 67020	316-463-5621	Harvey	NE 6-24- 3 W	Bryant
Builders Sand Co.	78th & Holliday Dr. Kansas City 66106	913-375-1414	Johnson Wyandotte	5-12-24 E SW 32-11-24 E	Theden Garrett
Carlile Sand & Gravel, Inc.	Box 1477, Liberal 67901	316-624-4093	Seward	N 1-33-33 W NE 35-33-32 W	Frazier Jolly
Chase Co. Road Dep't.	Cottonwood Falls 66845	316-263-6386	Chase	Various	Various
Cheyenne Co. Road Dep't.	St. Francis 67756	913-332-2621	Cheyenne	19- 1-41 W 16- 2-42 W 9- 5-37 W 19- 1-38 W	Palmer Morris Nelson Ramsey
Clark Co. Road Dep't.	Ashland 67831	316-635-2832	Clark	SE 12-32-22 W 27-32-23 W 12-32-25 W 18-31-22 W NW 13-30-23 W	Dorsey Abell Smith Young Bros. Pyle
Howard Clevenger	Leoti 67861	316-375-2575	Wichita	SE 32-18-37 W	
Comanche Co. Road Dep't.	Coldwater 67029	316-582-7231	Comanche	28-32-16 W NW 14-32-17 W 6-32-18 W 12-35-19 W	Waite Lenertz Gard DeGolyer
Consumers Sand Co., Inc.	924 W. Railroad St. Topeka 66608	913-232-5117 913-232-1414 913-232-4163	Shawnee	SW 23-11-16 E Kaw Half-Breed Reserve	Newman Kansas River
Howard Covert	Alton 67623	28	Rooks	NW 22- 7-17 W	Riffe
Cumley Sand Co.	Box 17045, Wichita 67217	316-777-4482	Sumner	NW 6-30- 2 W	
Davis & Sons Sand Sales	Rt. 1, Dodge City 67801	316-227-6301	Ford	SW 31-26-25 W	Bailey
Decatur Co. Road Dep't.	Oberlin 67749	913-475-3041	Decatur	15- 1-27 W	Huff
Dodge City Sand Co.	500 E. Cherry, Dodge City 67801	316-227-6091	Ford	36-26-25 W	
Dolese Brothers Co.	Box 1841, Wichita 67212	316-262-1428	Sedgwick	NW 7-27- 1 E	21st & W. Robbins

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Eakin Sand & Gravel Co.	Box 48, Larned 67550	316-285-3916	Pawnee	SW 5-22-16 W NW 8-22-16 W	Eakin
Edwards Co. Road Dep't.	Kinsley 67547	316-659-2188	Edwards	34-24-19 W	Feldman
Elk Co. Road Dep't.	Howard 67349	316-374-2580	Elk	NE 33-28-13 E 31-28- 9 E	Smith Barnes
Ellis Co. Road Dep't.	Hays 67601	913-625-7334	Ellis	23-15-19 W	Dinges
Ellsworth Co. Road Dep't.	Ellsworth 67439	913-472-4003	Ellsworth	SE SW 30-14-10 W NE 30-14-10 W W SW 22-15- 9 W SE NW 10-15- 9 W NE 35-15-10 W SW 18-15- 8 W NW 22-15- 8 W SW SW 35-15- 8 W SE SW 23-16- 7 W SW 36-16- 6 W SW 27-15- 8 W	McEvoy Borrell Root Burmeister Urbanek Croy Homolka Hoffman Peppiatt Buffington Thielen
Finlayson Gravel & Ready-Mix	Barnes 66933	907	Washington	NE 18- 3- 5 E	Finlayson
Ford Co. Road Dep't.	Dodge City 67801	316-225-4861	Ford	NW 12-27-24 W S NW 1-27-21 W	Ford Co. Molitor
Fountain Sand & Gravel Pit	Arlington 67514	316-538-3972	Reno	SE 6-25- 7 W	Fountain
Fyfe Sand & Gravel Co.	Box 331, Concordia 66902	913-243-4249	Cloud	26- 5- 3 W	
G & H Materials	Box 522, El Dorado 67042	316-775-2721	Butler	15-28- 5 E	Crowley
C.V. Garrett	Blue Rapids 66411	913-226-7350	Marshall	SE 24- 4- 6 E	Musil
Burl Gaunt	106 W. Hackney, Medicine Lodge 67104	316-886-4187	Barber	E NW 7-32-11 W	Palmer
Globe Construction Co. Inc.	1041 N. Water, Wichita 67203	316-265-2623	Sedgwick	SE 2-27- 1 W	Stewart
Gove Co. Road Dep't.	Gove 67736	913-936-2244	Gove	Various	Various
Grant Co. Road Dep't.	Box 1192, Ulysses 67880	316-276-1537	Grant Kearny	NE 29-29-35 W 10-25-36 W	Lighty Puckett
Gravel Products, Inc.	Nickerson 67561	316-422-3249	Reno	SW 15-22- 7 W	Paulson

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Gray Co. Road Dep't.	Cimarron 67835	316-855-3815	Gray	12-26-28 W	
Greeley Co. Road Dep't.	Tribune 67869	316-376-4253	Greeley	Various	White Woman Ck.
Hafenstine Construction Co.	Alma 66401	913-765-3405	Wabaunsee	Various creek locations	
Haigh Sand & Gravel	Beloit 67420	913-738-2367	Mitchell	NW 10- 7- 7 W	Haigh
Hamilton Co. Road Dep't.	Syracuse 67878	316-384-5135	Hamilton	Various	Various
Harper Co. Road Dep't.	Courthouse, Anthony 67003	316-842-5240	Harper	2-34- 6 W 23-34- 5 W 5-31- 9 W 9-32- 8 W 5-32- 7 W Various others	Welsh Mayo Jacobs Hoyt Fields
Haskell Co. Road Dep't.	Sublette 67877	316-375-2234	Haskell	20-30-34 W	Bryant
Haven Sand Co.	Haven 67543	316-465-7738	Reno	NE 20-24- 4 W	Mount
Haynes Sand & Gravel	Rt. 1, 1300 W. Madison Ave., Arkansas City 67005	316-442-2000	Cowley	NE 26-34- 3 E	Andrews
Hays Concrete Products Co.	Hays 67601	913-625-2716	Ellis	NW 30-13-18 W	
Heinzelman Construction Co.	506 S. 10th, Marysville 66508	913-562-3577	Marshall	SW 16- 2- 7 E NW 21- 2- 7 E	Williams Williams
Hodgeman Co. Road Dep't.	Jetmore 67854	316-357-4354	Hodgeman	Various	Various
Holliday Sand & Gravel Co.	6811 W. 63rd (Office) Overland Park 66202 Bonner Springs plant Edwardsville plant Rees plant Muncie plant Lawrence plant	913-236-5920 913-422-3095 913-422-3080 913-422-5399 913-299-2263 913-843-8717	Johnson Wyandotte Wyandotte Wyandotte Douglas	32-11-23 E 27-11-23 E 31-11-24 E 29-11-24 E 20-12-20 E	Schyt H.S.G. Rees H.S.G. Hayden & Nunemaker
Hoskinson Sand & Gravel Co.	Rt. 1, Hutchinson 67501	316-662-7783	Reno	SE 8-23- 6 W	Hoskinson
Hoxie Red-E-Mix	Hoxie 67740	913-675-3121	Sheridan	NE 11- 8-28 W	Feldt
Charles Hulme Construction Co.	1318 Warner Rd. Box 1049 Great Bend 67530	316-793-5177	Barton	SE 6-20-11 W	

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Hunter Ready Mix Co., Inc.	Hays 67601	913-625-3459	Ellis	NW 29-15-18 W	Werth
Hy-Grade Construction & Materials, Inc.	St. Paul 66771	316-449-2575	Neosho	NE 15-29-20 E	Hy-Grade
J & R Sand Co., Inc.	208 W. Hoover, Liberal 67901	316-624-5287	Seward	28, 33, 34-32-33 W	Lemert
Jewell Co. Road Dep't.	Mankato 66956	913-378-3431	Jewell	10- 1- 6 W	Heitman
C. R. Kaminska	Box 102, Medicine Lodge 67104	316-886-5213	Barber	NW 8-32-11 W	Kaminska
Kansas Sand & Concrete, Inc.	531 N. Tyler Topeka 66608	913-235-6284	Shawnee	Kansas River	N. Topeka Drain. Board
Kaw Valley Sand Co.	3800 Kansas Ave. Kansas City 66106	913-321-6636	Wyandotte	SE 18-11-25 E	Kansas River
Kearny Co. Road Dep't.	Box 346, Lakin 67860	316-355-6571	Kearny	10-25-36 W 11-25-36 W 24-25-35 W	Puckett Beymer Tackett
Walt Keeler Co., Inc.	826 E. Lincoln, Wichita 67211	316-265-1601	Sedgwick	SW 2-28- 1 W	Taylor
Kerr Sand Co.	Cimarron 67835	316-855-2222	Gray	NE 23-26-28 W	Kerr
Kershaw Redi-Mix Concrete & Sand Co., Inc.	Box 668, Manhattan 66502	913-776-8811	Riley	S 5-10- 8 E SE 30-10- 8 E	
Kingman Co. Road Dep't.	Kingman 67068	316-532-3771	Kingman	3-28- 8 W	McKenna
Kinsley Sand & Gravel, Inc.	Kinsley 67547	316-659-2259	Edwards	2-25-19 W	Owens
Kiowa Co. Road Dep't.	Greensburg 67054	316-723-2531	Kiowa	3-29-17 W 2-29-16 W 23-30-16 W	Hulme Starkey Plester
Lane Co. Road Dep't.	Dighton 67839	316-397-2401	Lane	NW 15-20-30 W	Hollingsworth
Larned Sand & Gravel	Box 227 Larned 67550	316-285-3236	Pawnee	SE 4-22-16	Buster
Lincoln Co. Road Dep't.	Lincoln 67455	913-524-4443	Lincoln	28-13-10 W 30-12- 9 W	Pejsha Busick

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Lincoln Co. Road Dep't. (cont.)					
Logan Co. Road Dep't.	Russell Springs 67755	913-846-2266	Logan	17-12-9 W	Nelson
Lucas Gravel Co.	Rt. 2, Box 136 Leon 67074	316-745-3350	Butler	21-10-10 W	Burger
Lyon Co. Road Dep't.	Emporia 66801	316-342-2295	Lyon	19-10-9 W	Oetting
Lyon Materials, Inc.	302 Peyton, Box 425 Emporia 6801	316-342-2047	Lyon	26-10-9 W	Jensen
McFarland Gravel	Rt. 2, Arkansas City 67005	316-442-9580	Cowley	3-10-8 W	Healy
McPherson Co. Road Dep't.	McPherson 67460	316-241-0466	McPherson	12-10-8 W	Jones
Marshall Co. Road Dep't.	Marysville 66508	913-443-4941	Marshall	21-10-7 W	Lewis
Meade Co. Road Dep't.	Meade 67864	316-873-2481	Meade	25-10-7 W	Jones
Miles Sand, Inc.	4857 N. Meridan Wichita 67204	316-838-3362	Sedgwick	29-10-6 W	Hartzell
Miller Brothers	Goodland 67735	913-899-7232	Sherman	34-12-7 W	Rittman
Missouri Valley Sand, Inc.	Box 89, Leavenworth 66048	913-682-3621	Leavenworth	29-12-6 W	Garrison
More Sand Co., Inc.	Rt. 3, Junction City 66441	913-238-6922	Geary	8-13-7 W	Wotting
Morris Co. Road Dep't.	Council Grove 66846	316-767-5519	Morris	33-13-6 W	Hoeh
Morton Co. Road Dep't.	Richfield 67953	316-592-2166	Morton	22-13-35 W	
				NW NE 14-28-6 E	Lucas
				10-19-12 E	Powell
				NE 21-19-11 E	Jones
				12-34-4 E	Duncan
				17-34-4 E	McFarland
				18-34-4 E	McFarland
				16-18-4 W	Aelmore
				29-1-6 E	Kruse
				1-34-28 W	Unruh
				25-26-1 W	
				NW 29-8-40 W	Elliott
				NE 1-9-22 E	Missouri River
				NW 35-11-5 E	More
				SW 27-17-9 E	Moore
				SW 32-14-8 E	Picolet
				NW 4-17-7 E	Williams
				NE 4-17-7 E	Berry
				S 21-33-41 W	

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Morton Sand & Gravel	Box 213, Oberlin 67749	913-475-3245	Rawlins	W SW 14- 2-32 W	Martin
Mt. Hope Sand Co.	Rt. 1 Box 11 Haven 67543	316-465-3447	Reno	Lots 4&D4 36-24- 4 W	
Mueller Sand & Gravel Co., Inc.	Hanover 66945	913-337-2252	Washington	SW 5- 2- 5 E NE 18- 2- 5 E SE 7- 3- 5 E S 28- 1- 4 E NW 8- 2- 4 E NE 7- 2- 5 E	Mueller Mueller Mueller Spitsnogle Mueller Mueller
Mulvane Sand Co., Inc.	6015 N. Broadway Wichita 67208	316-744-0433 316-777-1421	Sumner (plant)	31-29- 2 W	Estfan
Geo. M. Myers, Inc.	Box 911, El Dorado 67042	316-442-9120	Cowley	SW 36-35- 3 E	Meyers, Inc.
Ness Co. Road Dep't.	Ness City 67560	913-798-3350	Ness	31-17-23 W 32-16-22 W 1-16-25 W 35-20-23 W 2-16-24 W	Horchem Musselman Clyne Frusher Harris
New Era Sand & Gravel Co.	401 S. River St. St. Francis 67756	913-332-2147	Cheyenne	21- 3-40 W	New Era S & G
Oatville Sand & Gravel	4100 W. 31st South Wichita 67210	316-942-3871	Sedgwick	NE 11-28- 1 W	Newby
Osborne Co. Road Dep't.	Osborne 67473	913-346-2155	Osborne	28- 7-14 W	McReynolds
Oxford Sand & Gravel Co. Div. of Feaster Bros. Inc.	Box 266, Oxford 67119	316-455-3545	Cowley	SW 7-32- 3 E	Oxford
P-K Sand Co.	Box 582, Garden City 67846	316-276-8020	Finney	SW 25-32-24 W	Morris
Parks Enterprise, Inc.	648 Oak St. Emporia 66801	316-342-7233	Lyon	E 6-20-13 E W 6-20-13 E	McKinney Holforty
Partin Sand & Gravel Co.	Box 274, Stafford 67578	316-234-5445	Stafford	SE 4-25-11 W	
Paving Contractors, Inc.	6405 E. Kellogg Wichita 67207	316-684-6161	Sedgwick	NW 15-29- 1 E	Costin
Pawnee Co. Road Dep't.	Larned 67550	316-285-3761	Pawnee	3-22-16 W	Baldwin
Carroll Paxson	1220 Miami, Burlington 66839	316-364-2161	Coffey	SE 10-22-15 E	Paxson

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Peck-Woolf Sand and Material Co.	7301 Kaw Dr. Kansas City 66111	913-299-3342	Wyandotte	SE 21-11-24 E SW 31-11-24 E	
Phillips Co. Road Dep't.	Phillipsburg 67661	913-543-4912	Phillips	NW 13- 5-18 W E 16- 2-20 W	McKinley Greving
Popejoy Construction Co., Inc.	Box 385, Ulysses 67880	316-356-2404	Kearny	SW 3-25-36 W 9-25-36 W	Beymer Bahntge
Pratt Co. Road Dep't.	Pratt 67124	316-672-2441	Pratt	29-28-11 W 10-27-12 W SE 15-29-15 W 35-27-14 W 30-29-13 W SE 4-28-13 W 21-27-12 W	Armistead Studer Hogard Eubank Lambert Whitfield Maas
Ed Provence Sand Co.	6600 W. 13th Wichita 67206	316-942-5791	Sedgwick	NE 12-27- 1 W	Provence
Quinter Redi-Mix Co.	Quinter 67752	913-754-3661	Gove	NE 4-11-29 W	Hoover
Rawlins Co. Road Dep't.	Atwood 67730	913-626-3726	Rawlins	30- 3-32 W	Anderson
Charles Reise Contractor	114 1/2 N. 5th St. Seneca 66538	913-336-2819	Nemaha	NE 32- 1-13 E	Perkins
Republic Co. Road Dep't.	Belleville 66935	913-527-2664	Republic	SE 15- 2- 2 W	Hanel
Walt Rhoads Sand & Gravel Co.	615 W. 10th Goodland 66735	913-899-3425	Sherman	S 15-10-41 W	Rockwell
River Sand Co., Inc.	Box 233, 3220 Water Works Drive, Topeka 66604	913-233-3877	Shawnee	N 26-11-15 E	Kaw River
Dale Roberts	Quinter 67752	913-754-3519	Gove	E 25-13-28 W	Roberts
Robins Sand & Gravel	323 W. 2nd Minneapolis 67467	913-392-2087	Ottawa	NW 2-11- 4 W W 20-10- 4 W	Watson Stratton
Rock Hill Stone & Gravel Co., Inc.	Sterling 67579	316-278-3514	Rice	NE 27-21- 8 W	Rock Hill
Rottinghaus Rock & Gravel Co.	Baileyville 66404	913-336-2056	Nemaha	NW 23- 1-11 E NW 16- 1-11 E SW 27- 1-12 E	Schmitz O'Toole Rottinghaus
Rush Co. Road Dep't.	La Crosse 67548	913-222-3118	Rush	36-19-19 W 20-19-20 W	Anschutz Schlegel

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Rush Co. Road Dep't. (cont.)			Ellis	33-15-16 W 26-15-19 W	Urban Zimmerman
Russell Co. Road Dep't.	Box 415, Russell 67560	913-483-4032	Russell	12-15-15 W 21-11-14 W 5-12-15 W 26-12-13 W	Bender Bunker Brumitt K.C. Corps of Eng.
				1-15-15 W 29-14-12 W 30-14-11 W 2-13-14 W 20-11-11 W 8-15-15 W	Dumler Ehrlich Herber Major Rupert Truan
Salina Sand Co., Inc	Mentor 67465	913-823-2932	Saline	SE 7-15- 2 W NW 19-16- 2 W	Jenney Morse
San Ore Construction Co., Inc.	Box 417, McPherson 67460	316-241-2240	Barber	SW 21-33-11 W NW 31-33-11 W E 31-33-12 W NE 17- 4-26 W SW 2-17- 3 W NE 34-19- 3 W SE 6-24- 3 W NE 27- 8-42 W NW 29- 8-42 W SW 31- 8-36 W	Gilmore Bliss McNally Robbins Lowe West Estate Bryant Taylor Cramer Gager
Scott Co. Road Dep't.	Scott City 67871	316-872-2202	Scott	Various	Various
Seacat Sand & Cxcavation	409 W. Lincoln Greensburg 67054	316-723-2396	Kiowa	SW 3-29-17 W	Seacat
Sedgwick Sand Co.	Sedgwick 67135	316-766-0456	Sedgwick	10-26- 1 W	Nicholson
Seward Co. Road Dep't.	Liberal 67901	316-624-3401	Seward	2-33-33 W 1-35-31 W	
J.H. Shears' Sons, Inc.	819 W. 1st Street Hutchinson 67501	316-662-3307	Reno	SE 14-23- 5 W	Shears
Sheridan Co. Road Dep't.	Hoxie 67740	913-675-3621	Sheridan	7- 9-27 W 12- 6-30 W 20- 7-26 W 30-10-30 W 15- 6-27 W 23-10-26 W	Ochs Zodrow Currier Roberts Wagoner McWilliam
Sherman Co. Road Dep't.	Goodland 67735	913-899-5253	Sherman	Various	Various

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Shoffner Sand & Gravel Co.	134 E. Jewell Salina 67401	913-827-1520	Douglas Geary	NW 19-12-20 E SW 21-11- 5 E	
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	Greeley Logan Phillips Sherman Thomas	SE 35-17-42 W SW 12-13-34 W NE 29- 4-17 W NW 18- 8-41 W N 32-10-31 W NE 31-10-32 W NE 27- 9-34 W NW 33-14-23 W SW 11-13-40 W	Harris Luther McComb Errington Miller Siebert Theimior Wiles Lacey
Smith Sand Co., Inc.	Box 391, 1206 E. Fulton Garden City 67846	316-276-3771	Trego Wallace Finney	NW 17-24-33 W	
Stafford Co. Road Dep't.	Box 224, St. John 67576	316-549-3597	Stafford	13-25-12 W 6-24-13 W	Depew Fisher
Stanton Sand & Gravel	Ransom 67572	913-731-2475	Trego	25-14-24 W	Farm
State Highway Commission Director	7th Floor, State Office Bldg.	913-296-3461			
Division 1 Mat'ls Eng. John M. Griffith	121 W. 21st Topeka 66612	913-296-3881			
Division 2 Mat'ls. Eng. D.L. Jarboe	1006 N. Third Box 857 Salina 67401	913-823-2390			
Division 3 Mat'ls. Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	Decatur Graham Logan Norton Phillips Rawlins Smith Thomas Wallace	SE SE 29- 4-27 W S 22- 3-29 W NE 8- 8-22 W SE 35-14-32 W SE 19- 5-25 W SW 9- 5-23 W NW 23- 5-18 W SE 26- 2-33 W 4- 5-15 W 34-10-32 W E SW 20- 6-32 W E 19- 7-34 W SE 10-13-40 W	Ritter Tilden Stuchlik Cristy Est. Linden Clydesdale Maddox Niermeier Sweat Fulton Barnett Grover Lacey
Division 4 Mat'ls. Eng. James L. Farrell	411 W. 14th Chanute 67720	316-431-0102			

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State Highway Commission (cont.)					
Division 5 Mat'ls. Eng. R.E. Fry	500 N. Hendricks Hutchinson 67501	316-665-8222			
Division 6 Mat'ls. Eng. George B. Sigsbee	Box 619, Garden City 67846	316-276-2255			
J.E. Steele Sand	1400 N. Halstead Hutchinson 67501	316-662-5741	Reno	S NW 9-23- 5 W	Steele
Stewart Sand & Material Co.	4049 Pennsylvania Kansas City, Mo. 64111	816-753-3920	Wyandotte	S 23-11-24 E 29-11-24 SW 12-11-24	Meager Morris Plant
Stevens Co. Road Dep't.	Box 1167, Hugoton 67951	316-544-4782	Stevens	29-30-34 W 29-31-38 W	Bryant Cimarron Riv.
Stone Sand Co.	Box 872 Great Bend 67530	316-793-7864	Barton	SW 33-19-13 W	Stone
Sumner Co. Road Dep't.	Wellington 67152	316-326-2791	Sumner	36-32- 2 E	Donley
Superior Sand Co., Inc.	6500 W. 21st Wichita 67212	316-766-0592	Sedgwick	NW 3-27- 1 W	Superior Sand Co.
Superior Sand & Gravel Co., Inc.	Box 11145 Kansas City 66111	913-289-6525	Wyandotte	W 22-11-24 E	
Thomas Co. Road Dep't.	Colby 67701	913-462-2122	Thomas #1 #2	20- 7-34 W 17- 7-32 W	Ferguson Est. Sears
Tinkle Sand Co.	Claflin 67525	316-587-3942	Barton	NE 6-20-11 W	Knop
Tobias & Birchenough, Inc.	Box 470 Lyons 67554	316-257-2161	Rice	NE 16-20- 9 W	Tobias
Topeka Sand Co.	Rt. 4, Topeka 66603	913-233-9849	Shawnee	SE 23-11-16 E	
Trego Co. Road Dep't.	Wakenney 67672	913-743-6441	Trego	Various	Various
Tri-Co., Inc.	6700 S. Hydraulic Wichita 67233	316-524-8631	Sedgwick	NW 34-28- 1 E	Blood
Vic's Sand & Gravel Co.	6600 W. 21st, Wichita 67212	316-943-4372	Sedgwick	NW 1-27- 1 W	
Victory Sand & Concrete, Inc.	Box 281 Topeka 66601	913-233-2385	Shawnee	NW 25-11-15 E	Kansas River

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Wabaunsee Co. Road Dep't.	Alma 66401	913-765-3712	Wabaunsee	Various	Various
WaKeeney Redit-Mix, Inc.	Box 835 WaKeeney 67672	913-743-2810	Trego	SE 33-12-23 W	Tinkler
Wamego Sand Co., Inc.	Box 119 Wamego 66547	913-456-9888	Pottawatomie	NW 10-10-10 E	
Ray Wells Sand & Gravel	Rt. 1 Kingman 67068	316-532-2088	Kingman	NE 1-28- 8 W SW 1-28- 8 W	Coleman Wells
Larry Werth Sand Co.	Schoenchen 67667	913-625-6482	Ellis	SE 29-15-18 W	Werth
Marvin J. Werth Sand Co.	Rt. 2, Box 44A Hays 67601	913-624-5107	Ellis	31-15-18 W	Werth
White Construction Co.	Kanopolis 67454	913-634-5350	Lincoln Ellsworth		Bolte Hoffman Bates Grubb White
Whitfield Sand & Concrete, Inc.	Box 66, Pratt 67124	316-672-3181	Pratt Barber	SE 4-28-13 W SE 24-31-12 W	Barnes
Wichita Big River Sand Co.	990 N. Westlink Wichita 67204	316-524-0691	Sedgwick	18-28- 1 E	Davis Corp.
Wichita Co. Road Dep't.	Leoti 67861	913-375-2714	Wichita	E 8-19-36 W	Willis
Wilson Brothers	Rt. 3, Arkansas City 67005	316-442-4956	Cowley	32-34- 4 E	Wilson

SAND & GRAVEL PRODUCERS...LISTED BY COUNTY ALPHABETICALLY

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<u>BARBER</u>				
Burl Gaunt	106 W. Hackney, Medicine Lodge 67104	316-886-4187	E NW 7-32-11 W	Palmer
C.R. Kaminska	Box 102, Medicine Lodge 67104	316-886-5213	NW 8-32-11 W	Kaminska
San Ore Construction Co. Inc.	Box 417, McPherson 67460	316-241-2240	SW 21-33-11 W NW 31-33-11 W E 31-33-12 W	Gilmore Bliss McNally
Whitfield Sand & Concrete, Inc.	Box 66, Pratt 67124	316-672-3181	SE 24-31-12 W	
<u>BARTON</u>				
Arkansas Sand Co., Inc.	Box 742, Great Bend 67530	316-793-9458	NE 4-20-13 W	Schultz
Barton Co. Road Dep't.	Box 46, Great Bend 67530	316-453-4571	5-20-11 W SE 32-19-13 W 32-19-14 W	
Charles Hulme Construction Co.	1318 Warner Rd., Box 1049 Great Bend 67530	316-793-5177	SE 6-20-11 W	
Stone Sand Co.	Box 872 Great Bend 67530	316-793-7864	SW 33-19-13 W	Stone
Tinkle Sand Co.	Claflin 67525	316-587-3942	NE 6-20-11 W	Knop
<u>BUTLER</u>				
G. & H. Materials	Box 522, El Dorado 67042	316-775-2721	15-28- 5 E	Crowley
Lucas Gravel Co.	Rt. 2, Box 136 Leon 66801	316-745-3350	NW NE 14-28- 6 E	Lucas
<u>CHASE</u>				
Chase Co. Road Dep't.	Cottonwood Falls 66845	316-263-6386	Various	Various

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>CHEYENNE</u>				
Cheyenne Co. Road Dep't.	St. Francis 67756	913-332-2621	19- 1-41 W 16- 2-42 W 9- 5-37 W 19- 1-38 W	Palmer Morris Nelson Ramsey
New Era Sand & Gravel Co.	401 S. River St. St. Francis 67756	913-332-2147	21- 3-40 W	New Era S & G
<u>CLARK</u>				
Clark Co. Road Dep't.	Ashland 67831	316-635-2832	SE 12-32-22 W 27-32-23 W 12-32-25 W 18-31-22 W NW 13-30-23 W	Dorsey Abell Smith Young Bros. Pyle
<u>CLAY</u>				
John H. Alsop Sand Co.	11th & M. St., Box 345 Belleville 66935	913-527-2248	SW 2- 8- 2 E	Dittmar
<u>CLOUD</u>				
Fyfe Sand & Gravel Co.	Box 331, Concordia 66902	913-243-4249	26- 5- 3 W	
<u>COFFEY</u>				
Carroll Paxson	1220 Miami, Burlington 66839	316-364-2161	SE 10-22-15 E	Paxson
<u>COMANCHE</u>				
Comanche Co. Road Dep't.	Coldwater 67029	316-582-7231	28-32-16 W NW 14-32-17 W 6-32-18 W 12-35-19 W	Waite Lenertz Gard DeGolyer
<u>COWLEY</u>				
Haynes Sand & Gravel	Rt. 1, 1300 W. Madison Ave. Arkansas City 67005	316-442-2000	NE 26-34- 3 E	Andrews
McFarland Gravel	Rt. 2, Arkansas City 67005	316-442-9580	12-34- 4 E 17-34- 4 E 18-34- 4 E	Duncan McFarland McFarland

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Geo. M. Myers, Inc.	Box 911, El Dorado 67042	316-442-9120	SW 36-35- 3 E	Myers, Inc.
Oxford Sand & Gravel Co. Div. of Feaster Bros. Inc.	Box 266 Oxford 67119	316-455-3545	SW 7-32- 3 E	Oxford
Wilson Brothers	Rt. 3, Arkansas City 67005	316-442-4956	32-34- 4 E	Wilson
<u>DECATUR</u>				
Decatur Co. Road Dep't.	Oberlin 67749	913-475-3041	15- 1-27 W	Huff
San Ore Construction Co., Inc.	Box 417, McPherson 67460	316-241-2240	NE 17- 4-26 W	Robbins
State Highway Commission Division 3, Mat'l's Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	SE SE 29- 4-27 W S 22- 3-29 W	Ritter Tilden
<u>DICKINSON</u>				
Abilene Sand, Inc.	Box 524, Abilene 67410	913-263-3492	SE 25-13- 1 E	Wilson
<u>DOUGLAS</u>				
Bowersock Mills & Power Co.	Box 218, Lawrence 66044	913-843-1051	6th & New York	Kansas River
Holliday Sand & Gravel Co.	Lawrence, 66044	913-843-8717	20-12-20 E	Hayden & Nunemaker
Shoffner Sand & Gravel Co.	134 E. Jewell, Salina 67401	913-827-1520	NW 19-12-20 E	
<u>EDWARDS</u>				
Edwards Co. Road Dep't.	Kinsley 67547	316-659-2188	34-24-19 W	Feldman
Kinsley Sand & Gravel, Inc.	Kinsley 67547	316-659-2259	2-25-19 W	Owens
<u>ELLIS</u>				
Ellis Co. Road Dep't.	Hays 67601	913-625-7334	23-15-19 W	
Hays Concrete Products Co.	Hays 67601	913-625-2716	NW 30-13-18 W	
Hunter Ready Mix Co., Inc.	Hays 67601	913-625-3459	NW 29-15-18 W	Werth
Rush Co. Road Dep't.	La Crosse 67548	913-222-3118	26-15-19 W 33-15-16 W	Zimmerman Urban
Larry Werth Sand Co.	Schoenchen 67667	913-625-6482	SE 29-15-18 W	Werth

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Marvin J. Werth Sand Co.	Rt. 2, Box 44 A, Hays 67601	913-624-5107	31-15-18 W	Werth
<u>ELLSWORTH</u>				
Ellsworth Co. Road Dep't.	Ellsworth 67439	913-472-4003	SE SW 30-14-10 W NE 30-14-10 W W SW 22-15- 9 W SE NW 10-15- 9 W NE 35-15-10 W SW 18-15- 8 W NW 22-15- 8 W SW SW 35-15- 8 W SE SW 23-16- 7 W NW 36-16- 6 W SW 27-15- 8 W	McEvoy Borrell Root Burmeister Urbanek Croy Homolka Hoffman Peppiatt Buffington Thielen
White Construction Co.	Kanopolis 67454	913-634-5350		Bolte Hoffman Bates Grubb White
<u>ELK</u>				
Elk Co. Road Dep't.	Howard 67349	316-374-2580	NE 33-28-13 E 31-28- 9 E	Smith Barnes
<u>PINNEY</u>				
Alsop Sand Co.	1207 Pinecrest, Garden City 67846	316-276-3130	NE 19-26-32 W	City of Garden City
P-K Sand Co.	Box 582, Garden City 67846	316-276-8020	SW 25-32-24 W	Morris
Smith Sand Co., Inc.	Box 391, 1206 E. Fulton, Garden City 67846	316-276-3771	NW 17-24-33 W	
<u>FORD</u>				
Davis & Sons Sand Sales	Rt. 1, Dodge City 67801	316-227-6301	SW 31-26-25 W	Bailey
Dodge City Sand Co.	500 E. Cherry, Dodge City 67801	316-227-6091	36-26-25 W	
Ford Co. Road Dep't	Dodge City 67801	316-225-4861	NW 12-27-24 W S NW 1-27-21 W	Ford Co. Mollitor

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>GEARY</u>				
More Sand Co., Inc.	Rt. 3, Junction City 66441	913-238-6922	NW 35-11- 5 E	More
Shoffner Sand & Gravel Co.	134 E. Jewell, Salina 67401	913-827-1520	SW 21-11- 5 E	
<u>GOVE</u>				
Rod Bentley Sand & Gravel	Shields 67874	316-397-5669	SW 24-15-28 W	Bentley
Gove Co. Road Dep't.	Gove 67736	913-936-2244	Various	Various
Quinter Redi-Mix Co.	Quinter 67752	913-754-3661	NE 4-11-29 W	Hoover
Dale Roberts	Quinter 67752	913-754-3519	E 25-13-28 W	Roberts
<u>GRAHAM</u>				
State Highway Commission Div. 3, Mat'ls Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	NE 8- 8-22 W	Stuchlik
<u>GRANT</u>				
Grant Co. Road Dep't.	Box 1192, Ulysses 67880	316-276-1537	NE 29-29-35 W	Lignty
<u>GRAY</u>				
Gray Co. Road Dep't.	Cimarron 67835	316-855-3815	12-26-28 W	
Kerr Sand Co.	Cimarron 67835	316-855-2222	NE 23-26-28 W	Kerr
<u>GREELEY</u>				
Greeley Co. Road Dep't	Tribune 67869	316-376-4253	Various	White Woman Creek
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	SL 35-17-42 W	Harris
<u>HAMILTON</u>				
Hamilton Co. Road Dep't.	Syracuse 67878	316-384-5135	Various	Various
<u>HARPER</u>				
Harper Co. Road Dep't.	Courthouse, Anthony 67003	316-842-5240	2-34- 6 W	Welsh

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>HARVEY</u>				
Bryant Sand & Gravel Co.	Box 218, Burrton 67020	316-463-5621	NE 6-24- 3 W	Bryant
<u>HASKELL</u>				
Haskell Co. Road Dep't.	Sublette 67877	316-375-2234	20-30-34 W	Bryant
<u>HODGEMAN</u>				
Hodgeman Co. Road Dep't	Jetmore 67854	316-357-4354	Various	Various
<u>JEWELL</u>				
Jewell Co. Road Dep't.	Mankato 66956	913-378-3431	10- 1- 6 W	Heitman
<u>JOHNSON</u>				
Builders Sand Co.	78th & Holliday Dr. Kansas City 66106	913-375-1414	5-12-24 E	Theden
Holliday Sand & Gravel Co.	Overland Park 66202 Bonner Springs plant	913-236-5920 913-422-3095	32-11-23 E	Schyt
<u>KEARNY</u>				
Grant Co. Road Dep't	Box 1192, Ulysses 67880	316-276-1537	10-25-36 W	Puckett
Kearny Co. Road Dep't	Box 346, Lakin 67860	316-355-6571	10-25-36 W 11-25-36 W 24-25-35 W	Puckett Beymer Tackett
Popejoy Construction Co. Inc.	Box 385 Ulysses 67880	316-356-2404	SW 3-25-36 W 9-25-36 W	Beymer Bahntge
<u>KINGMAN</u>				
Kingman Co. Road Dep't.	Kingman 67068	316-532-3771	3-28- 8 W	McKenna
Ray Wells Sand & Gravel	Rt. 1, Kingman 67068	316-532-2088	NE 1-28- 8 W SW 1-28- 8 W	Coleman Wells
<u>KIOWA</u>				
Broce & Smith, Inc.	Box 9, Larned 67550	316-285-2189	SE 2-29-16 W	Starkey

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Kiowa Co. Road Dep't.	Greensburg 67054	316-723-2531	3-29-17 W 2-29-16 W 23-30-16 W	Hulme Starkey Piester
Seacat Sand & Excavation	409 W. Lincoln Greensburg 67054	316-723-2396	SW 3-29-17 W	Seacat
<u>LANE</u>				
Lane Co. Road Dep't.	Dighton 67839	316-397-2401	NW 15-20-30 W	Hollingsworth
<u>LEAVENWORTH</u>				
Missouri Valley Sand, Inc.	Box 89, Leavenworth 66048	913-682-3621	NE 1- 9-22 E	Missouri River
<u>LINCOLN</u>				
Lincoln Co. Road Dep't.	Lincoln 67455	913-524-4443	28-13-10 W 30-12- 9 W 17-12- 9 W 21-10-10 W Burger Oetting Jensen Healy Jones Lewis Jones Hartzell Rittman Garrison Wotting Hoeh	Pejsha Busick Nelson Burger Oetting Jensen Healy Jones Lewis Jones Hartzell Rittman Garrison Wotting Hoeh
White Construction Co.	Kanopolis 67454	913-634-5350		Bolte
<u>LOGAN</u>				
Logan Co. Road Dep't	Russell Springs 67755	913-846-2266	22-13-35 W	
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	SW 12-13-34 W	Luther
State Highway Commission Div. 3, Mat'l's Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	SE 35-14-32 W	Cristy, Est.
<u>LYON</u>				
Lyon Co. Road Dep't.	Emporia 66801	316-342-2295	10-19-12 E	Powell

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Lyon Materials, Inc.	302 Peyton, Box 425 Emporia 66801	316-342-2047	NE 21-19-11 E	Jones
Parks Enterprise, Inc.	648 Oak St., Emporia 66801	316-342-7233	E 6-20-13 E W 6-20-13 E	McKinney Holforty
<u>MARSHALL</u>				
Blue River Sand & Gravel Co.	Box 38, Blue Rapids 66411	913-226-8881	SW 19- 4- 7 E	Stryker
C.V. Garrett	Blue Rapids 66411	913-226-7350	SE 24- 4- 6 E	Musil
Heinzelman Construction	506 S. 10th, Marysville 66508	913-562-3577	SW 16- 2- 7 E NW 21- 2- 7 E	Williams Williams
Marshall Co. Road Dep't.	Marysville 66508	913-443-4941	29- 1- 6 E	Kruse
<u>MCPHERSON</u>				
McPherson Co. Road Dep't.	McPherson 67460	316-241-0466	16-18- 4 W	Aelmore
San Ore Construction Co., Inc.	Box 417, McPherson 67460	316-241-2240	SW 2-17- 3 W NE 34-19- 3 W	Lowe West Estate
<u>MEADE</u>				
Meade Co. Road Dep't.	Meade 67864	316-873-2481	1-34-28 W	Unruh
<u>MITCHELL</u>				
Haigh Sand & Gravel	Beloit 67420	913-738-2367	NW 10- 7- 7 W	Haigh
<u>MORTON</u>				
Morton Co. Road Dep't.	Box 11, Richfield 67953	316-592-2166	S 21-33-41 W	
<u>MORRIS</u>				
Morris Co. Road Dep't.	Council Grove 66846	316-767-5519	SW 27-17- 9 E SW 32-14- 8 E NW 4-17- 7 E NE 4-17- 7 E	Moore Picolet Williams Berry
<u>NEMAHA</u>				
Charles Reise Contractor	114 1/2 N. 5th Seneca 66538	913-336-2819	NE 32- 1-13 E	Perkins
Rottinghaus Rock & Gravel Co.	Baileyville 66404	913-336-2056	NW 23- 1-11 E NW 16- 1-11 E SW 27- 1-12 E	Schmitz O'Toole Rottinghaus

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<u>NEOSHO</u>				
Hy-Grade Construction & Materials, Inc.	St. Paul 66771	316-449-2575	NE 15-29-20 E	Hy-Grade
<u>NESS</u>				
Ness Co. Road Dep't.	Ness City 67560	913-798-3350	31-17-23 W 32-16-22 W 1-16-25 W 35-20-23 W 2-16-24 W	Horchem Musselman Clyne Frusher Harris
<u>NORTON</u>				
State Highway Commission Div. 3 Mat'ls Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	SE 19- 5-25 W SW 9- 5-23 W	Linden Clydesdale
<u>OSBORNE</u>				
Osborne Co. Road Dep't.	Osborne 67473	913-346-2155	28- 7-14 W	McReynolds
<u>OTTAWA</u>				
Robins Sand & Gravel	323 W 2nd, Minneapolis 67467	913-392-2087	NW 2-11- 4 W W 20-10- 4 W	Watson Stratton
<u>PAWNEE</u>				
Broce & Smith, Inc.	Box 9, Larned 67550	316-285-2189	SE SE 5-22-16 W	Bahls
Eakin Sand & Gravel Co.	Box 48, Larned 67550	316-285-3916	SW 5-22-16 W NW 8-22-16 W	Eakin
Larned Sand & Gravel	Box 277, Larned 67550	316-285-3236	SE 4-22-16	Buster
Pawnee Co. Road Dep't.	Larned 67550	316-285-3761	3-22-16 W	Baldwin
<u>PHILLIPS</u>				
Phillips Co. Road Dep't.	Phillipsburg 67661	913-543-4912	NW 13- 5-18 W E 16- 2-20 W	McKinley Greving
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	NE 29- 4-17 W	McComb

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State Highway Commission Div. 3 Mat'ls Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	NW 23- 5-18 W	Maddox
<u>POTTAWATOMIE</u>				
Wamego Sand Co., Inc.	Box 119, Wamego 66547	913-456-9888	NW 10-10-10 E	
<u>PRATT</u>				
Clyde Armstrong Sand Co.	1122 E. 6th, Pratt 67124	316-672-6292	SW 4-28-13 W	Armistead Studer Hogard Eubank Lambert Whitfield Maas
Pratt Co. Road Dep't.	Pratt 67124	316-672-2441		
Whitfield Sand & Concrete, Inc.	Box 66, Pratt 67124	316-672-3181	SE 4-28-13	Barnes
<u>RAWLINS</u>				
Morton Sand & Gravel	Box 213, Oberlin 67749	913-475-3245	W SW 14- 2-32 W	Martin
Rawlins Co. Road Dep't.	Atwood 67730	913-626-3726	30- 3-32 W	Anderson
State Highway Commission Div. 3 Mat'ls Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	SE 26- 2-33 W	Niermeier
<u>RENO</u>				
Fountain Sand & Gravel Pit	Arlington 67514	316-538-3972	SE 6-25- 7 W	Fountain
Gravel Products, Inc.	Nickerson 67561	316-422-3249	SW 15-22- 7 W	Paulson
Haven Sand Co.	Haven 67543	316-465-7738	NE 20-24- 4 W	Mount
Hoskinson Sand & Gravel Co.	Rt. 1, Hutchinson 67501	316-662-7793	SE 8-23- 6 W	Hoskinson
Mt. Hope Sand Co.	Rt. 1, Haven 67543	316-465-3447	Lots 4 & D4 36-24- 4 W	
San Ore Construction Co., Inc.	Box 417, McPherson 67460	316-241-2240	SE 6-24- 3 W	Bryant

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J. H. Shears' Sons, Inc.	819 W. 1st Street Hutchinson 67501	316-662-3307	SE 14-23- 5 W	Shears
J. E. Steele Sand	1400 N. Halstead Hutchinson 67501	316-662-5741	S NW 9-23- 5 W	Steele
<u>REPUBLIC</u>				
John H. Alsop Sand Co.	11th & M St. Box 345 Belleville 66935	913-527-2248	SE 7- 3- 4 E	Rumft
Republic Co. Road Dep't.	Belleville 66935	913-527-2664	SE 15- 2- 2 W	Hanel
<u>RICE</u>				
Arensman Sand & Gravel Co.	Chase 67524	316-543-2822	NE 29-20-10 W	Hagen
Rock Hill Stone & Gravel Co., Inc.	Sterling 67579	316-278-3514	NE 27-21- 8 W	Rock Hill
Tobias & Birchenough, Inc.	Box 470, Lyons 67554	316-257-2161	NE 16-20- 9 W	Tobias
<u>RILEY</u>				
Kershaw Redi-Mix Concrete & Sand Co., Inc.	Box 668, Manhattan 66502	913-776-8811	S 5-10- 8 E SE 30-10- 8 E	
<u>ROOKS</u>				
Boethin Construction Co.	Stockton 67669	913-425-6580	19- 7-17 W	
Howard Covert	Alton 67623	28	NW 22- 7-17 W	Riffe
<u>RUSH</u>				
Rush Co. Road Dep't.	La Crosse 67548	913-222-3118	36-19-19 W 20-19-20 W	Anschutz Schlegel
<u>RUSSELL</u>				
Russell Co. Road Dep't.	Box 415, Russell 67560	913-483-4032	12-15-15 W 21-11-14 W 5-12-15 W 26-12-13 W 1-15-15 W NW 29-14-12 W 30-14-11 W 2-13-14 W 20-11-11 W 8-15-15 W	Bender Bunker Brumitt K.C. Corps of Eng. Dumler Ehrlich Herber Major Rupert Truan

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>SALINE</u>				
Salina Sand Co., Inc.	Mentor 67465	913-823-2932	SE 7-15- 2 W NW 19-16- 2 W	Jenney Morse
<u>SCOTT</u>				
Scott Co. Road Dep't.	Scott City 67871	316-872-2202		
<u>SEDGWICK</u>				
Associated Mat'ls & Supply Co., Inc.	6015 N. Broadway, Box 4064 N. Wichita Station Wichita 67204	316-744-0433 316-766-0281	N N 23-26- 1 W	Clark
Bentley Sand Co.	Bentley 67016	316-432-5235	NW 13-25- 2 W NE 17-25- 1 W	Vogt
Big Three Sand & Gravel Co.	6000 W. 21st St. Wichita 67212	316-943-6361	SE 3-27- 1 W	Commercial Asphalt
Dolese Brothers Co.	Box 1841, Wichita 67212	316-262-1428	NW 7-27- 1 E	(21st & W. Robbins)
Globe Construction Co., Inc.	1041 N. Water, Wichita 67203	316-265-2623	SE 2-27- 1 W	Stewart
Walt Keeler Co., Inc.	826 E. Lincoln, Wichita 67211	316-265-1601	SW 2-28- 1 W	Taylor
Miles Sand, Inc.	4857 N. Meridan Wichita 67204	316-838-3362	25-26- 1 W	
Oatville Sand & Gravel	4100 W. 31st St. S. Wichita 67210	316-942-3871	NE 11-28- 1 W	Newby
Paving Contractors, Inc.	6405 E. Kellogg Wichita 67207	316-684-6161	NW 15-29- 1 E	Costin
Ed Provence Sand Co.	6600 W. 13th, Wichita 67206	316-942-5791	NE 12-27- 1 W	Provence
Sedgwick Sand Co.	Sedgwick 67135	316-766-0456	10-26- 1 W	Nicholson
Superior Sand Co., Inc.	6500 W. 21st, Wichita 67212	316-766-0592	NW 3-27- 1 W	Superior Sand Co.
Tri-Co., Inc.	6700 S. Hydraulic Wichita 67233	316-524-8631	NW 34-28- 1 E	Blood
Vic's Sand & Gravel Co.	6600 W. 21st, Wichita 67212	316-943-4372	NW 1-27- 1 W	
Wichita Big River Sand Co.	990 N. Westlink, Wichita 67204	316-524-0691	18-28- 1 E	Davis Corp.

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<u>SEWARD</u>				
Carlile Sand & Gravel, In.	Box 1477, Liberal 67901	316-624-4093	N 1-33-33 W NE 35-33-32 W	Frazier Jolly
J & R Sand Co., Inc.	208 W. Hoover, Liberal 67901	316-624-5287	28-32-33 W 33-32-33 W 34-32-33 W	Lemert
Seward Co. Road Dep't.	Liberal 67901	316-624-3401	2-33-33 W 1-35-31 W	
<u>SHAWNEE</u>				
Consumers Sand Co., Inc.	924 W. Railroad St. Topeka 66608	913-232-5117 232-1414 232-4163	SW 23-11-16 E Kaw Half-Breed Reserve	Newman Kansas River
Kansas Sand & Concrete, Inc.	531 N. Tyler, Topeka 66608	913-235-6284	Kansas River	N. Topeka Drainage Board
River Sand Co., Inc.	Box 233, 3220 Water Works Drive, Topeka 66604	913-233-3877	N 26-11-15 E	Kaw River
Topeka Sand Co.	Rt. 4, Topeka 66603	913-233-9849	SE 23-11-16 E	
Victory Sand & Concrete Inc.	Box 281, Topeka 66601	913-233-2385	NW 25-11-15 E	Kansas River
<u>SHERIDAN</u>				
Hoxie Red-E-Mix	Hoxie 67740	913-675-3121	NE 11- 8-28 W	Feldt
Sheridan Co. Road Dep't.	Hoxie 67740	913-675-3621	7- 9-27 W 12- 6-30 W 20- 7-26 W 30-10-30 W 15- 6-27 W 23-10-26 W	Ochs Zodrow Currier Roberts Wagoner McWilliam
<u>SHERMAN</u>				
Miller Brothers	Goodland 67735	913-899-7232	NW 29- 8-40 W	Elliott
Walt Rhoads Sand & Gravel Co.	615 W. 10th, Goodland 67735	913-899-3425	S 15-10-41 W	Rockwell

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
San Ore Construction Co., Inc.	Box 417, McPherson 67460	316-241-2240	NE 27- 8-42 W NW 29- 8-42 W	Taylor Cramer
Sherman Co. Road Dep't.	Goodland 67735	913-899-5253		
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2244	NW 18- 8-41 W	Errington
<u>SMITH</u>				
State Highway Commission Div. 3 Mat'ls Eng. Everett L. Olson	309 S. Second Norton 67654	913-927-2178	4- 5-15 W	Sweat
<u>STAFFORD</u>				
Partin Sand & Gravel Co.	Box 274, Stafford 67578	316-234-5445	SE 4-25-11 W	
Stafford Co. Road Dep't.	Box 224, St. John 67576	316-549-3597	13-25-12 W 6-24-13 W	Depew Fisher
<u>STEVENS</u>				
Stevens Co. Road Dep't.	Box 1167, Hugoton 67951	316-544-4782	29-30-34 W 29-31-38 W	Bryant Cimarron River
<u>SUNNER</u>				
Cumley Sand Co.	Box 17045, Wichita 67217	316-777-4482	NW 6-30- 2 W	
Mulvane Sand Co., Inc.	6015 N. Broadway, Wichita 67208	316-744-0433 316-777-1421	31-29- 2 W	Estfan
Sumner Co. Road Dep't.	Wellington 67152	316-326-2791	36-32- 2 E	Donley
<u>THOMAS</u>				
San Ore Construction Co., Inc.	Box 417, McPherson 67460	316-241-2240	SW 31- 8-36 W	Gager
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	N 32-10-31 W NE 31-10-32 W NE 27- 9-34 W	Millor Siebert Theimior
State Highway Commission Div. 3 Mat'ls Eng. Everett L. Olson	309 S. Second Norton 67654	913-927-2178	34-10-32 W E SW 20- 6-32 W E 19- 7-34 W	Fulton Barnett Grover

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
Thomas Co. Road Dep't.	Colby 67701	913-462-2122	20- 7-34 W 17- 7-32 W	Ferguson Est. Sears
<u>TREGO</u>				
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	NW 33-14-23 W	Wiles
Stanton Sand & Gravel	Ransom 67572	913-731-2475	25-14-24 W	Farm
Trego Co. Road Dep't.	Wakeeney 67672	913-743-6441	Various	Various
Wakeeney Redi-Mix, Inc.	Box 835, Wakeeney 67672	913-743-2810	SE 33-12-23 W	Tinkler
<u>WABAUNSEE</u>				
Hafenstine Construction Co.	Alma 66401	913-765-3405	Various	Various
Wabaunsee Co. Road Dep't.	Alma 66401	913-765-3712		
<u>WALLACE</u>				
Siebert Sand Co., Inc.	Box 10, Ness City 67560	913-798-2224	SW 11-13-40 W	Lacey
State Highway Commission Div. 3 Mat'ls Eng. Everett L. Olson	309 S. Second, Norton 67654	913-927-2178	SE 10-13-40 W	Lacey
<u>WASHINGTON</u>				
Finlayson Gravel & Ready-Mix	Barnes 66933	907	NE 18- 3- 5 E	Finlayson
Mueller Sand & Gravel Co., Inc.	Hanover 66945	913-337-2252	SW 5- 2- 5 E NE 18- 2- 5 E SE 7- 3- 5 E S 28- 1- 4 E NW 8- 2- 4 E NE 7- 2- 5 E	Mueller Mueller Mueller Spitsnogle Mueller Mueller
<u>WICHITA</u>				
Howard Clevenger	Leoti 67861	316-375-2575	SE 32-18-37 W	
Wichita Co. Road Dep't.	Leoti 67861	913-375-2714	E 8-19-36 W	Willis

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>WYANDOTTE</u>				
American Sand & Material Co., Inc.	4600 Speaker Road Kansas City 66106	913-342-4208	18-11-25 E	Kansas River
Builders Sand Co.	78th & Holliday Dr. Kansas City 66106	913-375-1414	SW 32-11-24 E	Garrett
Holliday Sand & Gravel Co.	6811 W. 63rd Edwardsville plant Reese plant Muncie plant	913-422-3080 913-422-5399 913-299-2263	27-11-23 E 31-11-24 E 29-11-24 E	H.S.G. Rees H.S.G.
Kaw Valley Sand Co.	3800 Kansas Ave. Kansas City 66106	913-321-6636	SE 18-11-25 E	Kansas River
Peck-Woolf Sand & Material Co.	7301 Kaw Dr. Kansas City 66111	913-299-3342	SE 21-11-24 E SW 31-11-24 E	
Stewart Sand & Material Co.	4049 Pennsylvania Kansas City, Mo. 64111	816-753-3920	S 23-11-24 E E 29-11-24 E SW 12-11-24 E	Meager Morris Plant
Superior Sand & Gravel Co., Inc.	Box 11145, Kansas City 66111	913-289-6525	W 22-11-24 E	

CRUSHED ROCK PRODUCERS...LISTED ALPHABETICALLY; M = Underground Mine

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Allen Co. Road Dept.	Iola 66749	316-365-2261	Allen	2-24-19 E	
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	Clay Dickinson Jackson McPherson Mitchell Morris Nemaha Pottowatomie Riley Washington	SW 24- 9- 3 E E 2-16- 4 E N 1- 6-12 E SW 11- 8- 2 W NW 14-18- 2 W SW 10- 7- 8 W SW 22- 6- 9 W SE 17-16- 6 E NW 14- 1-14 E SE 11- 1-14 E SE 34- 6-10 E NE 35- 6- 4 E NE 8- 2- 4 E	Forsyth Jones Pickett Johnson Johnson Fobes Meglie Atkinson Bechtelheimer, D. Bechtelheimer, H. Falk Eggerman Koehler
Department of the Army	Fort Riley Branch, Junction City 66442	913-239-3728	Riley	SE 3-11- 6 E	Campbell Hill Qy.
Aubel Asphalt, Inc.	Rt. 1, Box 151, Hays 67601	913-625-3105	Ellis	17-13-18 W	City of Hays
Roy Baker Quarry, Inc.	Box 97, Valley Falls 66088	913-945-3213	Jefferson	NE 20- 8-18 E	Baker
Bates County Rock, Inc.	Box 70, Butler, Mo. 64730	816-679-4123 913-352-8811	Linn	NW 24-21-24 E	Pleasanton Qy.
Bayer Construction Co., Inc.	Box 889, 509 Yuma Manhattan 66502	913-776-8839	Clay Riley	NW 4- 9- 4 E S 28-10- 9 E NE 29-10- 8 E SE NE 6- 6- 7 E NE SE 6- 6- 7 E 3-11- 6 E	Martin Moore Reichling Smerchek Smerchek Campbell Hill, Ft. Riley Res. Jones (Beattie) Hammitt
Benedict Rock & Lime Co.	Benedict 66714	316-698-2102	Marshall Wilson	E 17- 2- 9 E NE 6- 4- 7 E NE SE 2-28-15	Benedict R & L
Bromley & Sons Quarry & Transit-Mix Concrete	Rt. 2, Box 75, Atchison 66002	913-367-4073	Atchison	NW 19- 5-20 E	(M) Bromley
Brox For Rocks	1502 N. 2nd, Atchison 66002	913-367-3434	Atchison	SW 20- 5-21 E	(M) Brox

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Harry Byers & Sons, Inc.	500 N. Plummer, Chanute 66731	316-431-0700	Neosho	NW 19-27-18 E	Byers
Carr Rock Products Co.	Box 117, Neodesha 66757 Box 8, Douglass 67039	316-325-3818 316-746-2201	Wilson Butler	NE 18-30-16 E NE 19-29-4 E	Bailey Carr
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	Atchison Doniphan	NW 8-5-17 E SW 10-3-22 E SW NE 21-2-20 E	Horton Qy. Liapple Sinker
			Douglas Elk	W NW 20-13-21 E W SE 12-31-10 E	Eudora Qy. Moline Qy.
			Franklin Jefferson	W SE 6-17-20 E NW 11-11-18 E	Ottawa Qy. Leech-Ball
			Leavenworth Linn	NW 31-9-23 E N SW 23-19-21 E	Lansing Qy. Rues
			Lyon Nemaha	12-19-12 E NE 24-3-14 E	Coryell Barber
			Osage	SW 34-17-16 E NW 35-16-15 E	Melvern Qy. Farnsworth
			Pottawatomie Riley	15-10-9 E SE 29-10-9 E	St. George Qy. Zeandale Qy.
			Shawnee	18-12-17 E 14-10-15 E	E. Topeka Qy. N. Topeka Qy.
			Wabaunsee	SE SE 20-13-16 E NW 30-12-12 E	McQueen Schaeffer
Cullor Limestone Co., Inc.	20th & Sidney, Fort Scott 66701	316-223-4250	Bourbon	NW 2-25-26 E SE 17-24-23 E	Johnson Womelsdorf
				SE 9-26-22 E SE 8-26-22 E E 26-23-24 E	Drake Drake Dotson
Daniels Stone Co.	1711 E. 9th, Winfield 67156	316-221-9060	Cowley	33-32-4 E	Daniels
Deitz Hill Development Co.	Box 4, Kansas City, Missouri 66141	816-221-1311	Johnson	SE 9-14-23 E	C-B-H Ranch
Eagle-Picher Industries, Inc. Chemicals & Metals Div.	Box 910, Miami, Oklahoma 74354	918-673-1740	Cherokee	NE 10-35-24 E	Ballard
Ellis Co. Road Dep't.	Hays 67601	913-625-7334	Ellis		
Everett Quarries, Inc.	Wathena 66090	913-989-4921	Doniphan	20-3-22 E	Thompson
Fogle Quarry Co., Inc.	18th & Main, Ottawa 66067	913-242-4864	Franklin	NE 12-17-19 E	Fogle

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Greenwood Co. Road Dep't.	Eureka 67045	316-443-6241	Greenwood	21-26-11 E NE 31-22-13 E 11-28-11 E	Hughes Christy Jordon
Grosshans & Petersen, Inc.	Box 350, Marysville 66508	913-562-2301	Geary	NE 8-12- 6 E	Petersen Equip.
Hallett Construction Co.	Box 296, Marion 66861	316-382-3330	Chase McPherson Marion Rice	SW 26-20- 7 E SW 11-18- 2 W NE 6-21- 4 E SW 11-20- 6 W	Mott Holur Schlehuber Conrad
N.R. Hamm Quarry, Inc.	Perry 66073	913-597-2890	Jefferson Leavenworth Shawnee	SE 35-11-19 E SE 3-11-18 E SE 2- 9-21 E SW 23-12-21 E NE 15-10-15 E	Heck Richter (M) Brommell Quinlan Woodard
L.W. Hayes, Inc.	Box 236, Paola 66071	913-294-4011	Miami	SE 18-17-23 E	
Holland Quarries, Inc.	Box 5296, Lenexa 66215	913-888-5277	Johnson	SE 6-13-24 E	(M) Johnson
Hopper Brothers Quarries	Pawnee City, Neb. 68420	402-852-2031	Cloud Marshall Republic Washington	SW 25- 7- 5 W NW 6- 1- 8 E NE 18- 4- 5 W S SE 34- 3- 3 W SE 28- 2- 5 E SE 2- 3- 1 E	Jorden Pribyl Woods Chambers Niemeier Chambers
Hunt Rock Co.	Rt. 3, Garnett 66032	913-448-5962	Anderson	12-20-18 E 31-21-21 E	Brummel Louk
Jewell Co. Road Dep't.	Mankato 66956	913-378-3431	Jewell	Various	Various
Jones Rock Co., Inc.	Box M, Emporia 66801	316-342-2594	Coffey Lyon	NW 2-21-13 E SE 34-20-13 E	Jones
Walt Keeler Quarry	Florence 66851	316-878-4352	Marion	SE 6-21- 5 E	
Harry Keith	Coffeyville 66337	316-255-9416	Labette	SW 35-34-17 E	Keith
Killough-Clark, Inc.	Box 623, Ottawa 66067	913-242-4535	Anderson Douglas	SE 32-21-19 E NW 1-23-19 E NE 15-15-18 E SW 27-14-20 E	Starr Penland Clark Holmes

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Killough-Clark, Inc. (cont.)					
Koppes Brothers Quarries	Marysville 66508	913-562-3975	Franklin	NE SW 13-16-19 E SE NW 17-16-21 E N NW 30-16-24 E NW 4-17-17 E	Edwards Killough Crawford Lacey
Labette Co. Road Dep't.	Oswego 67356	316-795-4812	Marshall	W 16- 3- 9 E N 20- 2- 9 E	Koch Cain
McAdam Limestone Products, Inc.	Rt. 1, Garnett 66032	913-448-3179	Labette	SW 28-32-19 E	Myers
Midwest Minerals, Inc.	Box 7, Girard 66743	316-724-8283	Anderson	ESW NE 1-20-19 E	Bemus
George M. Myers Inc.	Box 911, El Dorado 67042	316-321-4040	Cherokee Crawford	NE 13-32-22 E NW 24-28-24 E SW 31-28-24 E SE 12-30-23 E SE 1-31-20 E SW 6-35-21 E NW 32-34-17 E	Sherman City Qy. Englevale Qy. Farlington Qy. Girard Qy. Parsons Qy. Chetopa Qy. Coffeyville Qy.
Nelson Quarries	La Harpe 66751	6	Labette Montgomery	Butler	Lefever
Neosho Co. Road Dep't.	Erie 66733	316-244-3203	Allen Linn	NW 8-27- 4 E	
Neosho Valley Rock Co.	Burlington 66839	316-364-2580	Montgomery	20-23-19 E 17-22-23 E SW 28-20-23 E NE 10-31-17 E 17-32-14 E	Fowler
O'Brien Rock Co., Inc.	Box 217, St. Paul 66771	316-449-2257	Neosho	30-28-19 E 27-27-20 E	Neely Bebbington
Quality Limestone Co.	1224 Julia, Atchison 66002	913-367-3904	Coffey	N 14-21-15 E	Pecka
Quartzite Stone Co., Inc.	Lincoln 67455	913-524-4494	Labette Neosho	NW 6-35-21 E E NE 4-29-21 E	Pickering O'Brien
Reno Construction Co., Inc.	Box 4278, Overland Park 66204	913-681-2381	Atchison	SW 30- 5-21 E	(M) St. Benedicts
			Lincoln	SE 14-12- 8 W S SW 11-12- 8 W	Lewick Bryan
			Jefferson Johnson	NE 5- 9-18 E SE 18-14-25 E SW 25-12-23 E NE 33-16-24 E	U.S. Government Stanley Blessing
			Miami		

BUILDING STONE PRODUCERS...LISTED ALPHABETICALLY

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Bandera Stone Co., Inc.	Box 24, Redfield 66769	316-756-4700	Bourbon	E 29-25-23 E	
Bayer Stone, Inc.	St. Marys 66536	913-437-2281	Chase	SE NE 29-18- 7 E	Haley
	508 Riley, Manhattan 66502	913-776-6282	Pottawatomie	SW 15- 7-12 E	Bayer
			Pottawatomie	SW 12- 6-10 E	Martin
			Riley	NE NE 29-10- 8 E	Bayer
				NW NW 28-10- 8 E	Bayer
H. J. Born Stone, Inc.	Box 45, Silverdale 67139	316-442-5750	Cowley	All 2&3-35- 5 E	Dunn
				All 4-35- 5 E	Born
				N 14-35- 5 E	Hart
				All 11-35- 5 E	Hart
				NW 32-34- 5 E	Born
	901 W. 35th N. Wichita 67219	316-838-7788	Chase	SE 12-19- 6 E	Thut
				S 7-19- 7 E	Born
				S 13-19- 6 E	Born
Hays Cut Stone & Veneer	Box 42, Hays 67601	913-625-3388	Ellis	NE 32-15-18 W	Werth
J. T. Lardner Cut Stone	128 N. Van Buren, Topeka 66603	913-234-8634	Chase	N 32-18- 7 E	
Prickett Quarry	Simpson 67478	913-593-2405	Cloud	NW 30- 8- 5	
Silverdale Limestone Co.	Rt. 3, Box 165, Arkansas City 67005	316-442-5766	Cowley	SE 29-34- 5 E	Silverdale Ls. Co.
				NE NE 32-34- 5 E	Silverdale Ls. Co.
J.D. Schwarck Quarries of Kansas, Inc.	Box 147, Hill City	913-627-3771	Graham Rawlins	NW 34- 7-24 W 16- 4-36 W	Smith Bell

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
Robins Sand & Gravel	323 W. 2nd Minneapolis 67467	913-390-2087	Lincoln	E SE 8-11- 6 E W 9-11- 6 E SW 15- 9- 4 E	Lancaster Lancaster Warnow
Rottinghaus Rock & Gravel Co.	Baileyville 66404	913-336-2056	Nemaha	NW 23- 1-11 E SW 27- 1-12 E	Schmitz Rottinghaus
J. D. Schwarck Quarries of Kansas Inc.	Box 147, Hill City 67642	913-627-3771	Graham Phillips Rawlins	NW 34- 7-24 W 16- 1-19 W 16- 4-36 W NW 10- 2-31 W	Smith Dake Bell Kogel
Scott Co. Road Dep't.	Scott City 67871	316-872-2202	Scott	SE 2-17-33	Patton
Scott Rock Co.	Sycamore 67363	316-325-2298	Montgomery	23-31-15 E	Miesner
Sedan Limestone Co., Inc.	Box 27 Sedan 67361	316-725-3404	Chautauqua Elk	33-33-11 E NE 36-29-12 E NW 4-30-11 E NE 21-31-12 E NE 10-28-11 E SE 25-25-13 E	Smylie Rankin McLellan Foster Blake Paske
Servaes Brothers Quarry	Atchison 66002	913-367-0705	Atchison Doniphan	32- 6-21 E 12- 4-19 E	(M) Servaes Burke
Southwest Rock & Chat Co., Inc.	703 W. 12th St., Box 111, Baxter Springs 66713	316-856-2192	Cherokee	SE 2-35-23 E	Early Bird Mine
Starnes Rock Products Co.	3354 Amidon, Wichita 67204	316-838-7148	Butler	8-25- 4 E	Wilson
Thompson-Strauss Quarries	7000 Holliday Drive, Kansas City 66106	913-375-1016	Wyandotte	SW 23-11-24 E	(M) Inland Under- ground
J.A. Tobin Construction Co.	Box 3917, Kansas City 66103	913-342-6770	Wyandotte	7-11-25 E	(M) Tobin Const. Co.
Union Quarries Inc.	Box 4540, Overland Park 66204	913-236-8258 913-888-3838	Johnson	NW 31-12-24 E	(M) Van Lerberg
Wade Agricultural Products	Box 38, La Cygne 66040	11	Linn Miami	NW 19-22-24 E SW 28-18-25 E	
Walker Stone Co., Inc.	Box 247, Chapman 67431	913-922-4711	Dickinson Geary	SW 27-12- 4 E 28-12- 4 E SW 2-11- 5 E NE 4-13- 5 E	Walker Walker Huston Caspar

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>LEASE</u>
West Lake Quarry & Material Co.	Box 206, Bridgeton, Missouri 63044	314-739-1122	Doniphan	10- 2-20 E	Schneider

CRUSHED ROCK PRODUCERS... LISTED BY COUNTY ALPHABETICALLY; M = Underground Mine -

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>ALLEN</u>				
Allen Co. Road Dep't.	Iola 66749	316-365-2261	2-24-19 E	
Nelson Quarries	La Harpe 66751	6	20-23-19 E	
<u>ANDERSON</u>				
Hunt Rock Co.	Rt. 3, Garnett 66032	913-448-5962	12-20-18 E 31-21-21 E	Brummel Louk
Killough-Clark, Inc.	Box 623, Ottawa 66067	913-242-4535	SE 32-21-19 E NW 1-23-19 E	Starr Penland
McAdam Limestone Products, Inc.	Rt. 1, Garnett 66032	913-448-3179	ESW NE 1-20-19 E	Bemus
<u>ATCHISON</u>				
Bromley & Sons Quarry & Transit-Mix Concrete	Rt. 2, Box 75 Atchison 66002	913-367-4073	NW 19- 5-20 E	(M) Bromley
Brox For Rocks	1502 N. 2nd, Atchison 66002	913-367-3434	SW 20- 5-21 E	(M) Brox
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	NW 8- 5-17 E	Horton Qy.
Quality Limestone Co.	1224 Julia, Atchison 66002	913-367-3904	SW 30- 5-21 E	(M) St. Benedicts
Servaes Brothers Quarry	Atchison 66002	913-367-0705	32- 6-21 E	(M) Servaes
<u>BOURBON</u>				
Cullor Limestone Co., Inc.	20th & Sidney, Fort Scott 66701	316-223-4250	NW 2-25-26 SE 17-24-23 E SE 9-26-22 E SE 8-26-22 E E 26-23-24 E	Johnson Womelsdorf Drake Drake Dotson
<u>BUTLER</u>				
Carr Rock Products Co.	Box 8, Douglass 67039	316-746-2201	NE 19-29- 4 E	Carr

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>BUTLER (cont)</u>				
George M. Myers Inc.	Box 911, El Dorado 67042	316-321-4040	NW 8-27- 4 E	Lefever
Starnes Rock Products Co.	3354 Amidon, Wichita 67204	316-838-7148	8-25- 4 E	Wilson
<u>CHASE</u>				
Hallett Construction Co.	Box 296, Marion 66861	316-382-3330	SW 26-20- 7 E	Mott
<u>CHAUTAUQUA</u>				
Sedan Limestone Co., Inc.	Box 27, Sedan 67361	316-725-3404	33-33-11 E	Smylie
<u>CHEROKEE</u>				
Eagle-Picher Industries, Inc. Chemicals & Metals Div.	Box 910, Miami, Okla. 74354	918-673-1740	NE 10-35-24 E	Ballard
Midwest Minerals, Inc.	Box 7, Girard 66743	316-724-8283	NE 13-32-22 E	Sherman City Qy.
Southwest Rock & Chat Co., Inc.	703 W. 12th St., Box 111 Baxter Springs 66713	316-856-2192	SE 2-35-23 E	Early Bird Mine
<u>CLAY</u>				
Anderson-Oxendale Co.	Box 425, Herington 67449	913-258-3415	SW 24- 9- 3 E	Forsyth
Bayer Construction Co., Inc.	Box 889, 509 Yuma Manhattan 66502	913-776-8839	NW 4- 9- 4 E	Martin
<u>CLOUD</u>				
Hopper Brothers Quarries	Pawnee City, Neb. 68420	402-852-2031	SW 25- 7- 5 W	Jorden
<u>COFFEY</u>				
Jones Rock Co., Inc.	Box M., Emporia 66801	316-342-2594	NW 2-21-13 E	
Neosho Valley Rock Co.	Burlington 66839	316-364-2580	N 14-21-15 E	Pecka
<u>COWLEY</u>				
Daniels Stone Co.	1711 E. 9th, Winfield 67156	316-221-9060	33-32- 4 E	Daniels
<u>CRAWFORD</u>				
Midwest Minerals, Inc.	Box 7, Girard 66743	316-724-8283	NW 24-28-24 E SW 31-28-24 E SE 12-30-23 E	Englevale Qy. Farlington Qy. Girard Qy.

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>DICKINSON</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	E 2-16- 4 E	Jones
Walker Stone Co., Inc.	Box 247, Chapman 67431	913-922-4711	SW 27-12- 4 E 28-12- 4 E	Walker Walker
<u>DONIPHAN</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	SW SW 10- 3-22 E SW NE 21- 2-20 E	Liapple Sinker
Everett Quarries, Inc.	Wathena 66090	913-989-4921	20- 3-22 E	Thompson
Servaes Brothers Quarry	Atchison 66002	913-367-0705	12- 4-19 E	Burke
West Lake Quarry & Material Co.	Box 206, Bridgeton, Mo. 63044	314-739-1122	10- 2-20 E	Schneider
<u>DOUGLAS</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	W NW 20-13-21 E	Eudora Qy.
Killough-Clark, Inc.	Box 623, Ottawa 66067	913-242-4535	NE 15-15-18 E SW 27-14-20 E	Clark Holmes
<u>ELK</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	12-31-10 E	Moline Qy.
Sedan Limestone Co., Inc.	Box 27, Sedan 67361	316-725-3404	NE 36-29-12 E NW 4-30-11 E NE 21-31-12 E	Rankin McLellan Foster
<u>ELLIS</u>				
Aubel Asphalt, Inc.	Rt. 1, Box 151 Hays 67601	913-625-3105	17-13-18 W	City of Hays
Ellis Co. Road Dep't.	Hays 67601	913-625-7334		
<u>FRANKLIN</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	W SE 6-17-20 E	Ottawa Qy.

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>FRANKLIN (cont.)</u>				
Fogle Quarry Co., Inc.	18th & Main, Ottawa 66067	913-242-4864	NE 12-17-19 E	Fogle
Killough-Clark, Inc.	Box 623, Ottawa 66067	913-242-4535	NE SW 13-16-19 E SE NW 17-16-21 E	Edwards Killough
<u>GEARY</u>				
Grosshans & Petersen, Inc.	Box 350, Marysville 66508	913-562-2301	NE 8-12- 6 E	Petersen Equip.
Walker Stone Co., Inc.	Box 247, Chapman 67431	913-922-4711	SW 2-11- 5 E NE 4-13- 5 E	Huston Casper
<u>GRAHAM</u>				
J. D. Schwarck Quarries of Kansas, Inc.	Box 147, Hill City 67642	913-627-3771	NW 34- 7-24 W	Smith
<u>GREENWOOD</u>				
Greenwood Co. Road Dep't.	Eureka 67045	316-443-6241	21-26-11 E NE 31-22-13 E 11-28-11 E	Hughes Christy Jordon
Sedan Limestone Co., Inc.	Box 27, Sedan 67361	316-725-3404	NE 10-28-11 E	Blake
<u>JACKSON</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	N 1- 6-12 E	Pickett
<u>JEFFERSON</u>				
Roy Baker Quarry, Inc.	Box 97, Valley Falls 66088	913-945-3213	NE 20- 8-18 E	Baker
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	NW 11-11-18 E	Leech-Ball
N. R. Hamm Quarry, Inc.	Perry 66073	913-597-2890	SE 35-11-19 E SE 3-11-18 E	Heck Richter
Reno Construction Co., Inc.	Box 4278, Overland Park 66204	913-681-2381	NE 5- 9-18 E	U.S. Government
<u>JEWELL</u>				
Jewell Co. Road Dep't.	Mankato 66956	913-378-3431	Various	Various

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>JOHNSON</u>				
Deitz Hill Development Co.	Box 4, Kansas City, Mo. 66141	816-221-1311	SE 9-14-23 E	C-B-H Ranch
Holland Quarries, Inc.	Box 5296, Lenexa 66215	913-888-5277	SE 6-13-24 E	(M) Johnson
Reno Construction Co., Inc.	Box 4278, Overland Park 66204	913-681-2381	SE 18-14-25 E SW 25-12-23 E	Stanley Blessing
Union Quarries Inc.	Box 4540, Overland Park 66204	913-236-8258 913-888-3838	NW 31-12-24 E	(M) Van Lerberg
<u>LABETTE</u>				
Harry Keith	Coffeyville 66337	316-255-9416	SW 35-34-17 E	Keith
Labette Co. Road Dep't.	Oswego 67356	316-795-4812	SW 28-32-19 E	Myers
Midwest Minerals, Inc.	Box 7, Girard 66743	316-724-8283	SE 1-31-20 E SW 6-35-21 E	Parsons Qy. Chetopa Qy.
O'Brien Rock Co., Inc.	Box 217, St. Paul 66771	316-449-2257	NW 6-35-21 E	Pickering
<u>LEAVENWORTH</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	NW 31- 9-23 E	Lansing Qy.
N. R. Hamm Quarry, Inc.	Perry, 66073	913-597-2890	SE 2- 9-21 E SW 23-12-21 E	(M) Brommell Quinlan
<u>LINCOLN</u>				
Quartzite Stone Co., Inc.	Lincoln 67455	913-524-4494	SE 14-12- 8 W S SW 11-12- 8 W	Lewick Bryan
Robins Sand & Gravel	323 W. 2nd Minneapolis 67467	913-390-2087	E SE 8-11- 6 E W SW 9-11- 6 E	Lancaster Lancaster
<u>LINN</u>				
Bates County Rock, Inc.	Box 70, Butler, Mo. 64730	816-679-4123 913-352-8811	NW 24-21-24 E	Pleasanton Qy.
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	N SW 23-19-21 E	Rues

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>LINN (cont.)</u>				
Nelson Quarries	La Harpe 66751	6	17-22-23 E SW 28-20-23 E	
Wade Agricultural Products	Box 38, La Cygne 66040	11	NW 19-22-24 E	
<u>LYON</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	12-19-12 E	Coryell
Jones Rock Co., Inc.	Box M, Emporia 66801	316-342-2594	SE 34-20-13 E	Jones
<u>MARION</u>				
Hallett Construction Co.	Box 296, Marion 66861	316-382-3330	NE 6-21- 4 E	Schlehuber
Walt Keeler Quarry	Florence 66851	316-878-4352	SE 6-21- 5 E	
<u>MARSHALL</u>				
Bayer Construction Co., Inc.	Box 889, 509 Yuma	913-776-8839	E 17- 2- 9 E NE 6- 4- 7 E	Jones (Beattie) Hammit
Hopper Brothers Quarries	Pawnee City, Neb. 68420	402-852-2031	NW 6- 1- 8 E	Pribyl
Koppes Brothers Quarries	Marysville 66508	913-562-3975	W 16- 3- 9 E N 20- 2- 9 E	Koch Cain
<u>MCPHERSON</u>				
Anderson-Oxendale Co.	Box 425, Herington 67449	913-258-3415	SW 11- 8- 2 W NW 14-18- 2 W	Johnson Johnson
Hallett Construction Co.	Box 296, Marion 66861	316-382-3330	SW 11-18- 2 W	Holur
<u>MIAMI</u>				
L. W. Hayes, Inc.	Box 236, Paola 66071	913-294-4011	SE 18-17-23 E	
Killough-Clark, Inc.	Box 623, Ottawa 66067	913-242-4535	N NW 30-16-24 E	Crawford
Reno Construction Co., Inc.	Box 4278, Overland Park 66204	913-681-2381	NE 33-16-24 E	
Wade Agricultural Products	Box 38, La Cygne 66040	11	SW 28-18-25 E	

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>MITCHELL</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	SW 10- 7- 8 W SW 22- 6- 9 W	Fobes Meglie
<u>MONTGOMERY</u>				
Midwest Minerals, Inc.	Box 7, Girard 66743	316-724-8283	NW 32-34-17 E	Coffeyville Qy.
Nelson Quarries	La Harpe 66751	6	NE 10-31-17 E 17-32-14 E	Fowler
Scott Rock Co.	Sycamore 67363	316-325-2298	23-31-15 E	Miesner
<u>MORRIS</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	SE 17-16- 6 E	Atkinson
<u>NEMAHA</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	NW 14- 1-14 E SE 11- 1-14 E	Bechtelheimer, D. Bechtelheimer, H.
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	NE 24- 3-14 E	Barber
Rottinghaus Rock & Gravel Co.	Baileyville 66404	913-336-2056	NW 23- 1-11 E SW 27- 1-12 E	Schmitz Rottinghaus
<u>NEOSHO</u>				
Harry Byers & Sons, Inc.	500 Plummer, Chanute 66731	316-431-0700	NW 19-27-18 E	Byers
Neosho Co. Road Dep't.	Erie 66733	316-244-3203	30-28-19 E 27-27-20 E	Neely Bebbington
O'Brien Rock Co., Inc.	Box 217, St. Paul 66771	316-449-2257	E NE 4-29-21 E	O'Brien
<u>OSAGE</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	SW 34-17-16 E NW 35-16-15 E	Melvern Qy. Farnsworth
Killough-Clark, Inc.	Box 623, Ottawa 66067	913-242-4535	NW 4-17-17 E	Lacey
<u>OTTAWA</u>				
Robins Sand & Gravel	323 W. 2nd Minneapolis 67467	913-390-2087	SW 15- 9- 4 E	Warnow

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>PHILLIPS</u>				
J. D. Schwarck Quarries of Kansas, Inc.	Box 147, Hill City 67642	913-627-3771	16- 1-19 W	Dake
<u>POTTAWATOMIE</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	SE 34- 6-10 E	Falk
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	15-10- 9 E	St. George Qy.
<u>RAWLINS</u>				
J. D. Schwarck Quarries of Kansas, Inc.	Box 147, Hill City 67642	913-627-3771	16- 4-36 W NW 10- 2-31 W	Bell Kogel
<u>REPUBLIC</u>				
Hopper Brothers Quarries	Pawnee City, Neb. 68420	402-852-2031	NE 18- 4- 5 W S SE 34- 3- 3 W	Woods Chambers
<u>RICE</u>				
Hallett Construction Co.	Box 296, Marion 66861	316-382-3330	SW 11-20- 6 W	Conrad
<u>RILEY</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	NE 35- 6- 4 E	Eggerman
Bayer Construction Co., Inc.	Box 889, 509 Yuma Manhattan 66502	913-776-8839	S 28-10- 9 E NE 29-10- 8 E SE NE 6- 6- 7 E NE SE 6- 6- 7 E 3-11- 6 E	Moore Reichling Smerchek Smerchek Campbell Hill, Ft. Riley Res.
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	SE 29-10- 9 E	Zeandale Qy.
Department of the Army	Fort Riley Branch, Junction City 66442	913-239-3728	SE 3-11- 6 E	Campbell Hill Qy.
<u>SCOTT</u>				
Scott Co. Road Dep't.	Scott City 67871	316-872-2202	SE 2-17-33	Patton

<u>COMPANY</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>	<u>LOCATION</u>	<u>LEASE</u>
<u>SHAWNEE</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	18-12-17 E 14-10-15 E SE SE 20-13-16 E	E. Topeka QY. N. Topeka QY. McQueen
N. R. Hamm Quarry, Inc.	Perry 66073	913-597-2890	NE 15-10-15 E	Woodard
<u>WABAUNSEE</u>				
Concrete Materials Division Martin-Marietta Corp.	1305 W. 42nd, Topeka 66609	913-266-5556	NW 30-12-12 E	Schaeffer
<u>WASHINGTON</u>				
Anderson-Oxandale Co.	Box 425, Herington 67449	913-258-3415	NE 8- 2- 4 E	Koehler
Hopper Brothers Quarries	Pawnee City, Neb. 68420	402-852-2031	SE 28- 2- 5 E SE 2- 3- 1 E	Niemeier Chambers
<u>WILSON</u>				
Benedict Rock & Lime Co.	Benedict 66714	316-698-2102	NE SE 2-28-15	Benedict R & L
Carr Rock Products Co.	Box 117, Neodesha 66757	316-325-3818	NE 18-30-16 E	Bailey
<u>WOODSON</u>				
Sedan Limestone Co., Inc.	Box 27, Sedan 67361	316-725-3404	SE 25-25-13 E	Paske
<u>WYANDOTTE</u>				
Thompson-Strauss Quarries	7000 Holliday Drive, KC 66106	913-375-1016	SW 23-11-24 E	(M) Inland Underground Fac.
J. A. Tobin Construction Co.	Box 3917, KC 66103	913-342-6770	7-11-25 E	(M) Tobin Const. Co.

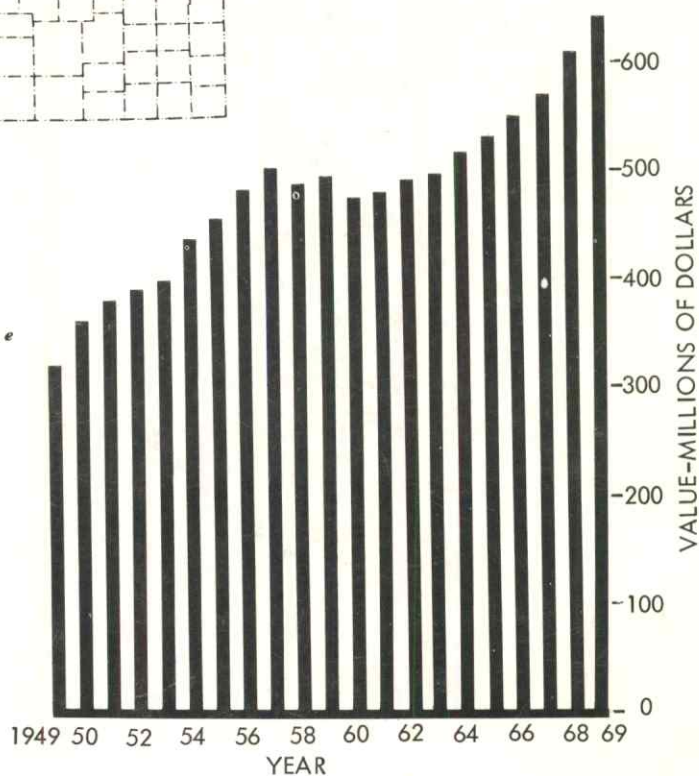


Mineral Production in Kansas.....1969



Total \$605,044,000

Estimated 1969 Value



Commodity	1969 Estimated Values	1969 Percent of Total	1969 Percent Loss or Gain from 1968
Crude Oil	\$290,102,000	47.9	- 1.6
Natural Gas	115,455,000	19.3	+ 8.1
Liquid Petroleum Gases	51,042,000	8.4	+ 7.2
Helium	40,827,000	6.7	+ .2
Cement	32,635,000	5.4	+ 5.1
Stone	23,040,000	3.8	+10
Miscellaneous Minerals (combined)	14,577,000	2.4	-10.8
Salt	15,730,000	2.6	+ 1.3
Sand and Gravel	11,146,000	1.8	+ 5.7
Clay and Shale	<u>10,500,000</u>	<u>1.7</u>	<u>+ 3.8</u>
1969	\$605,044,000	100	+ 1.9 Percent increase over 1968 production
1968	\$593,380,000		