

ENHANCED OIL-RECOVERY OPERATIONS IN KANSAS, 1975

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ABSTRACT

Data for 1,400 enhanced recovery projects in 69 Kansas counties are listed in this report, and a map shows the locations of these counties. Stratigraphic distribution of oil-producing zones and sub-surface water sources are also shown on a rock classification chart. Types of projects are indicated; these include 1 fireflood and 113 pressure-maintenance projects, 294 dump floods, 660 waterflood operations, and 332 that are not identified. During 1975, 73 repressuring applications were approved.

Crude oil production in Kansas totaled 59,106,104 barrels during 1975; of this, 18,701,313 barrels were recovered from the projects but only 12,108,726 barrels (20.5%) were listed as production resulting directly from the fluid that was injected. County and project summaries shown include acreage figures, number of oil producing and input wells, and the amount of water injected and oil produced on the projects. Some recently abandoned projects are also listed.

Research directed at developing new techniques for recovery of oil from large areas in Kansas where wells do not respond to present recovery techniques continues at Lawrence. Work also is progressing on schedule at the Cities Service Oil Company-Energy Research and Development Administration tertiary recovery pilot project in the old El Dorado field in Butler County.

INTRODUCTION

The title "Enhanced Oil Recovery" covers all production methods used after ordinary flowing and pumping have depleted a well (primary recovery methods). In many Kansas oil reservoirs, not enough energy is inherent in the rocks in which the oil is associated (solution gas, gas cap, or water drive) to drive more than a portion of the oil to the well-bore. It is then necessary to adopt other means of furnishing energy to move the oil. When the natural energy for production has declined, it is possible, in most oil reservoirs, to increase oil production by injection of either gas or water into the reservoir. If such injection takes place while the reservoir pressure is high, and the producing wells are in the flowing stage, the operation is classified as pressure maintenance. If it is started after the pressure has been substantially depleted, and the field is in the pumping stage, it is referred to as secondary recovery, repressuring, or water-flooding. Only the operators of an oil field can make the judgment as to when a field is in the secondary recovery stage. Another term used is "dump flood." The word "dump" is used by operators to describe the technique used in flooding when water zones overlying the oil-producing horizon are opened in selected wells, allowing water to flow by gravity into the oil "pay" with very little control. This type of operation is quite successful if the oil reservoir is highly permeable.

A rule-of-thumb in Kansas is that about one-third of the oil originally in place will be re-

covered by use of primary production methods (flowing and pumping). Another one-third portion can usually be produced by injecting water in one or more holes to displace and move the residual oil to another well (waterflooding). For many years now, additional methods have been used, or tried experimentally, in attempts to wring out more of the oil that is not recoverable by either primary or secondary methods. These tertiary methods include, among others, the use of steam, fire (thermal), various special gases (including CO₂), wetting agents and detergents, solvents, and miscible agents. Studies of core samples enable operators to identify factors such as the types of clay minerals that are present, and the amount of permeability, porosity, and the oil and water content. With this knowledge the operator can best determine the method of recovery that will work in a particular field. Large areas in Kansas have reservoirs that have not been amenable to primary and secondary methods of recovery, and the current research is attempting to rectify this problem.

In addition to aiding in the production of additional amounts of crude oil, waterflood projects also help in the disposition of oilfield brines; thus, they serve a double purpose. Companies are prohibited from disposing of brine on the land surface or in sands where potable water supplies may become polluted. Produced brines can be injected into their original rock zone with little difficulty if a closed system of production is used. If air is permitted to reach the brine, some components may become oxidized and will plug rock openings (pores) when re-injected. Water treatment units quite often are needed to prepare brines and fresh water from wells, streams, etc., so that they will not seal up the face of the rock near the well bore.

1975 PROJECT DATA

Data for 1,400 enhanced recovery projects in 69 counties are listed in Table 1, and the counties in which they are located are shown by shading in Figure 1. A number of the projects cross county borders and are listed as multiple-county projects in the report. The projects' official identification numbers are given in the first column of Table 1.

Crude oil production in Kansas has declined rapidly since the peak year, 1956, when 124.7 million barrels were produced. Secondary methods of recovery accounted for 15.1 million barrels (12.2%) of that oil (Goebel, et al., 1957). The 1975 total of 59,106,104 barrels is less than half the production 20 years earlier, and the 12,108,726 barrels reported produced by enhanced recovery methods in 1975 was about 20.5 percent of the oil produced during the year (Table 2). It should be noted that the companies reported that they produced 18,701,313 barrels of oil from the projects by both primary and secondary methods. In many cases they did not indicate the amount of this oil that was produced because of the secondary or tertiary methods in use. Enhanced

recovery methods, therefore, probably accounted for much more than the 12,108,726 barrels of oil reported to have been produced by enhanced methods during 1975. (See columns under "Oil recovered by enhanced methods, 1975," and "Cumulative to 12-31-1975.")

The types of projects used in Kansas fields in 1975 are indicated in this report. Table 1 lists 1 fireflood, 113 are identified as pressure maintenance, 294 as dump floods, and 660 are called waterflood operations. Three hundred thirty-two projects were not identified as to type.

During 1975, 73 repressuring applications were approved in the state.

Project report totals, provided by the companies, indicate that about 26 barrels of water or brine were injected for every barrel of oil recovered by enhanced recovery methods in 1975; 12,108,726 barrels of oil to 320,017,726 barrels of water. An average of 10,871 oil wells and 4,972 injection wells were operating on the 335,530 acres of land involved. Many additional wells are on these leases, as companies find that they may get better results if inputs and/or producers in a field are put in an inactive status for a few months, while another group of wells is put into production. In some areas, in the later stages of a flood, this seems to decrease the water/oil ratios. The spacing of wells for secondary recovery is normally closer than that employed in the development of fields for primary recovery. The permeability of the sands between the wells is one of the determining factors in well spacing. The "shoestring sands" in many of the Kansas fields are narrow and sinuous and conventional spacing patterns cannot be used in these fields.

In Table 1 we listed oil pay zones and sources of water, with bed thicknesses and average depth below the surface indicated. As an aid in comparing one bed with another, and identifying the geological group with which each is identified, a rock classification chart is included (Figure 2). Two useful marker beds, the Heebner Shale Member of the Shawnee Group, and the Stone Corral Formation of the Sumner Group, were added. The Stone Corral is present only in the western half of the state, while the Heebner is found over all but the easternmost part of Kansas.

The zones listed in Table 1 are shown on the rock chart, and identified as oil and/or water sources.

This report covers only projects that were in operation during 1975. The cumulative statistics in Table 2 do not reflect production in floods that have been abandoned. Some projects that have recently been abandoned are listed in the "Reports of Projects Abandoned" tabulation at the tail end of Table 1. A number of the operators had not furnished data on their field operations by publication date. Information for Kiowa County projects was not available, but we have shown it on our map as a county with enhanced recovery projects. Some project data, received too late for inclusion in county groups, were placed in a "Supplemental list of Projects" group.

CURRENT RESEARCH

The world-wide energy crisis that developed during 1973, and the resulting increase in prices paid for crude oil, joined to bring many companies back to the old oilfield areas. Kansas officials are also concerned about the continued decline in production, and are interested in developing new recovery methods.

During the 1973-74 Kansas Legislative Session, funds were granted for research in tertiary recovery methods. Since then a joint study has been underway by members of the University of Kansas Department of Chemical and Petroleum Engineering, and the Geochemistry and Subsurface Geology Sections of the Kansas Geological Survey. The research includes the testing of various solutions that may help to release the viscous oil from the rocks that contain it and studying these subsurface rocks in the areas that seem to have the most potential for tertiary recovery.

Another example of this renewed activity in research to determine better enhanced recovery techniques for application to Kansas oil fields is the El Dorado Micellar-Polymer Project being operated by Cities Service Oil Company, in cooperation with the Energy Research and Development Administration (ERDA). This field demonstration test, in the "650' Admire Sand" of the El Dorado field, Butler County, Kansas, if successful, could result in the future recovery of large amounts of otherwise unrecoverable oil. The "650' Admire Sand" is the shallowest zone in the multipay El Dorado Field which was discovered in 1915, and has produced 280 million barrels of oil to date.

This project, not designed to produce a profit, is expected to cost about seven million dollars, 60 percent of these funds being furnished by Cities Service and 40 percent by ERDA. In addition Cities Service will make other contributions worth about 1.9 million dollars.

The El Dorado Project is designed to allow side-by-side comparison of two micellar-polymer floods in the same field so that reservoir conditions for the two floods are as nearly identical as possible. Each test area will cover 25.6 acres, but, if the tests are successful, the project might be expanded to effect tertiary recovery of oil from all of the 6,200 acres of abandoned reservoir. The "650' Admire Sand" originally contained an estimated 108 million barrels of oil. Production during primary and secondary operations amounted to 36.5 million barrels. A successful tertiary project applied field-wide could recover approximately half of the remaining 71.5 million barrels. This is certainly a significant target. Work at the El Dorado Project is continuing on schedule in 1975 and early 1976.

The research now underway, in Lawrence and other places, designed primarily to find ways to unlock the large quantities of unproduced oil, hopefully will bring the flood tide of production back to Kansas.

HISTORICAL REVIEW

Prior to the turn of the century, operators in Pennsylvania and western New York oil fields observed substantial increases in oil production rates when water leaked past corroded casings of old wells into producing sands. This prompted them to purposely slit casing opposite water producing formations in some wells to permit water to enter the oil producing horizon.

Some years later, operators introduced the new technique from the eastern states into Kansas. Waterflooding was practiced haphazardly for many years in southeastern Kansas before it was authorized by law in 1935. The first legal project under the new Kansas statute was started on May 15, 1935, in the Seeley pool of Greenwood County, by York State Oil Company. Water was injected on that date into the Bartlesville sand at a depth of 1,940 feet. Two other projects started later in 1935. The Wiser Oil Company's Paulus flood in Chautauqua County was begun in September when water was injected into the "Peru" at a depth of 1,100 feet. The Texas Company inaugurated the third flood in December, 1935, in the Centerville Shoestring field of Linn County, by injecting water into the Bartlesville sand at a depth of about 400 feet. It is significant that the early "legal" waterfloods in Kansas were located in different areas, at various depths, and under differing geological conditions.

From 1937 on, interest in waterflooding spread rapidly throughout old stripper fields in eastern Kansas. By 1942, waterflooding projects were in operation in 13 counties, with greatest activity in Chautauqua, Montgomery, Greenwood, Neosho, Allen, Anderson, Linn, Franklin, Miami, and Crawford counties.

A special committee was organized at Chanute in 1950 to study secondary recovery operations in the state. Members of our present committee, who were appointed by Governor Frank Carlson, are our Co-Chairman Mack C. Colt, and Carl L. Pate. This group set up the mechanics for obtaining information on secondary oil recovery operations in Kansas, the information to be obtained, compiled, and published by the State Geological Survey at the University of Kansas, Lawrence. This also represents the Geological Survey's entrance into the efforts of the Interstate Oil Compact Commission to promote and improve oil conservation programs.

The foreword to Bulletin 57, published in 1945 by the Survey, states:

"This report, Oil and Gas in Eastern Kansas, constitutes a summary of the results of past work, and a preface to important future work on the occurrence and development of oil and gas deposits in eastern Kansas. This history of petroleum developments in this area covers a span of 85 years. It has passed from an era of relatively easy discovery of shallow

pools to one of more difficult prospecting for deposits in older and more obscured rocks, and of varied techniques for extracting oil from reservoirs that were only partly exhausted during the earlier period of flush production. Significant quantities of oil will undoubtedly be produced from eastern Kansas rocks for many years to come."

RULES AND REGULATIONS

General rules and regulations for the conservation of crude oil and natural gas in Kansas, issued by the State Corporation Commission, have specific sections dealing with the application, approval, operation, and discontinuance of fluid repressuring and waterflooding of oil and gas properties in Kansas. Applications for permanent disposal of brines produced from Kansas oil and gas fields also comes under the jurisdiction of the Conservation Division of the Commission. The permanent disposal of brines differs from waterflooding or secondary recovery operations in that disposal is in other than the producing zones (oil and gas reservoirs). The Oil Field and Environmental Geology Section of the State Department of Health and Environment monitors oil and gas producing areas to see that good housekeeping methods are used.

Field data for each proposed secondary and tertiary recovery project are reviewed by Corporation Commission personnel prior to commencement of a project. After injection is started, the operator must submit yearly summaries of the project to the Conservation Division.

For many years project data have been published by members of the Kansas Geological Survey (Table 3). These reports give companies an overview of all projects in the state. Material provided by the companies for this tabulation constitutes the yearly project summaries required by the Corporation Commission. The questionnaires (Figure 3) are filed in the Conservation Division offices after completion of tabulation.

ACKNOWLEDGMENTS

This report could not have been prepared without the assistance of the companies and individuals operating the recovery projects. We wish to thank all of them for their assistance. With few exceptions, the data they provided were used exactly as reported to us. Field names in some cases were changed to conform to the official names recognized by the Kansas Geological Society's Nomenclature Committee.

Members of our Enhanced Oil Recovery Committee were available for suggestions and assistance during the year. Along with Mack C. Colt, of Mack C. Colt, Inc., Iola, KS, and Margaret O. Oros, Kansas Geological Survey, our Co-Chairmen, the members include

Ray Anderson, Jr., BMG, Inc., Denver, CO; J. Lewis Brock, Conservation Division, Kansas Corporation Commission, Wichita, KS; C. L. Coffman, Cities Service Oil Co., Wichita, KS; James D. Elder, Terra Resources, Inc., Tulsa, OK; F. Doyle Fair, Petroleum Engineer, Wichita, KS; John O. Farmer III, John O. Farmer, Inc., Russell, KS; R. James Gear, Gear Operating Co., Wichita, KS; J. D. Kenworthy, Kewanee Oil Co., Tulsa, OK; Bruce F. Latta, Oil Field and Environmental Geology Section, State Department of Health and Environment, Topeka, KS; Larry A. Martin, Home-Stake Production Co., Tulsa, OK; John E. McLeland, Petroleum, Inc., Wichita, KS; Carl L. Pate, Oilfield Research Laboratories, Chanute, KS;

Gene Rowe, Petroleum Information, Inc., Tulsa, OK; E. W. Sauder, Independent Producer, Emporia, KS; Tom L. Schwinn, Schwinn and Schwinn, Wellington, KS; and C. L. Sheedy, Jr., Independent Producer, Vates Cmeter, KS. Geological Survey members of the Committee are Douglas L. Beene, Robert L. Dilts, and William J. Ebanks, Jr.

Frank Broadfoot, member of the Conservation Division of the Kansas Corporation Commission, Wichita, was called on all through the year; he and his staff helped in many ways. Marceline A. Younkin, of the Survey staff, designed the cover, Beverly Kyle typed Table 1, and Gina King assisted in preparation of material for the tables.

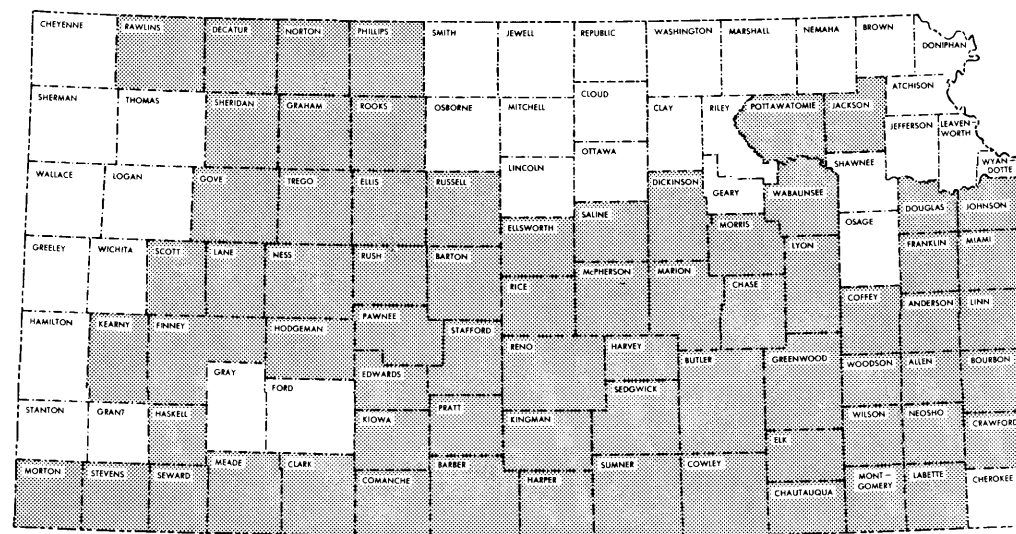


Fig 1--Map of Kansas showing counties with enhanced recovery projects.

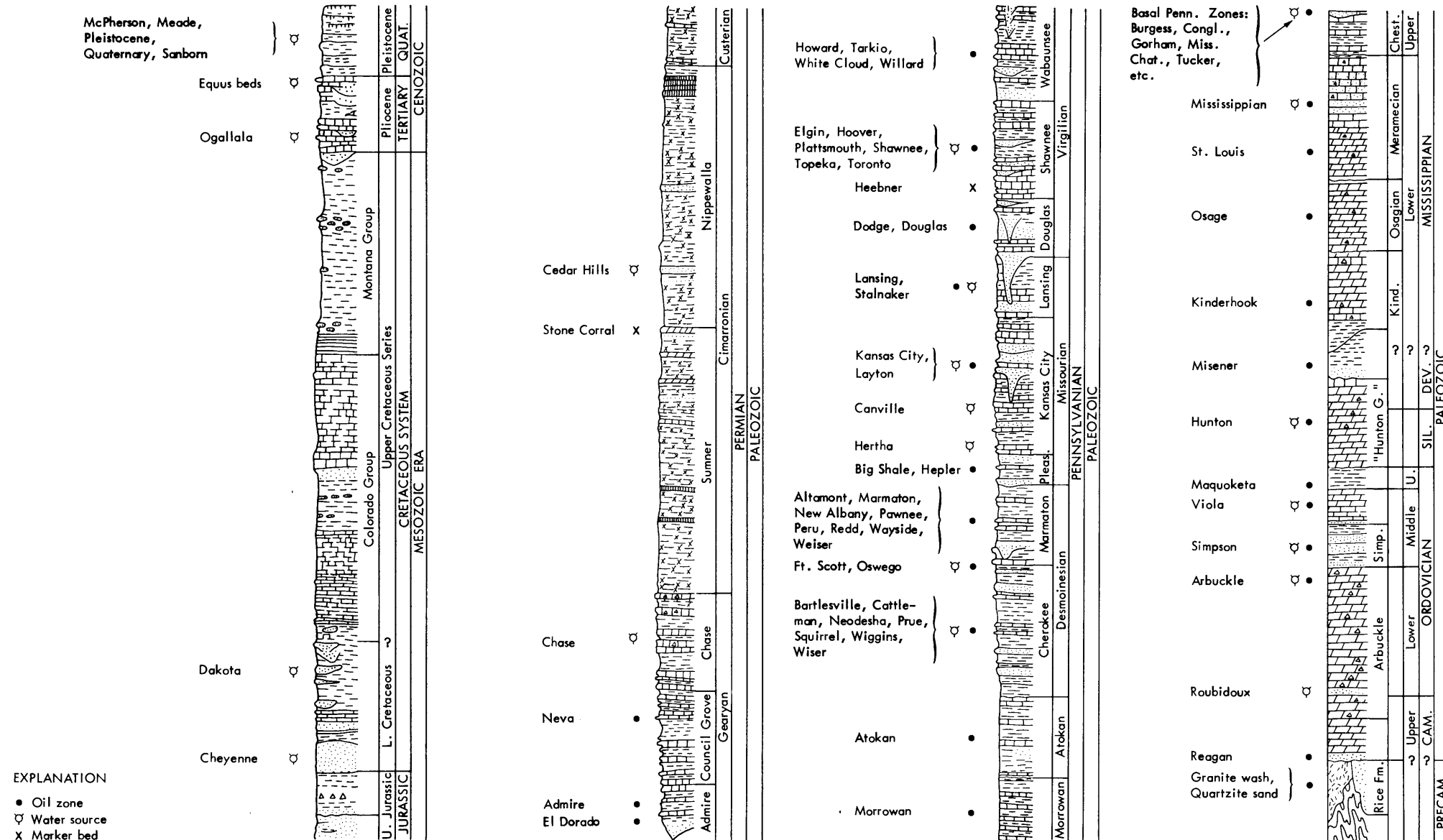


Fig. 2--Classification of rocks in Kansas (Oros, 1971, modified from Jewett et al, 1968). Stratigraphic positions of oil producing zones, water sources, and marker beds are indicated.

OIL ZONES AND WATER SOURCES

Names of oil-producing zones and sources of water injected into these zones during waterflood operations are included in data presented in Table 1. The present primary source of information on these rock units in Kansas is Bulletin 189 (Zeller, D. E. (Ed.) 1968).

A number of pay-zone names which are in daily use in the petroleum industry are not included in the Bulletin. In Jewett (1954), many of these names are listed, with a description of their normal stratigraphic position. Some of the terms may have been used for similar appearing, although different, sands in southeastern Kansas oil fields. A discussion of the reservoir rocks and water sources may also be found in Jewett's *World Oil* article (1948).

In Figure 2, oil pay-zones and subsurface water zones are identified with the geologic group with which the names are usually associated. Some liberty was taken, however, in the presentation, as subsurface units are not present in uninterrupted layers throughout the state. Sands and conglomerates at the base of the Pennsylvanian System (listed here as Congl sd. Gorham, etc.) shown just above the Mississippian rocks, occur at various positions in the Desmoinesian and Missourian Groups. A major unconformity exists between Pennsylvanian age rocks and the older rocks which underlie them. "Mississippi Chat" is a name used for erosional rocks at the top of the Mississippian rock units. Layton, Stalnaker, and some other names are applied to sands that have filled stream channels. These channels quite often cut deeply into older rocks; their stratigraphic position is in rocks much older than their depositional age.

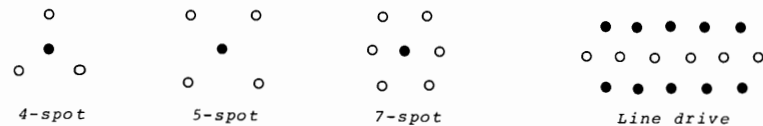
In addition to the indicated water source beds, a number of the projects depend on fresh water from streams, lakes, and municipal water supplies.

The approximate position of two important marker beds are also shown on the rock chart.

WELL PATTERNS

Four representative oil well and input well patterns are shown below. (See Craig, Chapter 5, 1971, for discussion of various injection patterns used in waterflood projects.) Abbreviations used for other patterns listed in this report are:

- Irreg = Irregular
- Line = Line drive
- Peri = Peripheral or perimeter



KEY: ● - oil well; ○ - water input

TYPE OF MATERIAL INJECTED

TYPE OF PROJECT

- (A) = Air injection
- (D) = Dump flood
- (F) = Fire flood
- (P) = Pressure maintenance
- (S) = Steam flood
- (SWD) = Salt water disposal
- (W) = Controlled waterflood
- (-) = Not identified

- Inert gas
- Natural gas
- F = Fresh water
- M = Mixture of fresh water and brine
- T = Treated brine
- U = Untreated brine

AVERAGE WELL-HEAD INJECTION PRESSURE
Pounds per square inch, as indicated, and:

Grav = Gravity
Vac = Vacuum

Special additives:

- MS = Micellar solution
- P = Polymer
- S = Surfactant

PRINCIPAL OIL PRODUCTION MECHANISM BEFORE SECONDARY RECOVERY OR REPRESSURING EFFORT

- Comb = Combination of production mechanisms not specifically designated
- Gas Exp = Gas expansion (gas cap) drive
- Grav = Gravity drainage
- S Gas = Solution gas drive
- Wat = Water drive

ABBREVIATIONS FOR OIL PRODUCING ZONES AND SOURCES OF INJECTED WATER

- | | | | |
|--------------------|------------------------------|------------|------------------------------|
| Arb | = Arbuckle | Miss | = Mississippian |
| Bartl | = Bartlesville | Morr | = Morrow |
| B Penn, Basal Penn | = Basal Pennsylvanian | Ogal | = Ogallala |
| Burg | = Burgess | Penn Congl | = Pennsylvanian Conglomerate |
| Cattle | = Cattleman | Platt | = Plattsmouth |
| Ced H | = Cedar Hills | Pleist | = Pleistocene |
| Congl | = Conglomerate | Perm | = Permian |
| Ch | = Chat, Chert | Pleas | = Pleasanton |
| Chey | = Cheyenne | Prod | = Produced |
| Cher | = Cherokee | Quat | = Quaternary |
| Ches | = Chesteran | Reag | = Reagan |
| Cott Gr | = Cottage Grove | Salt Sd | = Unnamed salt water sand |
| Dak | = Dakota | Sd | = Sand |
| Doug | = Douglas | Sh Grav | = Unnamed Shallow gravel bed |
| El Dor | = El Dorado | Sh Sd | = Unnamed shallow sand |
| Fr | = Unnamed fresh water source | Shaw | = Shawnee |
| Gr | = Gravel | Simp | = Simpson |
| Hunt | = Hunton | Snyder | = Snyderville |
| KC | = Kansas City | St L | = St. Louis |
| Kind | = Kinderhook | Stal | = Stalnaker |
| LKC | = Lansing-Kansas City | Squir | = Squirrel |
| Lay | = Layton | Tark | = Tarkio |
| Lans | = Lansing | Tuck | = Tucker |
| Lo | = Lower | Ter | = Tertiary |
| Lm | = Lime | Top | = Topeka |
| Ls | = Limestone | Tor | = Toronto |
| McPher | = McPherson | Up | = Upper |
| Maq | = Maquoketa | Wat | = Water |
| Marm | = Marmaton | Way | = Wayside |
| Mise | = Misener | White Cl | = White Cloud |

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. un- mited?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has in- been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
ALLEN COUNTY																
9546	--	Bronson-Xenia	Harold T. Beck	(W) Allen County Flood	Crowder	34-24S-21E 3, 4-25S-21E	320	0	Bartl	650	15	30	14	0	0	Yes
13452	--	Bronson-Xenia	R.W. Booth & G.K. Woods	(W) Richard W. Booth	Richard W. Booth	18-25S-21E	10	0	Bartl	762	24	0*	4	0	4	No
3091	--	Bronson-Xenia	Mack C. Colt, Inc.*	(W) KBC-KBN	North Holeman, Stewart-Holeman, Lamb, Isenhardt-Hickson, Zimmerman, Grubaugh, Lent-Hullum, Moore-Davidson, Smith-Lundberg, Johnson, Harvey, Morrison Newton-Wright	22-24S-21E 27-24S-21E 28-24S-21E 33-24S-21E	310	140	Bartl	750	20	72	49	2	1	Yes
9440	--	Bronson-Xenia	Mack C. Colt, Inc.*	(W) C-W	Harris J.W. Bartlett, Bartlett, McLaughlin L.M. Bacon	34-24S-21E 33-24S-21E 4-25S-21E 8-25S-21E 9-25S-21E	30	20	Bartl	800	20	6	0	0	0	Yes
15815	No	Colony West	Mack C. Colt, Inc.*	(W) Colony B South Unit	Colony B South Unit	21, 22, 27-23S-18E	150	0	Squir	815	25	19	0	1	0	Yes
6814	--	Davis-Bronson	Harold T. Beck	(W) Allen County Flood	Steiner	10, 15-24S-21E	--	--	Bartl	650	15	13	0	0	0	Yes
6851	--	Davis-Bronson	Dee Eastwood	(W) Dawson	Dawson	15-24S-21E	320	0	Bartl	650	10	7	--	--	--	Yes
13975	--	Davis-Bronson	Dorwin Jackson*	(W) ---	Stewart	22-23S-21E	160	80	Bartl	630	10	6	3	3	0	Yes
17800	Yes	Elsmore-Shoestring	Loreen S. Daniels*	(D) Larson	Larson	15-26S-21E	160	--	Bartl	713	11	5	--	0	--	Yes
11082	--	Elsmore-Shoestring	Walter Duncan	(-) Walquist	Walquist	32-26S-21E	100	0	Bartl	670	30	5	4	0	0	Yes
17350	No	Elsmore-Shoestring	Rainbow Oil, Inc.	(W) East Elsmore	Don R. Nelson, Marvin Sander	21-26S-21E 16-26S-21E	63	0	Bartl	640	12	22	0	4	0	Yes
11183	--	Humboldt-Chanute	Bucane Oil & Research Co.*	(W) Bucane Oil	Hayworth, Yount, Bracher	36-26S-18E	160	0	Bartl	825	8	7	0	0	0	No
596	--	Humboldt-Chanute	Central Kansas Oil, Inc.*	(W) Humboldt-Petrolia	Hamm, Shultz, R.L. Work, D. Work, Mathias, Middendorf, Wadley Armel, Campbell, McKinley, Morris, Grother, Trabue, Wilson-Dickerson	4-26S-18E 5-26S-18E 5, 8-26S-18E 7-26S-18E 19-26S-18E 20-26S-18E 29-26S-18E	488	0	Bartl	750	20	135	--	0	--	Yes
3435	--	Humboldt-Chanute	Central Kansas Oil, Inc.*	(W) Matson Group	Wadley, Fussman Morris, McCarty, McKinley Burtiss, Fraker	16-26S-18E 17-26S-18E 18-26S-18E	--	--	Bartl	800	8-60	--	--	0	0	Yes
8170	--	Humboldt-Chanute	Jones & Campbell	(W) Monarch	Monarch Unit	9-26S-18E	40	--	Bartl	800	10	4	10	0	0	Yes
5397	No	Humboldt-Chanute	Layton Oil Company	(W) Project 503	Project 503	1, 12, 13-26S-18E 6, 7-26S-19E	60	0	Bartl	820	16	16	0	5	1	Yes
8647	--	Humboldt-Chanute	Overland Energy, Inc.*	(-) Wolf-Tebay	Wolf-Tebay Unit	24-26S-17E 19-26S-18E	320	--	Bartl	820	40	11	--	--	0	Yes
1858	--	Humboldt-Chanute	Texaco, Inc.*	(W) Henrichs Block	Henrichs Block	22, 23, 26, 27-26S-18E	464	--	Bartl	725	0-40	33	--	--	--	Yes
5717*	--	Humboldt-Chanute	Roy Willis	(D) Heavy Oil	Hoepker C Krouse C,	25-26S-18E 36-26S-18E	4	--	Bartl	825	15	4	3	1	2	No+
3617	--	Humboldt-Chanute	Roy Willis	(D) Townsend	Townsend	31-26S-19E	20	--	Bartl	830	10	4	--	0	1	No*
10579	--	Humboldt-Chanute	Kenneth J. Wimsett	(W) C. Johnson	C. Johnson	18-26S-20E	159.5	55%	Bartl	725	10	23	0	8	0	Yes
16718	--	Humboldt-Chanute	Fabco Oil Co., Inc.	(W) Miller-Ling-Teats- Dolecek*	Miller, Teats, Dolecek	36-24S-17E 31-24S-18E	520	0	Squir	801	12	4	0	0	0	Yes
13992	Yes	Iola	Layton Oil Company	(W) Cross-Clinkenbeard	Cross, Clinkenbeard	3-24S-18E	15	0	Bartl	860	50	6	17	0	0	No*
8717	No	Iola	Layton Oil Company	(F) Carlyle Thermal Unit	Gregg, Wiggins B, Riggs Javaux	10-24S-18E 11-24S-18E	10	10	Bartl	850	20	9	75	0	0	No*
9017	--	Iola	Royal Oil & Gas Corp.	(D) Charlotte Hobbs	Charlotte Hobbs	9-24S-18E	160	--	Bartl	956	10	12	3	0	0	Yes
3246	No	Iola	The Star Producers, Inc.	(-) Lorance	Lorance	21-24S-18E	10	0	Squir	668	9	8	0	0	0	Yes
6633	--	Iola	Tech-American Resources Corp.*	(W) Scott-Sallee	Otis Sallee, H.E. Scott	14-25S-19E	320	0	Bartl	808	35	11	15	0	0	Yes
7469	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) Lee Maloney & E.H. Rose	Lee Maloney, E.H. Rose	15-25S-19E	320	0	Bartl	820	35	6	2	0	0	Yes
14322	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) H.P. Morrison Unit	H.P. Morrison Unit	22-25S-19E	320	0	Bartl	861	35	9	2	0	0	Yes
14357	Yes	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) D.L. Jarred & A.H. Setter "B"	D.L. Jarred, Andrew H. Setter "B"	21-25S-19E 22-25S-19E	320	0	Bartl	800	25	6	1	1	0	Yes
14897	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) A.W. Wade	A.W. Wade	23-25S-19E	80	0	Bartl	845	24	3	0	0	0	Yes
16534	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) A.W. Wade	A.W. Wade	23-25S-19E	80	0	Bartl	845	24	3	0	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks						
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods							
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975					
9546	10	0	0	0	Irreg	--	--	---	--	--	U	--	24	--	--	--	234	--	234	--								
13452	0	1	0	1	5-spot	0	0	---	--	--	-	1967	---	1/3	21.1	533	0	32,290	0	612	0	0	*Temp. Abd. lack of production					
3091	64	50	0	0	Line	350	47	Prod + Miss lime	980	--	T	1951	Grav	1/0	30	--	1,068,206	32,192,792	27,629	3,010,270	27,629	3,010,270	*Merged-was Colt Oil Company, Inc.					
9440	3	12	0	0	5-spot	410	.1	Prod + Miss lime	940	--	T	1962	Grav	1/0	26	--	107	998,536	475	--	475	74,902	*Merged-was Colt Oil Company, Inc.					
15815	10	0	0	0	Line	250	42	Sh lime above Big Shale	350	35	T	1971	Grav	1/0	32	--	154,394	494,598	17,358	62,675	17,358	62,675	*Merged-was Welda Recovery, Inc.					
6814	3	5	0	0	Irreg	--	--	---	--	--	U	--	---	--	28	--	--	--	--	--	551	--	551	--				
6851	6	0	0	0	Irreg	550	20	Prod + Lake	--	--	F	1972	Grav	3/1	25	--	43,000	172,000	1,900	7,334	950	--	--	--				
13975	5	0	0	0	Irreg	600	20	Miss	980	20	M	1968	Grav	1/15	25	25	35,000	--	--	--	--	1,417	--	--	--			
17800	1	5	0	-	Irreg	50	20	Prod + Arb	1000	--	U	--	Grav	--	30	--	7,300	--	--	--	--	0	--	--	*Was Jackson Bros.			
11082	7	0	0	0	Line	650	51	Miss	950	68	-	1964	---	--	32.5	--	78,683	1,831,059	3,728	131,569	3,728	--	--	--	*Was William Daniels			
17350	9	0	6	0	5-spot	650	50	Prod + Miss lime	864	436*	T&S	1974	Grav	4/1	30	--	132,861	174,352	13,263	25,620	10,000	12,000	--	--	*Open casing at 916'			
11183	4	14	0	0	Irreg	200	8	Prod	--	--	U	--	Grav	1/0	32	--	7,000	68,000	700	5,060	700	3,630	--	--	*Was F. Merton Jeanes			
596	50	62	0	0	Irreg	750	10	Prod + Neosho River	--	--	M	1950	---	--	28	80	190,910	25,741,300	17,538	1,156,689	17,539	1,156,689	--	--	*Was Minn Kan Oil Co.			
2698																												
3183																												
3435	140	9	0	0	Irreg	780	12	Neosho River	--	--	M	1936	---	--	27-28	--	--	--	--	--	7,394	--	--	--	--	--	--	*Was Minn Kan Oil Co.
8170	6	8	0	0	Irreg	400	40	Prod + Oswego	500	25	T	--	Wat	--	31	--	14,600	--	--	--	1,230	--	--	1,230	--	--	--	
5397	25	0	0	0	5-spot	310	42	Prod + Miss lime	1061	--	T	1970	S Gas	1/5	32	--	386,833	1,639,382	21,662	119,045	21,662	119,045	--	--	--	--		
8647																												
3802	10	21	0	0	Irreg	550	500	Prod + Oswego	525	100	T	--	S Gas	--	28	--	182,500	--	--	--	1,949	--	--	1,949	--	--	--	*Was Jones & Campbell
1858	10	-	-	-	5-spot	700	19	Prod + Arb	1500	--	M	1974	S Gas	--	29.1	--	68,951	82,390	4,685	5,243	4,685	5,243	4,685	5,243	--	--	*Was Ross Keas Oil Inc.	
5717	3	-	0	-	Irreg	400	5	Prod + Oswego Lime	450	30	U	1953	Grav	1/0	31	--	5,000	695,000	--	187,540	--	--	--	--	--	--	*C-6370 Inactive	
3617																												
10579	5	-	0	3	Irreg	250	5	Prod + Oswego lm	450	30	U	1963	Grav	1/2	32	--	1,000	214,000	--	--	--	200	28,398	--	--	--	*Shut down winter mons.	
16718	6	0	0	0	5-spot	500	20	Prod + KC lime	200	15	M	1972	Grav	1/1	32	--	3,000	20,600	14,400	42,100	7,200	--	--	--	--	--	*Shut down winter mons.	
13992	1	0	0	0	Peri	600	48	Prod + Salt Water Well	137	360	U	1968	Grav	9/1	28	--	17,000	114,400	480	9,520	380	3,160	--	--	--	--	*Ling lease abd.	
8717	2	2	0	0	Irreg	500+	130	Prod + Surface	--	--	F	1974	S Gas	--	21	700	12,950#	31,250±	1,620	--	--	1,620	--	--	--	--	*Mech prob +500MCF	
9017	0	5	0	0	---	--	--	---	--	--	-	1963	S Gas	--	21	700	0	1,145,300+	1,856	115,613	--	--	--	--	--	--	*Temp SD /#10,000 ±20,980	
9089																												
3246	1	0	0	0	Irreg	260	128	Prod	--	--	U	1952	S Gas*	--	19	--	46,720	665,589	7,715	--	--	--	--	--	--	--	*& Water	
6633	2	1	0	0	5-spot	--	3	River Gravel	20	6	-	1962	Grav	1/0	33	--	1,647	--	--	--	1,882	425	--	--	--	--	--	
7469	1	0	0	0	Irreg	100	4	Prod	--	--	U	1968	S Gas	99/1	19.6	--	1,472	77,158	2,072	121,588	0	0	0	0	0	0	*Was Tenneco Oil Company	
14322	3	1	0	0	Irreg	427	52	Prod + KC	170	30	M	1968	S Gas	99/1	20.6	--	40,164	343,699	11,676	111,220	11,676	68,971	68,971	68,971	68,971	*Was Tenneco Oil Company		
14357	7	0	0	0	Irreg	478	45	Prod + KC	170	30	M	1968	S Gas	99/1	23.6	100	114,593	911,906	9,209	147,229	9,209	80,466	80,466	80,466	80,466	*Was Tenneco Oil Company		
14897	2	1	0	0	Irreg	589	61	Prod + KC	170	30	M	1969	S Gas	99/1	23.4	--	46,379	503,491	11,433	61,779	11,433	27,883	27,883	27,883	27,883	*Was Tenneco Oil Company		
16534	3	0	0	0	Irreg	482	35	Prod + KC	170	30	M	1972	S Gas	99/1	22.7	--	32,627	158,411	1,282	14,197	1,282	2,497	2,497	2,497	2,497	*Was Tenneco Oil Company		

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

County	Is proj. un- itized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.	
ALLEN COUNTY (concl.)																
10334	No	Moran	Marvin E. Boyer Oil Co.	(W) LaHarpe Unit #2	Knox, Wade, Coltrane, Jones Wolfe, Foust	23-25S-19E 24-25S-19E	95	0	Squir	860	10	62	0	10	0	Yes
9952	--	Moran	Mack C. Colt, Inc.*	(W) Moran Group	Bowen, Day, Love, Lantz, McCall Norman, Snell	35-24S-20E 36-24S-20E	25	0	Bart1	800	15	6	2	0	0	Yes
▶ 17819	No	West Elsmore	Rainbow Oil, Inc.	(W) West Elsmore	Gerald E. Johnson	16-26S-20E	50	0	Bart1	720	19	6	0	8	0	Yes
ALLEN COUNTY TOTALS (Reported) (Includes project in supplemental list.)							6,884	250		608	204	44	9			
ALLEN-ANDERSON COUNTIES																
4401	--	Colony West	Mack C. Colt, Inc.*	(W) West Colony Project	Schulte, Davenport, Alexander, R. Baker, Victory Life, Harris, Kivett, Haldeman Ed Kelly, County Farm, Blohm, Bowlus W. W. Baker	8-23S-18E 9-23S-18E 16-23S-18E 34-23S-18E 3-23S-18E 15-23S-18E	150	105	Squir	850	15	28	37	0	2	Yes
ALLEN-BOURBON COUNTIES																
37-01-*-- 02A 153		Davis-Bronson	Mack C. Colt, Inc.†	(-) McIntyre-Travis	Henninger C, Henninger A, Marshall, Donovan, Depey, Gillaspie, Henninger B, Haynes, Honneus (Purdom), Lowe, Honneus (Stewart)	34-23S-21E 3-24S-21E 2-24S-21E 10-24S-21E 11-24S-21E 15-24S-21E 11-24S-21E	0	0	Bart1	700	30	11	0	0	0	No#
ALLEN-NEOSHO COUNTIES																
4919	--	Humboldt-Chanute	Texaco, Inc.*	(W) K.T. Block	K.T. Block	32,33-26S-18E 4-27S-18E	745	--	Bart1	730	0-40	67	-	-	-	Yes
4444	--	Humboldt-Chanute	Roy Willis	(P) Seefeldt	Seefeldt	3-27S-18E 34-26S-18E	20	--	Bart1	760	30	-	-	-	-	No*
ALLEN-NEOSHO COUNTIES TOTALS (Reported)							765	0		67	0	0	0			
ANDERSON COUNTY																
18135	--	Bush City Shoe-string	Glenn Caldwell	(P) C.K. Oil Co.	Kirk	8,9,16,17-21S-20E	120	80	Squir	800	40	10	-	11	1	Yes
3151	Yes	Bush City Shoe-string	Glacier Petroleum Co.	(W) Reed Group	Reed Group	4,5-21S-21E	--	--	Squir	620	20-30	150	-	-	-	Yes
3177	Yes	Bush City Shoe-string	Glacier Petroleum Co.*	(W) Connelly & Loreaux	C&L Unit	4,5-21S-21E	--	--	Squir	620	20-30	125	-	-	-	Yes
852 1111	--	Bush City Shoe-string	Kewanee Oil Co.	(W) Dengo	McCrabb, Litle & Oko Woods, Cleveland, Kretchmer & Victor Brownrigg, Jackson, Bandy & Daniel	28-20S-21E 33-20S-21E 4-20S-21E	364	17	Squir	614	5	123	4	0	0	Yes
5985	--	Bush City Shoe-string	Kewanee Oil Co.	(W) Dengo W.F.	Bandy, Victor Daniel	32,33-20S-21E 4-21S-21E	0	30	Bart1	740	11	0	3	0	0	No*
▶ 6421	No	Colony-Welda	Brecheisen Oil Co.	(W) Summers-Cameron	Summers-Cameron	34,35-21S-19E	70	0	Squir	800-820	20-30	21	0	1	0	Yes
6436	No	Colony-Welda	Brecheisen Oil Co.	(W) R.W. Brecheisen	R.W. Brecheisen	35-21S-19E	20	5	Squir	820	20	4	2	0	1	Yes
6699	No	Colony-Welda	Brecheisen Oil Co.*	(W) Kattenhorn	Faith Kattenhorn	27-21S-19E	50	10	Squir	825	24	7	0	0	0	Yes
9179	No	Colony-Welda	Brecheisen Oil Co.	(W) Buchanan-Settle	Buchanan-Settle	2-22S-19E	25	5	Squir	820	20	4	2	0	1	Yes
11406	No	Colony-Welda	Brecheisen Oil Co.*	(W) Melville-Kellstadt	Kellstadt	34-21S-19E	70	0	Squir	830	20	18	0	0	1+	Yes
4389	--	Colony-Welda	James E. Russell Petroleum	(W) Unit No. 2	Unit No. 2	28,29,32,33-22S-19E	116	0	Squir	800	16	6	17	0	0	No*
5363	--	Colony-Welda	James E. Russell Petroleum	(W) Unit No. 3	Unit No. 3	2,3-22S-19E	146	0	Squir	800	19	36	11	6	0	No*
10781	--	Colony-Welda	James E. Russell Petroleum	(W) Martin and Strain	Martin Strain	4-22S-19E 9-22S-19E	120	0	Squir	800	14	18	4	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks			
	Active	In-active	Drilled 1975	Abd. 1975			Injection Pattern	Source	Depth, ft.						Thick., ft.	Type	Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975	
10334	41	0	8	0	5-spot	500	12.1	Prod + Miss	1010	65	T	1963	Grav	98/2	24.6	0	181,463	-	46,251	-	46,251	-		
9952	6	1	0	0	5-spot	600	50	Prod + Miss	960	--	T	1953	Grav	1/0	22	0	104,969	1,243,494	3,093	83,975	3,093	83,975	*Merged-was Colt Oil Company, Inc.	
17819	7	0	7	0	5-spot	300	50	Prod + Miss	903	496*	T	1975	S Gas	--	30	-	25,525	25,525	3,020	3,020	500	500	*Open casing at 937	
	461	198	21	4													3,205,849	82,459,104	248,162	6,177,401	201,959	4,740,304		
4401	12	47	0	0	Line	650	16	Prod + Miss	1260	--	T	1955	Grav	1/0	32	0	68,818	7,094,073	7,234	0	7,234	1,320,639	*Merged-was Colt Oil Company, Inc.	
37-01-02A 153	0	0	0	0	Line	--	--	Prod + Miss	960	--	T	1952	Grav	1/0	28.5	0	0	8,326,899	1,091	0	0	458,500	*Inactive water flood †Merged-Colt Oil Co, Inc. #Shut down	
4919	30	-	-	-	5-spot	700	26	Prod + Arb	1500	--	M	1974	S Gas	--	32.5	-	279,975	339,130	8,063	9,025	8,063	9,025	*Was Ross Keas Oil Inc.	
4444	0	1	0	1	Irreg	--	--	Prod	525	20	U	1955	Grav	1/0	32	-	--	152,500	--	--	--	29,366	*Inactive	
	30	1	0	1													279,975	491,630	8,063	9,025	8,063	38,391		
18135	1	-	0	-	Irreg	--	10	Prod	--	--	U	1975	S Gas	--	36	6.5	300	300	17,321	17,321	--	--	--	
3151	150	-	-	-	Irreg	580	1445	Prod	--	--	U	--	Wat	--	29	-	520,200	--	--	--	--	--	--	
3177	100	-	-	-	---	650	1230	Prod	--	--	U	--	Wat	--	32	-	442,800	--	--	--	--	--	--	*Was Marmon Oil Company
852 1111	115	7	0	0	5-spot	775	10	Prod + Arb + Miss	907-1451	--	T	1944	S Gas	--	36	6.3@75°	371,126	10,496,174	19,794	2,149,758	19,794	1,509,717		
5985	0	0	0	0	Irreg	0	0	Prod	1451	--	T&M	1958	S Gas	--	38	-	0	86,882	0	0	0	0	0	*No water injected
6421	13	0	2	0	Irreg	700	20	Prod + KC*	400	4	T	1958	S Gas	49/1	35	-	94,900	664,900	6,487	35,315+	6,487	35,315	*400' shale+Since 1970	
6436	2	0	0	0	Irreg	700	20	Prod + KC*	400	4	M	1958	S Gas	49/1	34	-	18,250	228,250	1,515	4,484+	1,515	4,484	*400' shale+Since 1970	
6699	6	0	0	0	Irreg	700	25	Prod+KC+Oswego	400	5	T	1959	S Gas	9/1	34	-	54,750	409,750	5,690	17,107+	5,690	17,107+	*Was J.W. Peery+Since '71	
9179	5	0	0	0	Irreg	600	20	Prod + KC*	400	4	M	1962	S Gas	49/1	35	-	36,500	388,670	1,270	6,161+	1,270	6,161+	*+400' shale+Since 1970	
11406	9	0	2	0	Irreg	600	25	Prod+KC+Oswego	400	4	T&S	1965	S Gas	9/1	35	-	73,000	179,420	7,747	21,387#	7,747	21,387#	*Was J.W. Peery +Converted to input #Since 1971	
4389	0	17	0	0	5-spot	0	0	Prod	--	--	-	1955	S Gas	0	33	13	0	2,502,786	2,519	318,393	0	191,254	*Completing redev. program	
5363	0	24	0	0	5-spot	0	0	Prod+Miss	1200	--	T	1957	S Gas	0	36	7.5	0	2,301,116	13,188	208,227	13,188	101,539	*WF dev. in progress	
10781	16	3	0	0	5-spot	590	33	Prod+Oswego Lm	700	60	T	1964	S Gas	0	36	7.5	195,103	1,502,560	15,020	246,479	15,020	152,264		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
								Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In. active	Drilled		Abd.
ANDERSON COUNTY (concl.)																	
	11165	--	Colony-Welda	James E. Russell Petroleum	(W) Unit No. 1	Unit No. 1	21,22,27,28, 33-22S-19E	320	0	Squir	800	15	2	88	2	0	No*
	8945	--	Colony West	James E. Russell Petroleum	(W) West Colony	Brecheisen, Lacy Kelley Wolfe, McGhee West	5-23S-18E 6-23S-18E 31-22S-18E 36-22S-17E	213.7	0	Squir	850	17.8	54	11	0	0	Yes
	10327	--	Colony West	James E. Russell Petroleum	(W) Chas. M. Hill (was W.M. Dary)	Charles M. Hill	25-22S-17E	16	0	Squir	885	15	0	5	0	0	No*
	7361	--	Garnett Shoestring	Glenn Caldwell	(P) ---	Caldwell	32-20S-20E	30	-	Squir	660	20	9	4	0	0	Yes
	16816	No	Kincaid	Richard Engineering Co.	(W) Kincaid Water Flood	Lockwood, Cooper-Richard-Frost, Miller "A", Miller "B", McCaslin-Van Buskirk, Gaddis Steel	32-22S-21E 29-22S-21E 4-23S-21E 4-22S-21E 9-22S-21E	1240	0	Bartl	750	30	38	2	15	0	No*
	581*	--	Selma	Mack C. Colt, Inc.†	(-) Selma	Cochran, Monroe	21-21S-21E	0	0	Bartl	850	18	0	0	0	0	No
	13952	--	Selma	James E. Russell Petroleum	(W) Vernon Croan Lease	Vernon Croan	21-21S-21E	22	12	Bartl	650	12	0	5	0	0	No*
ANDERSON COUNTY TOTALS (Reported)								3,367	159				755	162	41	10	
BARBER COUNTY																	
	13209	No	Amber Mills	Reed Oil Company*	(W) House & Lawrenz	Ella Lawrenz Emma House	16-30S-12W 15,16-30S-12W	210	0	Viola	4500	8	3	0	0	3	Yes
	5362	--	Bloom	American Petrofina Co. of Texas*	(D) Bloom	Bloom	23-32S-12W	20	20	Miss	4321	17	1	0	0	0	Yes
	6939	--	Highway	Aylward Drilling Company	(P) Gilbert	Stone	23-32S-11W	80	10	Snyder*	3586	6	2	0	0	0	Yes
	17369	Yes	Medicine Lodge- Boggs	Continental Oil	(P) G.R. Smith "A"	G.R. Smith "A"	20-33S-12W	150	0	Simp	4963	31	4	1	-	-	Yes
	15010	--	Medicine Lodge- Boggs	Skelly Oil Company	(W) Boggs "C"	Boggs "C"	17-33S-12W	160	0	Simp	4794	12	6	4	0	0	Yes
	14776	Yes	Medicine Lodge North	Robert R. Price*	(W) Forsyth Unit	C.J. Forsyth, J. Hill, D. Kirkbride	17,18,19, 20-32S-12W	600	0	Miss	4480	15	12	0	0	0	Yes
	16556	--	Medicine Lodge North	Robert R. Price*	(W) Kirkbride et al	Kirkbride et al	20-32S-12W	252	0	Miss	4388	15	1	0	0	0	Yes
	15203	--	Moffett West	Tenneco Oil Company	(P) L.M. Lee "A" & "B"	L.M. Lee "A" & "B"	8,9-30S-15W	40	0	Viola	4646	30	1	2	0	0	Yes
	15630	No	Rhodes	Bowers Drilling Co., Inc.	(D) Gilmore-Chapin	Gilmore-Chapin, Groendyke Fitzgerald	19-33S-11W 30-33S-11W	480	200	Miss	4480	12	3	0	4	1	Yes
	6584	--	Rhodes	Energy Reserve Group, Inc.*	(-) W.A. Newkirk	W.A. Newkirk	20-33S-11W	571	409	Miss	4433	10	7	1	0	19	Not
	10102	No	Rhodes	Gulf Oil Corporation	(W) W.A. Newkirk	W.A. Newkirk	17-33S-11W	160	0	Miss	4450	--	7	1	0	0	Yes
	9123	Yes	Rhodes	Kewanee Oil Co.*	(W) Rhodes Unit	Page A, Page B Page C, Newkirk Page D	15-33S-11W 21-33S-11W 16-33S-11W 22-33S-11W	1200	800	Miss	4550	20	19	10	0	0	Yes
	17372	--	Rhodes	Kewanee Oil Co.	(W) Forester A	Forester A	28-33S-11W	120	0	Miss	4433	20	1	0	0	0	Yes
	16262	No	Salt Fork	Braden-Deem, Inc.	(W) Davis Ranch	Davis, Noland, Merrill	11,12-35S-15W	320	0	Miss	4970	30	4	0	0	0	Yes
	16259																
	15863	No	Skinner	Robert F. White	(D) Skinner "B"	Skinner "B"	17-31S-17W	40	0	Viola	4400	30	1	0	0	0	Yes
BARBER COUNTY TOTALS (Reported)								4,403	1,439				72	19	4	23	
BARTON COUNTY																	
	17142	--	Ames	Kaiser Francis	(P) Drews	Drews A, Drews B	15-18S-11W	60	0	Lans	3036	189	4	0	0	0	Yes
	6929	Yes	Ames	Pioneer Operations Co., Inc.	(W) Robl Unit	Robl Unit	22,23,26, 27-18S-11W	480	0	L-KC	2925	155	6	0	0	0	Yes
	11512	--	Bailey	NCRA	(W) Bailey L-KC Unit	Bailey, Bock, Robl	30-18S-11W	50	0	Lans	3278	16	5	1	0	0	Yes
	16938	No	Beaver	Colorado Oil Company, Inc.	(-) Kramer Lease	Kramer	15-16S-12W	60	40	Lans Arb	3051 3318	181 2	2	0	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros--Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
11165	0	41	0	0	5-spot	0	0	Prod + Miss	1200	--	T	1948	S Gas	0	33.1	13	0	6,458,240	494	1,320,839	0	579,789	*Awaiting completion of redevelopment	
8945	31	57	0	0	Line	590	31	Prod + Salt Sd	1100	35	T	1961	S Gas	--	30	22	347,293	6,228,464	14,379	669,410	14,379	494,699		
10327	0	5	0	0	5-spot	0	0	Prod + Hertha	500	--	T&S	1963	S Gas	0	27	38	0	87,600	0	2,511	0	2,511	*Awaiting future development	
7361	5	0	0	0	Irreg	0	5	Prod	--	--	U	1959	S Gas	--	35	--	1,825	721,325	880	74,900	-	-		
16816	26	1	10	0	Line & Irreg	200	600	Prod + KC Lm	100	100	T	1972+	S Gas	7/3	27	--	15,000	15,000	13,560	-	-	-	*Started in Oct. 1975 †SWD	
581	0	0	0	0	Line	--	--	Prod + Miss	1100	--	M	1952	Grav	1/0	26	--	0	985,000	0	-	0	263,780	*Inactive †Was Colt Oil Company, Inc.	
13952	0	5	0	0	---	0	0	Prod + Surface	--	--	F	1968	S Gas	0	32	8	0	334,200	0	9,934	0	9,934	*Awaiting redevelopment	
	583	179	14	1													2,657,518	52,530,960	167,022	5,102,226	132,248	5,182,132		
13209	1	0	0	0	Irreg	200	800	Prod	--	--	T	1967	Wat	9/1	37	--	292,000	2,587,850	3,883	130,044	3,883	130,044	*Was Cameron K. Reed	
5362	1	0	0	0	Irreg	315	34	Prod	--	--	U	1957	S Gas	1/2	33	--	12,066	209,440	8,252	139,211	0	0	*Was The El Dorado Refining Co.	
6939	1	0	0	0	Irreg	Grav	50	Prod	--	--	U	1959	Gas Exp+ Wat Drive	4/1	26	--	18,250	422,199	2,625	109,921	2,625	73,536	*Snyderville (Douglas)	
17369	3	0	-	-	Irreg	0	711	Prod	--	--	U	1975	S Gas	--	26	--	778,056	5,423,584	17,484	1,689,397	-	-		
15010	4	0	0	0	Irreg	0	298	Prod	--	--	U	1969	S Gas	73/352	26.2	--	435,712	1,501,936	19,145	2,881,845	19,145	76,611		
14776	3	0	0	0	Peri	1900	250	Prod + KC	4000	--	T	1969	S Gas	9/7	30	--	268,000	2,281,000	12,231	638,572	12,231	57,646	*Was Barbara Oil Company	
16556	1	0	0	0	Peri	1800	300	Prod + KC	4000	--	T	1972	S Gas	9/7	30	--	109,500	235,500+	331	3,603	331	331	*Was Barbara Oil Company †1974 & 1975 gross	
15203	1	0	0	0	Irreg	200	45	Prod	--	--	-	1968	Grav	--	34.6	--	16,425	102,555	2,637	88,652	0	0		
15630	1*	0	1	0	Irreg	Grav	100	---	--	--	T	1971	Grav	2/3	34	--	50,000	200,000	11,126	156,236	2,500	8,500	*Oil well converted	
6584	0	5	0	6	---	--	--	---	--	--	-	1958	---	--	--	--	0	591,617	4,660	9,614,279	0	0	*Was Clinton Oil Co. †Inj shut down in 1974	
10102	2	0	0	0	Irreg	1200	153	Prod	--	--	U	1963	S Gas	59/38	25.4	--	111,905	9,158,706	8,517	340,752	8,517	340,752		
9123	14	4	0	1	Peri	2100	585	Prod+Medicine Lodge River Wells	14	16	M	1962	Gas Exp	1/13.3	27	4.7+	3,063,589	64,707,778	117,652	5,476,365	117,652	1,876,201	*Was Barbara Oil Co. †@ Reservoir Press & Temp.	
10266																								
17372	1	0	0	0	Irreg	0	10	Prod*	--	--	U	1974	Gas Exp	0/50	0	--	4,200	16,700	0	0	0	0	0	*Produced by gas well
16262	1	0	0	0	Irreg	100	100	Prod	--	--	U	1971	S Gas	35/30	26	--	36,500	111,250	7,436	208,475	1,000	2,000		
16259																								
15863	1	0	0	0	Irreg	0	40	Prod	--	--	U	1971	S Gas	1/2	40	--	15,000	75,000	5,800	522,800	0	-	-	
	35	9	1	7													5,211,203	87,625,115	221,779	22,000,152	167,884	2,565,621		
17142	1	0	0	0	Irreg	1200	440	Prod	--	--	T&S	1974	---	18/224	--	--	146,000	292,000	7,300	675,177	1,000	2,000		
6929	2	0	0	0	Irreg	600	191	Prod+Red Bed	375	80	M	1971	S Gas	1/1	40	--	139,430	492,077	5,778	-	3,928	-	-	
11512	2	0	1	0	Irreg	1100	75	Prod+Shallow River Gravel*	40	20	M	1972	S Gas	52/45	42.5+	--	48,357	186,988	19,998	68,889	8,454	20,323	**Fresh Water †@60	
16938	1	0	0	0	Irreg	400	490	Prod	--	--	U	1973	Wat	16/369	39	--	171,904	516,959	5,310	359,665	-	-		

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. im- proved:	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
BARTON COUNTY (cont.)																
11244	No	Beaver	Keener Oil Company*	(W) Feltes	N. Feltes	8-16S-12W	50	0	Lans	3050	8	2	1	0	0	Yes
2259																
14631	No	Beaver	Phillips Petroleum Co.*	(P) Christian "D"	Christian "D"	10-16S-12W	40	-	L-KC	3060	12	1	0	0	0	Yes
15418	Yes	Bernard	Graybol Oil Corp.	(W) Musenberg Unit	Musenber Unit	10-19S-11W	60	0	Lans	3192	8	4	0	0	0	Yes
8475	No	Bloomer	Clifford E. Stephens, Jr.*	(D) ---	Bloomer	36-17W-11W	160	0	KC-L	--	--	2	-	-	-	Yes
8376	--	Bottoms	Hillenburg Oil Company*	(W) Zink A	Zink A	35-18S-12W	20	0	L-KC	3130	10	3	1	0	0	Yes
						36-18S-12W										
7810	--	Carroll	Everett Swander	(P) Meitner "A"	Meitner "A"	28-17S-14W	0	30	L-KC	3100	6	3	0	0	0	No*
17564	No	Carroll North	Phillips Petroleum Co.*	(P) Borchers "A"	Borchers "A"	8-17S-14W	20	0	Arb	3400	--	2	0	0	0	Yes
						Demel "A"†			Lans							
						17-17S-14W										
14333	No	Chaffee	H.A. Chapman	(W) Panning-Russell- Grunwald WF	Panning, Russell, Grunwald	31-19S-13W	40	200	L-KC	3252	6	2	0	0	1	Yes
14048	Yes	Chaffee	Four-Way Operating	(W) Vaughan-Russell	Russell	36-19S-14W	80	0	Lans	3187	235	3	0	0	0	Yes
11715	No	Chase-Silica	Okmar Oil	(W) Burmeister	Burmeister, Isern A	25-19S-11W	40	0	Lans-KC	3080	7	2	0	0	0	Yes
15218	--	Cheyenne	NCRA	(W) Lucas	Lucas	4-19S-12W	30	0	Lans	3104	15	2	0	0	0	Yes
16052	--	Cheyenne	NCRA*	(D) Miller "A"	Miller "A"	4-19S-12W	10	0	Lans	3100	15	1	0	0	0	Yes
10713	--	Cheyenne	Lloyd H. Phillips	(D) ---	---	4-19S-12W	80	-	Lans	3170	6	1	-	3	2	--
4344	No	Cheyenne View	Aladdin Petroleum Corp.	(P) Schartz	Schartz	14-19S-12W	-	-	KC	3050	30	5	0	0	0	Yes
5561	No	Cheyenne View	Aladdin Petroleum Corp.	(-) Rinker B	---	12-19S-12W	40	40	KC	3060	30	2	-	0	0	Yes
5387	No	Cheyenne View	George H. Hannum (Isern Petroleum Company)	(W) Lanterman Waterflood	Lanterman "A"	23-19S-12W	160	0	KC	3142	49	7	-	0	-	Yes
14846	Yes	Cheyenne View	Nadel and Gussman	(W) Cheyenne View Unit	Lucas, Schartz, Wess, Eppstein	10-19S-12W	140	0	Lans-KC	3100	15	2	1	0	0	Yes
3272	No	Cheyenne View	Sohio Petroleum Company	(W) Heinz "A" Lease	Heinz "A" Lease	12-19S-12W	30	-	L-KC	3100	17	1	1	0	0	Yes
3421	--	Cheyenne View	Southern States Oil Company	(P) Kultgen	Achatz	11-19S-12W	240	-	L-KC	3100	19-20	12	2	0	0	Yes
7208						12-19S-12W										
12012	No	Clarence	KRM Petroleum Corporation*	(D) Button	Button	35-19S-15W	160	0	L-KC	3246	4	2	0	0	0	Yes
17192	--	Dartmouth	W.L. Hartman	(W) Kohler	Kohler	30,31-19S-12W	140	-	L-KC	3118	240	5	-	-	-	Yes
17845	--	Rolling Green East	Fell & Wolfe Oil Co.	(D) DeWerff	DeWerff, Sessler	1,2-20S-12W	450	-	Arb	3340	20	7	0	4	0	Yes
8476	--	Ellinwood North	American Petrofina Co. of Texas*	(W) Schwamborn	Schwamborn	28-19S-11W	100	40	L-KC	3065	12	3	0	0	0	Yes
17067	No	Erna Northwest	Icer Addis	(W) Nordman	Nordman "B"	19-18S-14W	480	-	L-KC	3300	10	8	0	0	0	Yes
						Nordman, Ralph Nordman, Sophia Bahr										
						24-18S-15W										
8604	No	Erna Southeast	Carl W. Boxberger	(D) Russell B	Russell B	29-18S-14W	160	0	L-KC	3258	210	2	0	0	0	Yes
11427	--	Ft. Zarah	W.L. Hartman	(W) Harris	Harris	30-19S-12W	30	0	L-KC	3139	60	2	-	-	-	Yes
15942	--	Frank	Raymond Oil Company, Inc.	(W) Hammeke-Neeland	Hammeke-Neeland	7,8-19S-12W	120	-	L-KC	3160	22	3	-	-	-	Yes
5366	--	Great Bend Airport	Petroleum Management, Inc.	(W) Great Bend Airport	Essmiller "A", Opie	26-19S-14W	320	100	L-KC	3188	240	2	1	0	0	No
8335	No	Hammeke West	Nadel and Gussman	(W) Hammeke	Hammeke	18-19S-11W	20	10	L-KC	3142	10	2	2	0	0	Yes
6983	No	Heizer SW	Four-Way Operating, Inc.*	(D) Hall	Hall	28-19S-14W	160	80	L-KC	3198	236	1	1	3	1	Not
13421	No	Hiss	Wayne L. Brown*	(P) McGreevy Lease	McGreevy Lease	30-20S-13W	80	0	L-KC	3214	40	2	0	0	0	Yes
13046	No	Kimpler	Icer Addis	(W) Kimpler Waterflood	Kimpler "C"	31-18S-11W	80	-	L-KC	3150	5	1	1	0	0	Yes
8421																
10802	No	Klepper	C.L. Hanes	(D) Klepper	Klepper	2-19S-11W	20	0	KC	3040	5	1	0	0	0	Yes
9560	No	Kraft-Prusa	Colorado Oil Company, Inc.	(W) Esfeld Lease	Esfeld	29-16S-11W	90	70	Doug	2960	15	3	3	0	0	Yes
11520	No	Kraft-Prusa	Four-Way Operating*	(D) Ney	Ney	17-16S-11W	40	20	Lans	3006	304	1	0	0	0	Not
12275	No	Kraft-Prusa	Gulf Oil Corporation	(W) Joseph	Joseph	29-16S-11W	160	0	Doug	2995	--	7	5	0	0	Yes
6187	--	Kraft-Prusa	NCRA	(W) Paul Dolechek	Paul Dolechek	24-16S-12W	40	0	Gorham	3352	26	4	0	0	0	No*
9163	--	Kraft-Prusa	NCRA	(W) Dolechek Estate	Dolechek Estate	24-16S-12W	30	10	Gorham	3339	20	3	0	0	0	Yes
14488	No	Kraft-Prusa	Okmar Oil Co.	(W) Smith	Smith	36-16S-11W	40	0	Arb	3373	8	4	0	0	0	Yes
16846	--	Kraft-Prusa	Petroleum Management, Inc.	(W) North Oeser	North Oeser	30-16S-11W	160	-	L-KC	3057	--	9	0	0	0	Yes
12991	No	Kraft-Prusa	Samson Resources Company*	(W) Krier WF	Krier A & C	30-16S-11W	160	0	Doug	2980	8	5	0	0	0	Yes
13453	No	Kraft-Prusa	Skelly Oil Company	(W) E.F. Esfeld	E.F. Esfeld	30-16S-11W	50	0	Doug- Lans	2965	15	4	3	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil vis., cp. @ 60° F	Production and injection statistics (bbls)				Remarks			
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975	
11244	1	1	0	0	Irreg	325	727	Prod	--	--	T	--	Wat	--	38	--	265,355	--	6,965	--	6,965	--	*Was Mobil Oil Corporation	
2259	1	0	0	0	Peri+	0	106	Prod	--	--	U	1968	S Gas	1/3	39	--	38,692	110,330	1,494	79,083	1,074	1,074	*Was Thomas H. Allan+Irr.	
14631	3	0	0	0	4-spot	850	93	Prod	--	--	U	1970	S Gas	16/70	40	3.2	101,610	--	10,687	--	10,687	--		
15418	-	0	-	6	Irreg+	0	70	---	--	--	U	--	---	8/70	--	36	--	--	--	--	--	--	*Was Skelly ++Line	
8475	1	0	0	0	Irreg	18	125	Prod	--	--	T	1961	---	73/27	39	--	45,625	--	3,012	--	3,012	--	*Was Terra Resources, Inc.	
7810	0	1	0	0	Irreg	0	0	Prod	0	0	T	1960	S Gas	15/85	38.7	--	10,793	--	4,346	--	0	--	*Not injecting	
17564	1	0	#	0	Irreg	0	224	Prod	--	--	U	1974	Grav	1/63	--	--	81,611	100,855	1,628	207,238	0	0	*Was Birmingham-Bartlett Drlg. Co. +Damel Lse P&Abd #Converted 1 prod. well to water injection	
14333	2	0	0	1	Peri	Vac	44	Prod + Fresh	50	65	M	1968	S Gas	15/1	36	--	32,183	303,488	11,056	194,861	11,056	49,054		
14048	1	0	0	0	Irreg	400	13	Prod	--	--	U	1971	S Gas	1/1	34	--	2,258	3,001	4,116	63,612	4,116	7,335		
11715	1	0	0	0	Peri	350	254	Prod + Arb	3300	5	T	1966	S Gas	--	34	34	92,710	830,287	1,914	233,065	1,914	5,960		
15218	1	0	0	0	Irreg	0	250	Prod+Grav Bed	60	30	T	1969	S Gas	1/1	44*	--	87,907	451,494	19,046	87,953	13,645	24,649	*@60	
16052	1	0	0	0	Irreg	0	85	Prod	--	--	T	1972	S Gas	10/5	40@60	--	23,091	141,402	2,945	12,682	0	0	*Was Thunderbird Drlg. Inc.	
10713	1	-	-	-	---	--	22	Prod	--	--	U	--	---	--	34.9	--	8,030	--	--	--	--	--		
4344	1	-	0	-	Irreg	200	200	Fresh	50	20	F	1972	S Gas	--	40	--	79,791	362,445	11,175	48,707	--	--		
5561	1	-	0	-	Irreg	150	180	Fresh wat sand	--	--	M	1959	S Gas	--	38	--	77,710*	2,036,950*	--	--	--	--	++4121MCF & 340.665MCF Cum.	
5387	1	-	-	-	Irreg	300	180	Prod	--	--	T	1966	S Gas	1/1	40	--	65,700	278,176	7,141	434,997	2,101	14,538		
14846	4	0	0	0	Peri	0	92	Prod + Sh Fr Wat	50-100	50	M	1969	S Gas	54/46	42	2.5	140,000	883,500	2,971	--	2,971	59,415		
3272	1	0	0	0	Irreg	0	280	Prod	--	--	T	1960	S Gas	1/5.1	40.1	--	102,028	1,383,830	1,540	81,474	1,540	77,459		
3421	3	0	0	0	Irreg	700	345	Prod	--	--	T	--	Grav	--	39	--	370,164	2,195,105	30,919	--	30,919	--		
7208	1	0	0	0	Irreg	Vac	180	Prod	--	--	U	1965	S Gas	1/49	25.3	--	54,000	659,000	2,700	--	2,700	84,700	*Was Crown Oil Company	
12012	1	-	-	-	Irreg	400	910	Prod	--	--	T	1974	S Gas	--	36.5	--	321,679	357,817	2,735	2,985	0	0		
17192	1	0	1	0	Irreg	300	300	Prod	--	--	U	1975	Wat	--	38.5	--	--	--	20,092	22,340	--	--	--	
17845	1	0	1	0	Peri	0-Vac	201	Prod	--	--	U	1961	S Gas	1/2	42	--	147,061	3,483,292	3,938	63,621	3,938	63,621	*Was The El Dorado Refining Co.	
8476	2	1	0	0	Peri	0-Vac	201	Prod	--	--	U	1961	S Gas	1/2	42	--	147,061	3,483,292	3,938	63,621	3,938	63,621		
17067	2	0	0	0	Irreg	50	340	Prod	--	--	U	1973	Gas Exp	--	40	--	123,810	381,397	16,417	76,369	3,500	19,580		
8604	1	0	0	0	Irreg	20	210	Prod	--	--	U	1961	S Gas	2/1	39	--	76,650	387,985	3,527	158,037	3,527	10,324		
11427	1	-	-	-	Irreg	60	60	Prod + wat sand	20	15	M	1964	S Gas	--	40	--	22,835	--	1,847	37,920	900	19,270		
15942	1	-	-	-	Irreg	60	350	Prod	360	--	-	1971	S Gas	1/0	41	--	120,979	629,552	4,537	37,381	4,537	37,381		
5366	0	1	0	0	Irreg	0	0	---	--	--	-	1957	C Gas	--	--	--	29,200	1,439,521	650	57,477	0	56,827		
8335	1	0	0	0	Irreg	0	35	0	--	--	T	1961	S Gas	4/1	38	--	12,775	437,300	2,559	--	700	64,800		
6983	1	0	1	0	Irreg	0	145	Prod	--	--	U	1959	#	14/106	35.3	--	22,330	443,941	182	109,840	182	25,260	*Was Clarence J. Mermis +Intermittent #Partial water drive	
13421	1	0	-	-	Irreg	0	297	Prod	--	--	U	1971	Grav	6/30	39	--	108,405	477,926	3,984	11,217	2,889	7,095	*Was Phillips Petroleum Co.	
13046	1	0	0	0	---	0	50	Prod	--	--	T	1961	S Gas	--	41	--	18,200	518,600	1,534	8,496*	500	64,506	*Since 1971	
8421	1	0	0	0	Line	0	150	Prod	--	--	U	1964	Grav	2/3	42.6	--	54,750	295,675	816	13,472	0	0		
10802	1	1	0	0	Irreg	750	270	Prod	--	--	U	1963	S Gas	16/19	36	--	103,458	1,867,088	8,425	--	8,425	154,896		
9560	1	0	0	0	Irreg	0	54	Prod	--	--	U	1965	#	1/0	33.1	--	13,068	205,062	1,745	174,550	1,745	10,779	*Was Nat'l Coop Ref Assn. +Mechanical problems #Solution & water	
11520	1	0	0	0	Irreg	0	54	Prod	--	--	U	1965	#	1/0	33.1	--	13,068	205,062	1,745	174,550	1,745	10,779		
12275	1	0	0	0	Irreg	950	501	Prod	--	--	U	1966	S Gas	86/1845	40.1	--	198,506	1,889,954	15,169	241,046	15,169	241,046		
6187	0	0	0	1	Irreg	--	--	Prod	--	--	U	1958	S Gas	1/3.8	42.4+	--	0	2,894,392	0	165,148	0	106,891	*Terminated WF 10-7-74 +@60	
9163	1	0	0	0	Irreg	275	265	Prod + Chey	525	50	M	1962	S Gas	1/3.2	42.1*	--	96,146	1,665,298	5,968	168,114	3,521	87,616	*@60	
14488	1	-	-	-	Irreg	85	141	Prod	--	--	U	--	S Gas	16/46	36	--	51,465	131,327	5,028	377,503	3,208	6,603		
16846	1	-	-	-	Irreg	0	143	Prod	--	--	U	1972	S Gas	2/1	--	--	52,098	241,884	27,546	1,073,784	27,546	1,009,826		
12991	1	0	0	0	Irreg	600	415	Prod	--	--	T	1966	S Gas	--	36	--	151,750	2,011,544	5,650	794,705	4,321	79,021	*Was Kathol Petroleum, Inc.	
13453	1	0	0	0	Irreg	450	619	Prod	--	--	T	1967	S Gas	--	40	--	225,928	2,084,383	8,722	603,783	8,722	110,477		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. uni- fied?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?	
								Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.		
BARTON COUNTY (concl.)																		
	15196	--	Kraft-Prusa	Tenneco Oil Company	(D) John Riemann "B"	John Riemann "B"	22-16S-12W	40	0	L-KC	3108	85	1	0	0	0	Yes	
	13853	No	Lanterman	Lario Oil & Gas Company	(P) Rehme	Rehme	15-19S-11W	40	0	L-KC + Arb	3050	--	2	0	0	0	Yes	
	14882	No	Mary A	Murfin Drilling*	(W) Mary Axman W.F.	Mary Axman	23-17S-15W	80	40	L-KC	3414	12-14	2	1	0	0	--	
	17144	No	Mater	Murfin Drilling Company*	(W) Mater W.F.	Ed Mater, Max Mater	11-17S-15W	160	27	Tor + L-KC	3142	20	5	0	0	0	Yes	
	11059	--	Ney Southwest	Ralph R. Rhyne*	(D) Rude	Rude E	2-16S-13W	20	15	Lans	3100	5	1	-	-	-	Yes	
	13049	No	Prairie View	Icer Addis	(W) John Schartz Water- flood	Ahrens, Kowalsky, John Schartz	20-19S-11W	160	--	Lans + KC	3200	150	4	0	0	0	Yes	
	4418	--	Prairie View	Texaco, Inc.	(-) Prairie View	J. Schartz	20-19S-11W	160	--	Lans	3406	--	1	0	0	0	No*	
	7104	Yes	Pritchard	Phillips Petroleum Co.	(W) West Hiss LKC Unit	West Hiss LKC Unit	36-20S-14W	130	0	L-KC	3350	50	4	1	0	0	Yes	
	17155	Yes	Putnam West	Murfin Drilling Company	(W) Williams Unit W.F.	Williams Unit	12-17S-14W	160	--	L-KC	3214	30	3	0	0	0	Yes	
	14323	--	Reif South	Four-Way Operating, Inc.*	(W) Klug	Klug	31-16S-12W	0	20	Lans	3173	185	0	0	0	1	No†	
	13249	No	Roesler	Nadel and Gussman	(W) Bieberle	Bieberle	15-18S-11W	30	0	KC	3025	10	2	0	0	0	Yes	
	15193	--	Rolling Green East	Southern States Oil Company	(P) Lonnon B	Lonnon B	25-20S-13W	160	--	KC	3258	32	2	0	0	0	Yes	
	11630	Yes	St. Peter	Shelley Oil Company	(D) Robl Unit	Robl	32-18S-11W	240	40	Platt + Lans	2912	216	8	0	0	3	No*	
	11909	--	St. Peter	Texaco, Inc.	(W) St. Peter Pool	Musenberg Hickel H. Schlochtermeir, T. Schlochtermeir	33-18S-11W 5-19S-11W 32-18S-11W	240	--	Lans + Platt	2900	--	6	1	0	0	Yes	
	12861	No	St. Peter East	Nadel and Gussman	(W) Johannng	Johannng	34-18S-11W	110	10	KC	3060	10	7	3	0	0	Yes	
	14055	No	St. Peter East	Nadel and Gussman	(W) Birzer	Birzer	3, 4-19S-11W	80	0	Lans + KC	3100	20	4	0	0	1	Yes	
	9838	Yes	Sandrock	APCO Oil Corporation*	(W) Sandrock Unit	Weathers	27-20S-13W	60	0	Lans + KC	3400	20	4	0	0	0	Yes	
	13215	Yes	Sandrock	Phillips Petroleum Co.	(W) Pursel Unit	Morrison, Jackson Pursel Unit	28-20S-13W 28-20S-13W	55	0	L-KC	3300	15	3	0	0	0	Yes	
	12586	--	Sandrock Southeast	Kewanee Oil Co.	(W) Engleman-McDonald	Engleman McDonald	27-20S-13W 34-20S-13W	0	0	KC	3261	54	3	1	0	0	Yes	
	5560	No	Trapp	Aladdin Petroleum Corp.	(-) Soderstrom	Soderstrom	21-17S-13W	40	40	KC	3145	10	2	-	-	-	Yes	
	12144	Yes	Trapp	Earl Allen*	(P) F.J. Schreiber	F.J. Schreiber	32-16S-13W	80	0	KC	3092	180	3	0	0	0	Yes	
	16089	No	Trapp	Colorado Oil Company, Inc.	(W) Siemsen	Siemsen	24-16S-14W	30	0	Lans + KC	3127	14	1	0	0	0	Yes	
	16882	Yes	Trapp	Petroleum, Inc.	(W) Trapp Unit	Sausen "B", Reif "I", Nettleingham Karst "B"	13-16S-14W 14-16S-14W	440	0	L-KC	3130	27	2	1	1	0	Yes	
	14759	No	Trapp	Lee Phillips Oil Company	(W) Oltmanns	Oltmanns	15-17S-13W	10	0	Arb + KC	3150 3350	10	3	0	0	0	Yes	
	11517	No	Trapp	Samson Resources Company*	(W) Schneider C. WF	Schneider "C"	2-16S-14W	160	0	Lans	3082	0	1	0	0	0	Yes	
	16787	--	Trapp	Sierra Petroleum Co., Inc.	(W) Wilborn-Lansing K.C. Unit	Thorne "C" Wilborn, Thorne "B"	22-16S-13W 27-16S-13W	360	--	L-KC + Topeka	3121	64	5	0	0	0	Yes	
	15821	--	Two-Eighty-One	Cities Service Oil Company	(D) Eveleigh "C"	Eveleigh "C" Lease, Streck "A"	27-16S-14W	32	0	Lans + KC	3188	12	3	0	0	0	Yes	
	11972	No	Workman Northwest	Kewanee Oil Co.	(W) Buckbee	Buckbee	14-20S-12W	20	10	Arb	3373	28	1	0	0	0	Yes	
	17247	No	Workman Northwest	Murfin Drilling Company	(-) Buckbee - Hulme	Buckbee	15-20S-12W	240	0	Arb	3370	51	4	1	0	0	Yes	
	15842	No	Workman Northwest	Petroleum, Inc.	(P) Hulme "G-I" Lease	Hulme "G-I"	16-20S-12W	160	0	L-KC	3160	52	5	0	0	0	Yes	
BARTON COUNTY TOTALS (Reported) (Includes projects in supplemental list.)								10,217	862				283	34	11	9		
BARTON-RICE COUNTIES																		
	9151	Yes	Mary Ida	Sohio Petroleum Company	(W) Mary Ida Unit	Reif "A", Reif "B", Manke, Buehler, Mooney, Doll, Musenberg	31-18S-10W 36-18S-11W	370	--	L-KC	3100	21	8	5	0	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
15196	1	0	0	0	Peri	310	306	Prod	--	--	--	1969	---	8/15	42.9	--	111,690	403,716	874	208,460	0	0	
13853	1	0	0	0	Irreg	0	374	Prod	--	--	U	1967	S Gas	14/145	37	--	136,478	840,279	2,346	34,917	0	0	
14882	1	0	0	0	Irreg	250	440	Dak	410	30	M	1969	S Gas	99/1	40	--	151,800	1,044,166	4,113	39,171	4,113	23,371	*Was 3-G Oil Company
17144	1	-	0	0	Irreg	400	289	Prod + Dak	300	40	M	1974	S Gas	9/1	37	--	210,962	212,262	11,072	292,281	5,492	5,492	*Was 3-G Oil Company
11059	1	-	-	-	Irreg	0	35	Prod	--	--	U	1964	S Gas	1/4	38	--	12,775	264,575	718	11,960	475	6,465	*Was K&E Drlg. Co.
13049	1	1	0	0	Irreg	900	480	Prod + Surface	40	10	M	1956	S Gas	--	38	--	175,200	1,887,850	8,088	48,543*	7,000	38,338*	*Since 1971
4418	0	1	0	0	---	0	0	---	--	--	-	--	---	--	--	--	0	--	1,786	--	1,786	--	*No injection since 5-1-74
7104	2	1	0	0	Irreg	0	465	Prod+Fr Wat Sd	150	--	M	1959	S Gas	1/4.3	40	5.5	339,330	6,229,151	12,089	1,120,810	7,519	158,874	
17155	1	0	0	0	Irreg	250	274	Prod + Dak	250	20	M	1973	S Gas*	4/15	36	--	99,938	152,512	8,823	47,592	8,823	9,023	*& Wat
14323	0	0	0	1	Irreg	100	5	Prod	--	--	U	1968	S Gas	2/0	33	--	1,800	4,000	0	34,453	0	0	*Was Charles Carlock +Mechanical problems
13249	1	0	0	0	Irreg	900	69	Prod+Sh Fr Wat	100	40	F	1967	S Gas	9/1	45	--	25,250	222,750	4,214	--	4,214	25,249	
15193	1	0	0	0	Irreg	--	36	Prod	--	--	T	1969	Grav	--	37	--	13,140	90,409	2,772	27,586	2,772	27,586	
11630	0	1	0	3	Irreg	0	0	---	--	--	T	1965	S Gas	--	38	--	0	1,879,737	26,866	--	24,754	287,518	*No water injected in 1975
11909	4	0	0	1	Peri	Vac	92	Prod	--	--	U	1962	Wat	2384/3649	--	--	134,656	4,342,679	8,772	352,481	8,772	199,576	
12861	3	0	0	0	Peri	0	10	Prod + Sh	100	20	M	1966	S Gas*	85/15	40	--	11,350	1,504,800	10,479	--	10,479	126,054	*with partial water
14055	3	0	0	1	Peri	0	145	Prod + Sh Fr	100	0-	M	1968	S Gas*	1/4	41	--	152,600	1,188,100	2,212	--	2,212	31,412	*with partial water
9838	2	0	0	0	Irreg	50	100	Prod + Ter Sd	60	16	M	1962	S Gas	+	30	--	80,607	1,722,821	4,686	--	4,686	145,845	*Was Schermerhorn +Trace of water
13215	2	1	0	0	Line	280	295	Prod + Sh Fr	60	--	M	1967	S Gas	1/.5	30	18	215,183	1,845,518	11,215	356,620	8,685	98,682	
12586	2	0	0	0	Irreg	Vac	279	Prod	--	--	-	1966	S Gas	68/59	30	--	204,212	1,144,775	2,656	285,024	0	28,665	
5560	1	2	0	0	Irreg	125	180	Prod	--	--	-	1957	---	--	38	--	5,060	2,051,080	858	461,914	--	--	
12144	1	0	0	0	Irreg	500	400	Prod	--	--	T	1965	S Gas	1/1	37	--	144,000	1,440,000	8,144	92,834	7,057	70,570	*Continental Oil Co.
16089	1	0	0	0	Irreg	175	289	Prod + Arb	3349	3	U	1971	Wat	6/70	35	--	142,333	1,048,215	2,842	--	0	0	
16882	1	0	0	0	Line	Vac	72	Prod + Cedar Hill	247	44	T	1973	S Gas	17/36	41	4	26,414	86,042	5,335	14,658	5,335	14,658	
14759	1	0	0	0	Irreg	Vac	78	Prod	--	--	U	1969	---	31/69	40	--	28,470	420,781	6,570	398,882	0	0	
11517	1	2	0	0	Irreg	0	60	Prod	--	--	U	1965	S Gas	1/10	37	--	21,900	360,800	4,625	917,344	1,202	7,787	*Was Shell
16787	1	0	0	0	Peri	200	278	Prod + Dak	312	30	M	1973	Wat	34/66	39	--	101,615	276,890	4,969	17,400	0	0	
15821	1	0	0	0	Irreg	0	65	Prod	--	--	U	1970	S Gas	55/28	37.6	--	25,000	124,000	13,484	260,037	0	0	
11972	1	0	0	0	Irreg	Vac	8	Prod	--	--	U	1965	Wat	10/16	39	--	2,774	80,146	1,086	49,112	0	0	
17247	1	0	0	0	Irreg	0	127	Prod + Sh Fr	15	20	M	1974	S Gas	1/4	38	--	46,370	59,570	5,705	238,720	0	-	
15842	1	0	0	0	Line	569	269	Prod	--	--	T	1971	S Gas	61/163	40.1	5	98,134	327,121	14,231	73,014	14,231	73,014	
107	16	4	15														8,166,319	71,463,594	567,257	15,220,295	397,504	4,576,788	
9151	8	5	0	0	Peri	820	212	Prod + Fresh	130	10	M	1962	S Gas	1/4.25	39.6	--	602,403	8,829,462	33,309	961,836	33,309	797,973	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. uni-tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
								Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
BARTON-RUSSELL COUNTIES																	
	14582	--	Hall-Gurney	NCRA	(W) Northwest Beaver Unit	Hilgenberg "A", Hofmeister, Hilgenberg, Hilgenberg, Hilgenberg "B", Staudinger "A", Staudinger "E", Staudinger "B", Staudinger "D", Depiesse	32-15S-12W 5-16S-12W 6-16S-12W	400	40	Lans + Top	2980 2835	15	16	0	0	0	Yes
BARTON-STAFFORD COUNTIES																	
	10131	--	Bart-Staff	NCRA	(W) Dorfshaffer-McGreevy	Dorfshaffer McGreevy "A", McGreevy "B"	5-21S-14W 33-20S-14W	70	60	Lans	3330	15	6	0	0	0	Yes
	13810	No	Shaeffer-Rothgarn	Kewanee Oil Co.	(W) Sharp A & B	Sharp A Sharp B	35-20S-13W 3-21S-13W	100	40	KC	3267	206	3	0	0	0	Yes
BARTON-STAFFORD COUNTIES TOTAL (Reported)								170	100				9	0	0	0	
BOURBON COUNTY																	
	12914	--	Bronson Southeast	Hillenburg Oil Company*	(W) Woodward W	Woodward A	12,13-25S-21E	90	0	Bart1	661	18	10	0	0	0	Yes
	17316	--	Bronson Southeast	Hillenburg Oil Company*	(W) ---	Humphrey	36-24S-21E	80	0	Bart1	661	18	10	2	0	0	Yes
	14061	No	Bronson-Xenia	T. E. Bird	(W) Collins	John Camac, Audry Collins	25-24S-21E	25	0	Bart1	610	16	6	1	4	3	No*
	14355																
	17329	--	Bronson-Xenia	Dee Eastwood	(W) Bronson Unit	Bronson Unit	1-25S-21E	640	0	Bart1	650	10	15	-	4	-	Yes
	5545	--	Bronson-Xenia	Kanalta Resources, Ltd.*	(-) Zeigler	Arthur Zeigler	7,8,17, 18-24S-22E	--	-	Bart1	600	15	0	7	-	-	--
	8780	--	Hepler	Walter Duncan	(-) Hepler	Shireman, Johnson Freeman, Jackson	19-27S-22E 24-27S-21E	140	0	Tuck	675	14	34	0	0	0	Yes
BOURBON COUNTY TOTALS (Reported)								975	0				75	10	8	3	
BUTLER COUNTY																	
	9719	--	Augusta	Cities Service Oil Company	(W) Skaer-Starkey Waterflood	Skaer, Starkey	35-27S-4E	165	100	KC Lm	2030	5	10	0	0	5	Yes
	10415	--	Augusta	Cities Service Oil Company	(W) Augusta Unit	Augusta Unit	2,10,11,14, 15-28S-4E	732	28	KC	2050	6	16	8	0	14	Yes
	17901	--	Augusta	Cities Service Oil Company	(W) Augusta Unit Simpson	Augusta Unit	2-28S-4E	70	0	Simp	2568	11	3	0	0	0	Yes
	12240	--	Augusta	Hammer & Maclean	(P) Ambler & Moyle	Ambler Moyle	2-28S-4E 35-27S-4E	160	0	KC Lm	2062	10	7	-	-	-	Yes
	16242	--	Augusta	Hammer & Maclean*	(D) Safford-Mann	---	26-27S-4E	160	0	KC	2032- 2040	10	1	0	0	0	Yes
	15786	--	Augusta	Leland Prier*	(W) ---	Lee Prier, Bohannon	2-28S-4E	120	-	KC	2390	15	4	-	0	-	Yes
	2120	--	Augusta North	Robert F. White*	(D) ---	Foster	21-27S-4E	160	80	KC	2000	20	6	0	0	0	Yes
	2672	No	Blankenship	Hank Martell Oil Company*	(P) Dunne	Dunne	9-26S-8E	80	0	Bart1	2400	20	2	1	0	0	Yes
	16166	--	Blankenship	Lee Phillips Oil Company	(P) Keighley Northeast Flood Unit	Saco Drumm Drumm Institute, Gray "B" Gray "A", Gray "C"	30-26S-8E 31-26S-8E 6-27S-8E	--	--	Bart1	2700	42	16	0	0	6	Yes
	6105	No	Brandt-Sensenbaugh	J.E. Morris	(D) Brewer	Brewer, Seeley	23-28S-7E	60	0	Peru	2350	10	3	0	0	0	Yes
	15259	--	Brandt-Sensenbaugh	White & Ellis Drilling, Inc.	(D) Ramp	Ramp	23,26-28S-7E	160	0	Peru	2450	10	2	0	0	0	Yes
	7926	No	Combs Northeast	Kewanee Oil Co.	(W) Gate Lease	Gate	34-29S-5E	40	0	Bart1	2817	8	1	0	0	0	Yes
	11136	No	De Moss	Rex & Morris Drilling Co.	(W) De Moss	De Moss "A" De Moss "B" Sutter Farner	5,8-28S-7E 5-28S-7E 7-28S-7E 8-28S-7E	400	-	Bart1	2650	40	10	1	0	0	Yes
	13958	No	Eckel Northeast	Rex & Morris Drilling Co.	(W) Henn Unit	Henn Vernon, Lill	6-27S-7E 5-27S-7E	110	0	KC A Zone	2025	10	6	0	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
14582	8	0	0	0	Peri	500	290	Prod + Dak	360	40	T	1968	S Gas	13/70	41.3	--	851,561	5,865,081	50,575	488,783	25,715	252,688		
10131	2	0	0	0	Irreg	700	210	Prod + Arb	3550	--	T	1963	S Gas	1/2.6	30.5	--	152,774	2,784,856	12,968	352,777	11,459	216,053		
13810	1	0	0	0	Irreg	350	282	Prod	--	--	U	1967	S Gas	20/23	34	--	102,983	741,799	3,449	303,786	1,460	11,680*	*Corrected	
	3	0	0	0													255,757	3,526,655	16,417	656,563	12,919	227,733		
12914	10	0	0	0	Line	600	75	Prod + Miss LS	832	--	F&T	1966	S Gas	8/17	31	--	27,375	--	13,319	--	13,319	--	--	*Was Terra Resources, Inc.
17316	7	0	0	0	Line	600	100	Prod + Miss	840	--	F&T	1966	S Gas	30/1	30	--	36,500	--	13,319	--	13,319	--	--	*Was Terra Resources, Inc.
14061 14355	0	9	0	0	Line	230	0	Prod + Miss	820	300	T	1968	S Gas	1/0	32	15	0	923,060	1,345	74,422	1,345	74,422		*Revising injection system
17329 5545	6	-	-	-	Irreg	350	50	Prod	--	--	U	1966	Grav	5/1	31	--	109,500	190,500	6,450	12,450	--	--		
	-	1	-	-	---	--	--	---	--	--	-	--	---	--	--	--	--	--	--	--	--	--	--	*Was Trico Oil Co.
8780	40	0	0	0	5-spot	498	11	Miss	830	30	-	1961	S Gas	--	26	--	237,544	4,246,955	7,148	467,246	7,148	--		
	63	10	0	0													410,919	5,360,515	41,581	554,118	35,131	74,422		
9719	12	2	0	0	5-spot	265	219	Prod + Arb	2600	--	U	1962	S Gas	43/143	36	--	1,071,004	15,335,393	17,997	683,694	17,997	681,294		
10415	16	3	0	2	5-spot	353	258	Prod	--	--	T	1963	S Gas	69/232	36	--	1,855,601	27,091,973	22,634	2,947,469	22,634	1,018,440		
17901	1	0	0	0	Irreg	360	196	Prod	--	--	-	1974	S Gas	--	--	--	93,638	104,397	79,596	235,713	465	473		
12240	4	-	-	1	Irreg	250	166	Prod + KC Lm	2062	10	U	1965	Grav	7/3	35	0	243,446	4,263,845	8,239	127,013	8,239	127,013		
16242	1	0	0	0	Irreg	0	208	Prod	--	--	U	1971	Grav	96/4	32	0	76,096	395,411	2,778	8,637	2,778	500	*Was Wilbur Skaer	
15786	4	-	-	-	4-spot	-	-	Prod	--	--	U	1963	Grav	--	34	--	--	--	4,341	--	--	--		*Was Farm & Ranch Uni Inv. Corp.
2120	1	0	0	0	Irreg	400	1000	Prod	--	--	U	--	Wat & S Gas	1/9	36	--	350,000	1,000,000†	4,800	7,450,000	4,000	134,500		*Was Mobil †Estimated (58 years old)
2672	1	1	0	0	Irreg	0	50	Prod	--	--	T	--	S Gas	3/2	35	--	18,250	114,400	2,298	--	--	--		
16166	3	0	0	3	---	Vac	1123	Prod + Doug Sd	1580	20	U	1971	S Gas	11/89	37	--	409,895	2,801,145	52,882	809,746	0	0		*Was Eureka Drilling Co.
6105	1	0	0	0	Irreg	140	240	Prod + Miss	2700	30	U	1958	S Gas	--	--	--	87,600	--	--	--	--	--		
15259	1	0	0	0	Irreg	0	4	Prod	--	--	T	1969	S Gas	3/2	38	--	1,000	7,940	1,658	67,306	0	0		
7926	1	0	0	0	Irreg	Vac	40	Prod	--	--	U	1960	S Gas	1/1.5	38	0	14,600	747,385	673	62,496	0	20,280		
11136	2	0	0	0	Irreg	120	220	Prod	--	--	U	1964	S Gas	--	40	--	160,600	--	6,216	--	--	--		
13958	2	0	0	0	Irreg	0-140	183	Prod + Quat Sd	20	20	M	1967	S Gas	11/9	37	--	133,588	1,001,153	9,399	175,483	6,579	27,436		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
BUTLER COUNTY (cont.)																
11895	No	Elbing	Aladdin Petroleum Corp.	(P) Furman	Furman	8-23S-4E	120	0	KC	1925	30	5	0	0	0	Yes
--	--	Elbing	Dorman A. Ball	(W) Webreck	Webreck	18-23S-4E	80	--	Miss	2400	35	1	1	0	1	Yes
7145	No	Elbing	Hillenburg Oil Co.*	(D) North Lathrop	North Lathrop	17-23S-4E	80	0	KC	1950	30	4	0	--	--	Yes
8005	No	Elbing	Hillenburg Oil Co.*	(P) South Lathrop	South Lathrop	17-23S-4E	80	0	KC	1950	30	3	3	0	0	No+
11937	No	Elbing	Phillips Petroleum Co.	(W) J.C. Scully Lease	Scully	17-23S-4E	60	0	L-KC	2020	30	1	0	0	1	Yes
13622	No	Elbing & Elbing East	Richard B. Morris*	(P) Everrt-Ferrier	Everrt-Ferrier, Neer-Ferrier, Parris	29-23S-4E	70	0	KC	2020	30	3	0	0	0	Yes
4575	No	El Dorado	R.R. Abderhalden	(P) Pollard	Pollard	25-25S-4E	80	0	El Dor*	700	20	1	4	0	0	Yes
6672	No	El Dorado	R.R. Abderhalden	(W) Deming W.F.	Deming	19-25S-5E	80	0	El Dor*	650	13	0	4	0	0	No+
7084	No	El Dorado	R.R. Abderhalden*	(W) Jackson "C" Waterflood	Jackson "C"	24-25S-4E	160	0	El Dor+	650	20	1	1	0	0	Yes
15390	No	El Dorado	J.A. Allison	(P) Berndsen, Hetherington, Turner	Berndsen, Hetherington, Turner	15-26S-4E	100	60	Simp	2448	28	8	0	0	0	Yes
2577	--	El Dorado	Cities Service Oil Company	(W) Finney Simpson	Finney, Graham "C", Fulkerson & Millheisler "A", D.L. Howe, Millheisler "B" & Thompson	4-26S-5E	251	370	Simp	2460	27	22	3	0	15	Yes
6351	--	El Dorado	Cities Service Oil Company	(W) Chesney White Cloud	Chesney "A"	32-25S-5E	50	0	White Cld	860	10	5	0	0	0	Yes
"	--	El Dorado	Cities Service Oil Company	(W) Chesney-Hegberg MP	Chesney	21-25S-5E	51	0	Admire Sd	650	20	8	0	--	0	Yes
"	--	El Dorado	Cities Service Oil Company	(W) Chesney Kansas City	Hegberg	28-25S-5E	347	100	KC	1900	32	20	4	0	8	Yes
7869	--	El Dorado	Cities Service Oil Company	(W) Enyart Lansing-Kansas City	Chesney	21-25S-5E	568	268	L-KC	1600-	22	41	1	0	7	Yes
10002	--	El Dorado	Cities Service Oil Company	(W) Enyart Lansing-Kansas City	Brack "B", Brack "C" and Hamilton Abraham-Ralston and Porter Enyart "A"	11-26S-4E 1-26S-4E 12-26S-4E 2-26S-4E	568	268	L-KC	1600-	22	41	1	0	7	Yes
9803	--	El Dorado	Cities Service Oil Company	(W) Stokes Kansas City	B. Stokes & Hegberg	28-25S-5E	600	0	KC	2000	20	27	4	0	6	Yes
13973	--	El Dorado	Cities Service Oil Company	(W) Stapleton Simpson	Pierpoint	32-25S-5E	135	20	Upper Simp	2440	19	4	1	0	2	Yes
16163	--	El Dorado	Cities Service Oil Company	(W) Empire Lansing	Stapleton	29-25S-5E	103	0	Lans	1700	20	8	0	0	0	Yes
3016	No	El Dorado	Dunne Equities, Inc.	(D) M.A. Koogler	Empire Fee	17-26S-5E	265	--	Simp-Viola	2400	40	26	0	0	0	Yes
2551	--	El Dorado	Gear Petroleum Co.	(W) Page Lease	Koogler	25-26S-4E	30	--	Simp	3000	10	2	0	0	0	Yes
7763*	--	El Dorado	Gear Petroleum Co.	(W) Robison Lease	---	9-26S-5E	100	--	Miss	2570	35	5	0	0	0	--
4830	No	El Dorado	Gulf Oil Corporation	(W) A.J. Shumway	A.J. Shumway	11-26S-4E	160	0	KC	1975	--	16	8	0	0	Yes
13161	No	El Dorado	Okmar Oil Co.*	(W) Fowler	Fowler	1-26S-4E	20	0	KC	2040	20	3	0	0	0	Yes
15109	No	El Dorado	Okmar Oil Co.	(W) Baker Coop	Baker West	16-26S-5E	20	20	Lans	1650	10	1	0	0	0	Yes
7484	--	El Dorado	Saco Oil Company	(P) Belton	Belton	3-25S-5E	40	--	Peru	2130	14	2	--	--	2	Yes
12221	--	El Dorado	Anna Seeber	(W) Ramsey Et Al	Ramsey	6-26S-5E	50	0	White Cld	760	10	5	0	0	0	Yes
7096	--	El Dorado	Southern States Oil Company	(P) W.E. Brown	W.E. Brown	32-26S-5E	--	--	Viola	2692	12	2	0	0	0	Yes
6333	--	El Dorado	Southern States Oil Company	(P) Mills	Mills	27-25S-5E	160	--	El Dor	700	--	13	0	0	24	Yes
8192	--	El Dorado	Southern States Oil Company	(P) Cook	Cook	4-26S-5E	40	--	KC	2000	--	--	--	--	--	--
8336	--	El Dorado	Southern States Oil Company	(P) Cook	Cook	4-26S-5E	40	--	Doug	2500	--	--	--	--	--	--
8386	--	El Dorado	Southern States Oil Company	(P) Cook	Cook	4-26S-5E	40	--	Viola	2611	18	2	0	0	0	Yes
17692	No	El Dorado	Stelbar Oil Corp.	(W) Stone	Stone	2-25S-5E	80	--	Peru	2150	20	2	2	0	0	Yes
3454	No	El Dorado	White & Ellis Drilling, Inc*	(D) Wilson	Wilson	7-25S-5E	160	0	Miss	2560	15	3	0	0	0	Yes
4099	No	El Dorado	Wilson Production Co., Inc.	(P) Wilson Prod. Co.-Hawkins	Wilson	7-25S-5E	160	0	Miss	2560	15	3	0	0	0	Yes
16481	No	El Dorado	Wilson Production Co., Inc.	(P) Wilson Prod. Co.-Hawkins	Robison North, Robison South	17-25S-5E	100	0	Miss	2500	35	8	0	0	2	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
11895	2	1	0	0	Irreg	180	400	Prod	--	--	T	1964	S Gas	--	--	--	160,977	2,015,290	2,871	109,378	--	--		
--	1	--	0	--	Line	--	--	Prod + Miss Ch	40	35	T	1962	Grav	1/4	--	--	13,140	--	1,460	--	0	--	--	
7145	1	0	0	0	Irreg	0	300	Prod + Hunt	2300	15	U	1959	S Gas	--	33	--	109,500	1,639,500	3,600	--	600	--	--	*Was Terra Resources, Inc.
8005	0	1	0	0	Irreg	0	0	Prod + Hunt	2300	15	U	1960	S Gas	--	33	--	0	2,083,500	4,000	--	0	--	--	*Was Terra Resources, Inc. †Shut injection down
11937	2	0	0	0	Irreg	0	213	Prod + Viola + Hunt	2400 2325	--	U	1965	S Gas	1/10.7	35	10	156,000	1,639,770	1,147	55,882	0	4,293		
13622	1	0	0	0	Irreg	150	150	Prod + Fresh	20	5	M	1967	S Gas	--	33	--	55,000	495,000	1,690	--	390	--	--	*Was James A. Cook
4575	1	0	0	0	Irreg	500	70	Prod	--	--	U	--	S Gas	--	36	--	25,550	--	1,002	--	1,002	--	--	*Shallow Sand
6672	0	8	0	0	5-spot	0	0	Prod	--	--	T	1958	S Gas	11/28	36	6.5	0	994,496	0	79,476	0	79,476		*Shallow Sand †Temporarily shut in
7084	1	0	0	0	Irreg	200	30	Prod	--	--	T	--	S Gas	1/10	33	--	10,950	47,450	242	1,527	242	1,527		*Was Abels Oil Co. †Shallow Sand
15390	3	0	0	0	Irreg	Vac	250	Prod	--	--	T	1970	Wat	1/4	39	--	90,000	823,816	9,251	996,261	9,251	65,890		
2577 5493 6586 6888	13	2	0	4	Irreg	185	429	Prod + Arb	2426	11	T	1950	S Gas	5/0	34.5	--	1,878,920	48,586,641	54,634	4,532,519	54,634	2,781,765		
6351	4	0	0	0	Peri	292	213	Prod	--	--	T	1972	S Gas	17/109	35	--	201,014	822,218	6,525	63,858	6,525	23,078		
"	19	0	--	0	5-spot	190	61	Prod + Lake	--	--	F	1975	S Gas	--	37	--	35,029	35,029	287	7,700,000	287	287		
"	22	2	0	3	5-spot	586	252	Prod + Arb	2500	31	T	1958	S Gas	135/441	36	--	1,915,710	32,967,583	40,160	2,395,190	40,160	2,347,836		
7869 10002	25	0	0	1	5-spot	589	460	Prod + Arb	2400	193	T	1963	S Gas	0	36	--	4,055,923	42,268,040	92,017	1,699,805	92,017	1,668,576		
9803	19	0	0	2	5-spot	581	309	Prod + Arb	2500	--	T	1962	S Gas	9/38	36	--	1,853,815	30,080,811	56,097	1,559,515	56,097	1,092,618		
13973	4	1	0	0	5-spot	323	425	Prod + Arb	2404	672	T	1967	S Gas	0	36	--	634,610	5,035,677	17,834	1,482,663	17,834	229,054		
16163	4	0	0	0	Irreg	125	237	Prod + Viola + Simp	2500	--	T	1971	S Gas	3/2	36.1	--	389,004	1,403,572	13,969	441,934	13,969	55,150		
3016	10	0	0	0	Irreg	0	5900	Prod	--	--	U	1951	Gas Exp	--	34	--	21,535,000	861,751,524	26,433	3,321,230	26,433	3,321,230		
2551	2	0	0	0	Irreg	200	356	Prod	--	--	U	--	S Gas	--	36	--	129,940	314,110	2,650	--	2,650	--		
7763	1	0	0	0	Irreg	50	212	Prod	--	--	U	1960	S Gas	--	43	--	75,400	--	3,950	--	3,950	--	*Being converted to SWD	
4830	6	0	0	0	5-spot	650	3158	Prod	--	--	U	1963	S Gas	21/143	33.5	--	1,094,573	11,707,052	36,937	650,980	36,937	650,980		
13161	1	0	0	0	Peri	350	898	Prod + Arb	2440	5	U	1966	S Gas	--	33	--	327,770	2,964,720	3,501	54,287	2,310	18,340		*Was L. Lamb
15109	1	0	0	0	Peri	275	340	Prod + KC	1750	10	U	1969	--	6/79	34	--	124,100	973,625	1,893	36,388	1,893	11,481		
7484	1	--	--	--	Irreg	50	50	Prod	--	--	U	1958	Grav	1/9	34.3	--	--	--	1,948	177,948	1,948	16,895		
12221	1	--	0	--	5-spot	100	100	Prod	2160	3	T	1965	S Gas	4/1	36	--	54,750	--	1,490	--	1,009	--	--	
7096	1	0	0	0	Irreg	--	425	Prod	--	--	T	1959	Grav	--	32	--	155,125	2,021,741	2,007	86,991	2,007	86,991		
6333	2	0	0	0	Irreg	400	841	Prod	--	--	T	1959	Grav	--	35	--	470,334	12,113,060	10,237	691,946	10,237	691,946		
8192 8336 8386																								
17692	1	0	0	0	Irreg	150	900	Prod	--	--	T	1975	Wat	--	34	--	328,500	328,500	3,840	3,840	3,840	3,840		
3454	1	0	0	0	Irreg	300	45	Prod	--	--	T	1951	S Gas	--	36	--	16,425	1,525,100	6,886	--	6,886	378,351		
4099	1	0	0	0	Irreg	50	60	Prod	--	--	U	1954	Wat	--	40	--	21,600	1,950,800	6,484	--	0	0		*Was Henderson Oil Co.
16481	1	1*	0	1	Irreg	100	500	Prod	--	--	U	1972	Grav	6/79	43	--	55,000+	859,455+	75,400	930,400	37,700	--	--	*Plugged 1975 †+27,500MCF +429,227 MCF cum.

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
BUTLER COUNTY (cont.)																
4077	No	El Dorado	Wright Oil Company	(W) Robison Lease	Robison	17-25S-5E	200	-	Miss	2550	30	16	0	2	0	Yes
17950	--	Entz	Cities Service Oil Company	(W) Entz-Gamble	Entz, Gamble	23-26S-4E	80	0	Simp	2491	10	3	0	0	0	Yes
5287	--	Ferrell	Midwest Supply Co.	(-) Ferrell Lease	Ferrell	21-28S-8E	400	-	Miss	2750	30	11	-	-	-	Yes
16942	--	Ferrell	K.T. Wiedemann Trust	(D) Mary Jane Fouts	#5	16-28S-8E	80	-	Miss Lm	2725	--	2	0	0	0	Yes
6254	--	Fox-Bush-Couch	Betty Blair	(-) Naden	Naden	13, 14-29S-5E	200	-	Bartl	2802	12	5	-	-	-	No
1650	--	Fox-Bush-Couch	Southern States Oil Company	(P) Brown (North)	Brown A	25-29S-5E	72	-	Bartl	2735	45	2	1	0	0	Yes
5496	No	Fox-Bush-Couch	Tomlinson Oil Co., Inc.	(D) Speer and Bunnell	Speer	27-28S-5E	80	0	Bartl	2790	25	3	0	0	0	Yes
2903	--	Fox-Bush-Couch	James H. Webster	(P) North Fox Bush Unit	Bowyer, Speedling, Mill Molter, Bunnell Shawver Craig Kingsley	25-28S-5E 26-28S-5E 35-28S-5E 23-28S-5E 24-28S-5E	500	300	Bartl	2750	50	5	0	0	0	--
10457	--	Harlan	Adair Oil Company	(P) Harvey	Harvey	26, 35-23S-4E	280	40	KC	2140	7	4	0	0	0	Yes
16646	--	Hazlett	Range Oil Company, Inc.	(P) Sommers	Sommers	5-25S-5E	120	-	Congl Sd	2375	10	1	-	-	-	Yes
17052	No	Hazlett	Rex & Morris Drilling Co.	(D) --	Fannie	29-23S-5E	40	0	Miss	2453	25	2	0	0	0	Yes
16357	--	Hazlett	K.T. Wiedemann Trust	(W) Clearwater Unit (Hazlett Pool)	Clearwater Ammeter H.A. Goering, E.R. Goering	31-23S-5E 32-23S-5E 29-23S-5E	360	0	Miss Osage	2459	24	25	2	0	0	Yes
3805	No	Keighley	R.W. Musgrove*	(D) Barnhill	Barnhill	12-27S-7E	160	-	--	2740	30	2	-	0	-	Yes
37-05-05	No	Kramer-Stern	Dunne Equities, Inc.	(D) Blakeman	Blakeman, Clay "B"	4-28S-8E	240	0	Viola	3089	10	3	0	0	0	Yes
13048	--	Kramer-Stern	Hammer & Maclean	(D) Leon Unit	Tabing, Poindexter, Sontag, Holt, Woolm Stern & Stern B	21-27S-6E 22-27S-6E	230	0	Viola	3006	12	12	2	0	2	Yes
16178	No	Kramer-Stern	Rex & Morris Drilling Co.	(W) Lucas "A" & "B" Waterflood Unit	Lucas "A", Lucas "B"	11-28S-6E	160	0	Lower Simp	3000	6	9	0	0	0	Yes
17260	--	Kramer-Stern	Saco Oil Company	(D) Kramer	Kramer, Gilliland Lindgren	3-28S-6E 4-28S-6E	--	-	Viola	3070	10	8	0	0	0	Yes
976	--	Kramer-Stern	Southern States Oil Company	(P) Shriver-Stern	Stern Shriver Patterson	27-27S-6E 33-27S-6E 34-27S-6E	680	-	Viola Lm	3080	40	20	2	0	2	Yes
3074																
6984																
8301																
3218	--	Kramer-Stern	Texaco, Inc.	(P) Tabing	F. Tabing	28-27S-6E	--	16	Viola	3075	16	1	0	0	0	Yes
17267	No	Kramer-Stern	Woodward Oil Acct	(-) --	North Blakeman Lease, South Blakeman Lease	3-28S-6E	160	0	Viola	3050	4-6	3	-	1	-	Yes
13911	--	Leon	Hammer & Maclean	(D) Maclean Lease	Maclean	17-27S-6E	160	0	Viola Lm	3129- 3136	17	2	0	0	0	Yes
6426	Yes	Muddy Creek	R.R. Abderhalden	(W) South Muddy Creek WF	Doyle, Probert, Hodges	13-29S-4E	60	20	Bartl	2800	20	2	2	0	0	Yes
6853	No	Muddy Creek	R.R. Abderhalden	(W) North Muddy Creek WF	E. Fresh, C. Williams	7-29S-5E	60	0	Bartl	2730	13	3	1	0	0	Yes
6099	No	Muddy Creek	Tomlinson Oil Co., Inc.	(W) Stewart "A" Lease	Stewart "A"	6-29S-5E	20	0	Bartl	2700	9	1	1	0	0	Yes
11990	--	Paulson	American Petrofina Co. of Texas*	(P) Paulson Waterflood Station #1	Busenitz, Guinty, Webreck Scully "A" & "B" Hinze	13-23S-3E 23-23S-3E 24-23S-3E	320	120	Miss	2460	28	24	1	0	0	Yes
13254	--	Paulson	American Petrofina Co. of Texas*	(P) Paulson Waterflood Station #2	Paulson "C"	25-23S-3E	160	0	Miss	2460	28	3	0	0	0	Yes
15596	No	Pierce	Baker Oil Inc.	(D) Jones	Jones	33-25S-4E	20	--	Miss	2525	40	2	0	0	0	Yes
16947	--	Pierce	White & Ellis Drilling, Inc.	(D) Albers	Albers	21-25S-4E	320	0	Miss	2550	10	9	0	0	0	Yes
11095	No	Potwin	Rex & Morris Drilling Com- pany*	(D) Maxwell	Maxwell "A", Maxwell, McGill Penner	31-24S-4E 32-24S-4E	410	0	Miss Dol	2670	9	13	0	0	0	Yes
9368	--	Reynolds-Shaffer	American Petrofina Co. of Texas*	(D) Brewer	Brewer	33-26S-6E	80	0	Miss	2784	12	5	0	0	0	Yes
4039	--	Reynolds-Shaffer	Yuma Oil Company	(D) Doughty & Palmer	Doughty, Palmer	6-27S-6E	40	-	Bartl	2700	10	3	0	0	0	Yes
17763	No	Reynolds-Shaffer	Murfin Drilling Company	(P) Reynolds-Shaeffer WF	Beadles Daugherty Edwards, Tatum Maclean	34-26S-6E 33-26S-6E 4-27S-6E 3-27S-6E	560	220	Miss	2794	21	13	1	0	0	Yes
12229	--	Rosalia	Continental Oil	(P) Rosalia	Zimmerman	11-25S-7E	480	0	Squir	2560	30	5	1	-	-	Yes
12310																

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
4077	2	0	0	0	Irreg	200	700*	Prod	0	0	T	--	S Gas	1/4	42	--	511,000	--	54,000	--	30,000	--	*Gravity
17950	2	0	0	0	Irreg	140	104	Prod	--	--	U	1975	S Gas	--	0	--	3,682	3,682	4,219	302,746	--	--	--
5287	5	--	--	--	Irreg	500	400	Prod	--	--	T	1955	Grav	--	37	--	600,000	--	17,473	--	17,473	--	--
16942	1	0	0	0	Irreg	0	44	Prod	--	--	U	1973	Wat	3/40	39	--	1,460	9,446	1,747	171,527	--	--	--
6254	2	--	--	--	Irreg	0	30	Prod	--	--	M	1960	--	1/4	35	--	40,000	--	3,500	--	--	--	--
1650	1	0	0	0	Irreg	--	220	Prod	--	--	T	1959	Grav	--	40	--	80,300	1,427,771	2,914	107,185	2,914	107,185	--
5496	1	0	0	0	Line	100	723	Prod	--	--	U	1957	Gas Exp	--	37.8	--	263,723	8,991,686	3,450	511,111	3,450	101,365	--
2903	5	6	0	0	Irreg	Grav	250	Prod	--	--	T	--	S Gas	--	42	--	--	--	--	3,378	--	3,378	--
10457	1	0	0	0	Irreg	250	10	Prod	--	--	U	1963	--	--	32	--	13,237	168,912	5,673	79,307	1,200	17,630	--
16646	--	--	--	--	Irreg	0	45	Prod	--	--	U	1972	Wat	1/1	40	--	16,425	--	1,969	28,823	492	7,206	--
17052	1	0	0	0	Irreg	0	210	Prod	--	--	U	1973	S Gas	9/210	41	--	76,650	--	2,739	120,988	0	0	--
16357	2	2	0	0	Irreg	600	480	Prod	--	--	T	1971	Grav	11/200	40	--	350,426	1,294,742	21,179	111,826	--	--	--
3805	1	0	0	0	--	Grav	40	Prod	--	--	--	1950	Gas Exp	--	38	--	--	15,000	--	1,500	--	0	*Was White & Ellis
37-05-05	2	0	0	0	Irreg	--	500	Prod	--	--	U	--	Gas Exp	1/1	35	--	365,000	--	12,104	--	0	0	--
13048	3	0	0	0	Irreg	--	143	Prod	--	--	U	1966	Grav	3/2	34	--	156,867	551,436	17,002	187,664	17,002	187,664	--
16178	1	0	0	0	Irreg	300	540	Prod + Miss	2750	50	U	1971	S Gas	7 1/2/12 1/2	34	--	196,370	695,609	14,097	398,971	2,820	7,175	--
17260	--	--	--	--	Irreg	Vac	975	Prod	--	--	U	1974	Wat	5/95	--	--	--	--	18,803	--	18,803	--	--
976 3074 6984 8301 3218	8	0	0	0	Irreg	875	680	Prod + Viola	--	--	M	1959	Grav	--	34	--	2,112,285	24,276,568	37,727	979,024	37,727	979,024	--
17267	1	--	--	--	4-spot	-28*	900	Prod	--	--	--	1952	Wat	5/9	--	--	113,129	826,556	2,768	106,296	0	0	--
13911	1	0	0	0	Irreg	0	200	Prod	0	0	U	1968	Grav	5/95	35	--	73,000	584,000	1,754	8,743	1,754	8,743	--
6426	1	0	0	0	Line	600	100	Prod + Doug	800	70	T	1962	S Gas	3/1	38	3	36,500	1,358,011	3,052	87,330	3,052	87,330	--
6853	3	0	0	0	Irreg	350	40	Prod + Doug	560	20	T	1963	S Gas	3/0	38	--	43,800	501,035	4,209	77,230	4,209	77,230	--
6099	1	1	0	0	Peri	357	64	Prod + Doug	1599	30	T	1958	S Gas	--	38.4	--	23,308	491,757	2,198	115,849	2,198	55,538	--
11990	--	2	0	0	Irreg	650	375	Prod	--	--	U	1965	Wat	1/5	41	--	548,458	4,210,604	21,987	913,108	21,987	311,116	*Was The El Dorado Refg. Co.
13254	1	0	0	0	5-spot	50	267	Prod	--	--	U	1967	Wat	1/20	39.9	--	97,603	3,920,493	1,220	43,636	1,220	42,564	*Was The El Dorado Refg. Co.
15596	1	0	0	0	Irreg	0	30	Prod	--	--	U	1970	Grav	--	43	--	10,950	61,950	500	35,923	0	0	--
16947	1	0	0	0	Irreg	0	20	Prod	--	--	T	1973	S Gas	3/1	40	--	7,200	18,600	6,373	236,608	--	--	--
11095	3	0	0	0	Irreg	180	160	Prod	--	--	U	1964	Wat	--	43	--	176,300	536,517	8,099	--	2,700	--	*Was Clinton Oil Company
9368	1	0	0	0	Irreg	0-Vac	89	Prod	--	--	U	1962	S Gas	1/5	34	--	32,361	332,738	3,550	116,984	3,550	20,833	*Was The El Dorado Refg. Co.
4039	1	0	0	0	Irreg	Vac	50	Prod	--	--	U	--	Wat	1/24	--	--	18,250	--	4,891	--	4,891	--	--
17763	1	0	0	0	Irreg	400	550	Prod + Arb	3229	--	T	1975	Wat & Grav	1/4	35	--	179,928	179,928	10,486	563,240	400	400	--
12229 12310	1	0	--	--	Irreg	0	280	Prod	--	--	U	1965	S Gas	--	40	--	103,572	305,002	0	*	0	*	*Press Maint.

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

County	Project no.	Is proj. uni-tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
								Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
BUTLER COUNTY (concl.)																	
	4169	No	Sallyards	Okmar Oil*	(W) Drumm-Bitler	Drumm-Bitler	20-26S-8E	80	0	Bartl	2660	25	2	2	0	0	Yes
	16653	--	Salter	Kathol Petroleum, Inc.	(-) Swindell	Swindell	22-28S-3E	160	-	Simp	3003	6	1	0	0	0	Yes
	1319	No	Seward	W.R. Gross	(D) Seward	Seward	12-27S-7E	50	-	Bartl	2700	30	1	0	0	0	No*
	10166	--	Shinn	K.T. Wiedemann Trust	(W) Shinn Waterflood	Shinn	19-29S-8E	120	0	Miss Dol	2760	16	14	0	0	0	Yes
	2096	No	Smock-Sluss	Bisagno Bros, Inc. & Bisagno Six Oil Co., Inc.	(D) Bisagno	Bisagno Bros. Inc, Bisagno Six Oil Co., Inc., Bisagno #17	35-26S-5E	90	10	Bartl	2700	40	4	2	0	0	Yes
	2915	No	Smock-Sluss	Bert I. Lebow	(P) Sluss	R. Sluss		40	-	Bartl	2700	26	1	-	-	-	Yes
	13206	No	Smock-Sluss	J.E. Morris	(D) Knutson	Knutson, Irvine	11-27S-5E	320	0	Bartl	2700	30	3	1	0	0	Yes
	3430	No	Snowden-McSweeney	Earl F. Wakefield, Inc.	(D) Wakefield "Fee"	Wakefield "Fee"	9-29S-6E	200	0	Bartl	2800	20	7	4	0	7	Yes
	17996	--	Snowden-McSweeney	Ernest Price Jr.	(D) --	Woods Bros.	16-29S-6E	160	-	Peru	2480	20	3	-	4	-	Yes
	4029	No	Towanda	Kewanee Oil Co.	(W) Rice-Wait	Rice & Wait	5-26S-4E	240	80	Viola Simp	2445 2476	30	11	3	0	0	--
	16406	--	Whitewater East	White & Ellis Drilling, Inc.*	(D) Edmiston	Edmiston	33-25S-4E	240	0	Miss	2460	8	5	0	0	0	Yes
	15542	No	Whitewater West	Kathol Petroleum, Inc.	(D) Vachal	Vachal	33-25S-3E	80	-	Miss	2724	7	1	0	0	0	Yes
	15546	--	Whitewater West	Kathol Petroleum, Inc.	(D) Hamilton Scully	Hamilton Scully	34-25S-3E 28-25S-3E	400	-	Miss	2725	22	5	0	0	-	Yes
	15654	--	Keighley	R.W. Musgrove*	(D) --	Worrell	12-27S-7E	160	-	Bartl	2740	30	2	-	-	-	Yes
	1318	No	Young	Dunne Equities, Inc.	(D) Willhite	Willhite	27-26S-7E	80	-	KC	2108	28	5	0	1	0	Yes
	3258	No	Young	Okmar Oil Co.	(W) Young Co-op	Young A, Young B, Young-Inger, Willhite, Willhite A & B	27-26S-7E	110	0	KC	2140	37	8	0	0	0	Yes
	5919	No	Young	J.E. Morris and Rex & Morris Drilling Co.	(D) Guenther	Guenther "A", Guenther "B"	29-26S-7E	440	160	Miss	2750	20	9	0	0	1	Yes
	5932					Johnson	20-26S-7E										
	12982	--	Young Southwest	Crowe Drilling Co., Inc.	(P) PMA Ranch	PMA Ranch	32-26S-7E	80	0	Miss	2724	8	5	0	0	0	Yes
BUTLER COUNTY TOTALS (Reported) (Includes projects in supplemental list.)								16,828	2,012			663	72	9	105		
BUTLER-COWLEY COUNTIES																	
	5547	--	Fox-Bush-Couch	Stelbar Oil Corp.	(W) Brown & Shawver Atlanta Ranch	Brown, Brown, Brown, Shawver Atlanta Ranch	36-29S-5E 31-29S-6E 1-30S-5E 6-30S-6E	640	320	Bartl	2800	30	3	0	0	0	Yes
	16114	No	Rock Northeast	Stelbar Oil Corp.	(W) Abildgaard	Abildgaard Holt Holt-Gimple, Gimple, Pottorff Holt	6-30S-5E 31-29S-5E 32-29S-5E 29-29S-5E	960	-	Bartl	2832	18	13	0	0	-	Yes
BUTLER-COWLEY COUNTIES TOTAL (Reported)								1,600	320			16	0	0	0		
BUTLER-MARION COUNTIES																	
	6185	Yes	Elbing	C.E. Bayes	(D) Bayes Oil Co.	Evans Aures	33-22S-4E 3-23S-4E	81	0	KC	2060	40	2	1	0	0	Yes
CHASE COUNTY																	
	16856	No	Teter	Glacier Petroleum Co.	(P) Hartley A	Hartley A	35-22S-9E	50	-	Bartl	2457	36	4	0	1	0	Yes
CHASE-GREENWOOD COUNTIES																	
	15055	Yes	Atyeo-Pixlee	The Buckeye Corporation Aztec Oil Co., Division	(W) Evans Unit	Evans	12-22S-9E 7-22S-10E	250	0	Miss	2400	30	13	0	0	0	Yes
CHASE-LYON COUNTIES																	
	519	--	Atyeo-Pixlee	E.W. Sauder*	(P) Annie Hughes & H.W. Hughes Leases	Annie Hughes H.W. Hughes	24-21S-9E 19-21S-10E	80	40	Bartl	2200	25	11	1	0	0	Yes

► See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head pres. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav. deg.	Oil visc. cp. @ 60° F	Production and injection statistics (bbl)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975			Injection Pattern	Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
4169	1	0	0	0	--	75	106	Prod	-	-	U	1954	S Gas	-	36	--	38,690	732,110	812	117,120	812	11,951	*Was H.C. Bennett
16653	1	0	0	0	Irreg	0	90	--	-	-	-	1972	*	1/9	29.7	--	32,850	108,405	653	205,894	0	0	*Conventional Unit
1319	1	0	0	0	Irreg	0	150	Prod	-	-	U	--	--	-	-	--	1,368	741,230	166	83,091	--	--	*Well shut down intermittently
10166	6	0	0	0	Irreg	875	474	Prod	-	-	T	1963	*	76/350	39	--	1,037,873	6,726,741	36,958	325,785	36,958	325,785	*Other, not identified
2096	3	1	1	-	Irreg	Vac	600	Prod	-	-	T&S	1955	Grav	10/1	37.9	--	180,000	15,150,000*	11,920	95,983*	10,728	86,384*	*Estimate
2915	1	-	-	-	--	85	175	Prod	-	-	F	--	Grav	-	38	--	63,875	--	4,015	--	--	--	--
13206	1	0	0	0	Irreg	0	298	Prod	-	-	U	1967	S Gas	3/20	39	--	108,770	772,335	5,979	128,792	1,993	5,938	
3430	2	0	0	0	5-spot	0	32	Prod	-	-	U	1960	S Gas	-	39	--	81,760	3,841,682*	4,457	222,569*	2,228	111,284*	*Since 1960
17996	3	-	4	-	Irreg	Vac	30	Prod	-	-	U	1975	Grav	7/3	34	--	4,500	--	3,000	--	--	--	--
4029	2	2	0	0	Irreg	275	850	Prod	-	-	U	1954	Wat	-	38	--	621,142	15,970,551	30,276	4,245,417	0	0	
6580																							
16406	1	0	0	0	Irreg	0	25	Prod	-	-	T	1972	S Gas	1/2	40	--	9,000	33,875	2,735	128,531	0	0	*Was Kimray, Inc.
15542	1	0	0	0	Irreg	0	20	Prod	-	-	T	1970	*	2/3	43	--	7,300	42,340	1,288	16,177	0	0	*Conventional Unit
15546	1	0	0	0	Irreg	0	300	Prod	-	-	T	1970	*	2/3	43	--	109,500	635,100	6,874	111,116	0	0	*Conventional Unit
15654	1	-	-	-	--	Grav	40	Prod	-	-	-	1960	G Exp	-	39	--	--	15,000	--	1,500	--	0	*Was White & Ellis
1318	2	0	0	0	Irreg	0	300	Prod	-	-	U	--	Gas Exp	-	34	--	109,500	--	2,274	--	--	--	--
3258	3	1	0	0	Peri	300	464	Prod + Miss	2700	10	U	1952	S Gas	-	34	--	508,080	3,783,388	18,299	1,070,004	15,981	162,891	
5919	1	0	0	1	Irreg	0	649	Prod + Squir	2494	50	U	1957	S Gas	6/70	33	--	236,885	--	8,175	--	4,100	--	--
5932																							
12982	1	0	0	0	Peri	10	90	Prod	-	-	-	1966	S Gas	-	-	--	--	900	--	--	--	--	--
	<u>296</u>	<u>37</u>	<u>5</u>	<u>18</u>													<u>50,486,854</u>	<u>1,219,916,822</u>	<u>1,154,575</u>	<u>52,531,591</u>	<u>748,142</u>	<u>18,282,154</u>	
5547	1	0	0	0	Line	Vac	30	Prod	-	-	T	1957	S Gas	-	39	--	10,950	950,960	1,849	--	1,849	143,075	
16114	1	1	0	0	Line	300	40	Prod	-	-	U	1971	S Gas	-	37	--	14,600	65,600	15,336	257,320	0	0	
	<u>2</u>	<u>1</u>	<u>0</u>	<u>0</u>													<u>25,550</u>	<u>1,016,560</u>	<u>17,185</u>	<u>257,320</u>	<u>1,849</u>	<u>143,075</u>	
6185	2	0	0	0	4-spot	0	20	Prod	-	-	U	1954	Grav	3/15	31+	--	14,400	--	1,400	--	800	--	--
16856	2	0	-	0	Irreg	250	312	Prod	-	-	U	1973	S Gas	-	40	--	113,568	--	14,273	--	--	--	--
15055	2	0	0	0	5-spot	300	400	Prod	-	-	U	1960	S Gas	-	38	--	146,000	--	12,272	--	4,500	--	--
519	2	2	0	1	Irreg	450	70	Prod	-	-	T	1939	Grav	1/4	39	--	50,000	1,925,000	10,400	474,400+	3,000	204,100	*Was Ohio *Since 1955

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.	
CHAUTAUQUA COUNTY																
17641	--	Cedar Vale	Roscoe Mendenhall*	(-) Leedy	Leedy	10-34S-8E	40	-	Pawnee	1900	150	2	-	3	-	No†
14002	--	Cloverdale	Olympic Petroleum Company	(W) Cloverdale Field Unit	F. McConaghy, J.H. Haden, Haden "G"	12-33S-8E	243	0	Alta- mont Cattle	2030	15	16	0	0	0	Yes
469	--	Elgin	John M. Denman Oil Co.	(D) Fleisher-Newman	Ruby Haden R.O. Hawkins Fleisher Kygar Newman	13,14-33S-8E 7,18-35S-10E 17,18-35S-10E 12,13-35S-9E 18-35S-10E 18-35S-10E	1560	0	Peru	1540	40	12	0	0	1	Yes
10744	No	Hale-Inge	Layton Oil Company	(W) Hale Flood	Whartenby Monroe, Harmon, Krusky Sweeney, Alexander, Fee, Vaughn	18-32S-13E 19-32S-13E	200	0	Wiser	1130	12	9	9	0	0	Yes
9072	--	Landon-Floyd	Patteson Bros. Inc.	(-) Shaffer Lease	Nile McNee	14,23-32S-10E	220	-	Miss	1950	8	4	2	0	-	Yes
4746	--	Leniton	John M. Denman Oil Co.*	(P) Lowe Unit	Keith, McAfee, Mattocks	20-33S-10E	320	0	Peru	1440	25	13	0	0	0	Yes
5161	--	Leniton	John M. Denman Oil Co.*	(P) R.L. Mendenhall Unit	Burden Eggen, Goode "A", Goode "B", McCall, J. Smith W.W. Smith	18,19-34S-10E 17-33S-10E 17,20-33S-10E 20-33S-10E	1040	0	Peru	1425	50	26	0	0	3	Yes
6721	No	Leniton	Charles J. Martin*	(W) Staats Chautauqua Unit	Campbell & Webb	21,28-33S-10E	40	-	Peru	1300	20	4	0	0	0	Yes
2207	--	Niotaze	Steinberger Bros.	(W) Hyderfield	Hyder, Guier Buckles & Stough	5-35S-13E 6-35S-13E	250	0	Redd	700	15	21	2	1	0	Yes
11863	--	Oliver	Adair Oil Company	(P) McNee	Oliver, McNee	2-32S-10E	95	10	Miss	2000	6	1	0	0	0	Yes
15130	--	Peru-Sedan	Elmer Blankenship*	(-) Murray	Murray Lease	27-34S-11E	5	5	Peru	1260	10-40	4	2	0	0	Yes
36-01- 28	No	Peru-Sedan	Roy A. Burt*	(D) Gardner	--	26-33S-11E	160	0	Peru	1200	23	5	1	0	0	Yes
289	No	Peru-Sedan	Bill I & Myra Custer*	(D) O.K. Spurlock	O.K. Spurlock	36-34S-11E	40	0	Peru	1177	22	3	2	0	0	Yes
3221	--	Peru-Sedan	Deck Oil Co.	(W) McMillan	McMillan	27-34S-12E	160	-	Peru	1100	15	12	-	0	-	Yes
15	--	Peru-Sedan	John M. Denman Oil Co.*	(P) Blundell	Blundell	36-34S-11E	80	0	Peru	1000	36	4	0	0	0	Yes
139	--	Peru-Sedan	John M. Denman Oil Co.*	(P) Bellman Unit	D.J. Moore	3-34S-11E	150	0	Peru	1073	16	9	3	0	0	Yes
388	--	Peru-Sedan	John M. Denman Oil Co.*	(P) Peru Farm	Peru Farm	31-33S-12E 16-34S-12E 3-34S-11E	490	0	Peru	980	38	27	13	0	0	--
462	--	Peru-Sedan	John M. Denman Oil Co.	(D) Hann Unit	H.W. Moore Alexander, Spurlock Ellexson, Hatfield Hann Pennell	31-34S-12E 36-34S-11E 35-34S-11E 1-35S-11E	930	0	Peru	1100	30	63	0	1	0	Yes
463	--	Peru-Sedan	John M. Denman Oil Co.	(-) Albright Fee	Albright	15,16-34S-11E	680	0	Peru	1165	20	7	0	0	0	Yes
465	--	Peru-Sedan	John M. Denman Oil Co.*	(D) Bird Unit	Bird Johnson Keenan Lemmon	25,26-34S-10E 27-34S-10E 34-34S-10E 26-34S-10E	1360	0	Peru	1360	40	42	0	3	0	Yes
467	--	Peru-Sedan	John M. Denman Oil Co.*	(D) Morton-Riley	Morton Riley	34-33S-12E 27-33S-12E	360	0	Peru	990	30	13	0	0	0	Yes
468	--	Peru-Sedan	John M. Denman Oil Co.*	(D) Lemmon-Beck	Beck Dunham-Lemmon	1-35S-11E 25,36-34S-11E	550	0	Peru	1125	50	35	0	0	0	Yes
1029	--	Peru-Sedan	John M. Denman Oil Co.*	(P) Casement	A. Casement, C. Casement	33-33S-11E 5-34S-11E	350	0	Peru	1187	16	14	16	0	0	Yes
1473	--	Peru-Sedan	John M. Denman Oil Co.*	(P) Gregg	Gregg	14,15,21,22,23, 26,27,28-33S-11E	2300	80	Peru	1224	33	15	19	0	11	Yes
17030	--	Peru-Sedan	John M. Denman Oil Co.*	(P) C.C. Poor Farm	C.C. Poor Farm, Conley Hanley-Johnson, H.W. Moore J.A. Lowe	10-34S-12E 15-34S-12E 22-34S-12E 10,15-34S-12E	629	0	Peru	984	20	25	10	3	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
17641	1	-	3	-	Irreg	0	100	Prod	-	-	U	1975	Gas Exp	1/1	38	-	18,000	--	1,800	--	540	-	*Was Mendenhall Estate †Wells down
14002	4	2	0	0	Line	802	177.5	Prod + Sh Wat Wells	20	4-6	F	1968	S Gas	1/9	38.9	3.50*	255,009	2,391,162	25,552	832,315	25,552	402,427	*Reservoir Temp. 103°
469	3	0	0	-	Irreg	-	30	Prod	-	-	U	--	Gravity	-	38	-	24,360	2,915,960	4,060	724,533	4,060	434,719	
10744	4	0	0	0	5-spot	350	63	Prod	-	-	T	1974	S Gas	-	33	-	91,250	125,750	1,321	1,817	1,321	1,817	
9072	2	-	-	-	Irreg	0	950	Prod	-	-	-	1962	Grav	1/10	30	-	345,000	--	6,840	--	2,000	--	
4746	1	1	0	0	Irreg	275	60	Prod	-	-	U	--	S Gas	-	32	-	17,300	123,400	2,873	13,925	2,873	13,925	*Was D.J. Marshall et al
5161	3	0	0	0	Irreg	250	20	Prod	-	-	U	--	S Gas	-	31	-	32,000	1,332,200	5,324	327,207	5,324	327,207	*Was Mendenhall Drlg. Co.
6721	1	0	0	0	5-spot	175	60	Prod	-	-	U	--	S Gas	1/3	30	-	1,800	--	18,000	--	0	--	*Was C.W. Staats
2207	11	2	0	0	5-spot	325	8	Prod + Big Salt	350	50	U	1941	S Gas + Gas Exp	1/0	34.5	-	30,000	485,000	6,000	127,800	6,000	127,800	
11863	1	0	0	0	Irreg	0	-	Prod	-	-	U	1965	Wat	-	29	-	5,500	125,325	498	16,809	0	0	
15130	1	0	0	0	4-spot	0	40	Prod	-	-	U	1967	Grav	-	32	-	14,600	--	2,019	--	--	--	*Was Dean Todd
36-01-28	2	0	0	0	Irreg	Grav	3	Prod	-	-	U	1933	Grav	-	34	-	1,095	--	2,547	--	880	--	*Was Sinclair
289	1	0	0	0	5-spot	0	10	Prod	-	-	U	--	Grav	-	33.7	-	3,650	--	410	--	0	--	*Was Little Nick Oil Co.
3221	1	1	0	0	Irreg	150	245	Prod	-	-	U	1952	S Gas	-	34	-	89,400	--	3,560	484,568*	0	--	*Estimated
15	1	0	0	0	Irreg	250	35	Prod + Salt Sd	450	60	U	--	--	-	34	-	4,900	27,200+	826	3,834+	826	3,834	*Was Federal Petroleum †Since 1-1-72
139	2	2	0	0	Irreg	300	40	Prod + Salt Sd	450	60	U	1955	S Gas	-	32	-	10,600	221,700	1,762	36,151	1,762	36,151	*Was Federal Petroleum
388	5	10	0	0	Irreg	250	55	Prod + Salt Sd	450	60	U	1955	S Gas	-	33	-	98,200	1,071,300	16,375	193,125	16,375	193,125	*Was Federal Petroleum
462	21	0	1	0	Irreg	-	30	Prod	-	-	U	--	S Gas	-	35	-	173,790	14,050,026	28,965	3,483,894	28,965	2,090,336	
463	1	0	0	0	Irreg	0	20	Prod	-	-	U	--	Grav	-	35	-	10,200	83,000*	1,701	19,011*	1,701	19,011	*Since 10-1-68
465	5	0	0	0	Irreg	0	30	Prod	-	-	U	--	Grav	-	38	-	77,100	482,900+	12,852	107,886+	12,852	107,886	*Was Denman Bros. †Since 10-1-68
467	1	0	0	0	Irreg	0	40	Prod	-	-	U	--	Grav	-	33.5	-	21,900	141,500+	3,648	31,944+	3,648	31,944	*Was Denman Bros. †Since 10-1-68
468	8	0	0	0	Irreg	0	20	Prod	-	-	U	--	--	-	34	-	87,000	624,100+	14,617	140,355+	14,617	140,355	*Was Denman Bros. †Since 10-1-68
1029	3	13	0	0	Irreg	200	80	Prod + Salt Sd	450	60	U	1955	S Gas	-	32	-	41,010	2,690,459	6,835	328,579	6,835	328,579	*Was Federal Petroleum
1473	5	10	0	0	Irreg	300	20	Prod + Salt Sd	460	60	U	1955	S Gas	-	34	-	25,600	1,734,700	4,270	1,749,489	4,270	1,749,489	*Was Federal Petroleum
17030	8	10	0	0	Irreg	275	20	Prod + Salt Sd	450	60	U	1955	S Gas	-	34	-	48,100	1,183,400	8,017	1,104,413	8,017	1,104,413	*Was Federal Petroleum

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location		Acres in project		Oil producing zone			Oil producing wells (1975)			Has inj. been continuous?
							S - T - R		Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	
CHAUTAUQUA COUNTY (concl.)																	
	17031	--	Peru-Sedan	John M. Denman Oil Co.	(D) Bowman Unit	Dennis, Orton, Winans Spire	27-34S-11E 34-34S-11E	350	0	Peru	1220	40	22	0	0	0	Yes
	17033	--	Peru-Sedan	John M. Denman Oil Co.*	(P) Hartzell-Rodgers	Hartzell Rodgers	19-34S-12E 18,19-34S-12E	320	0	Peru	1000	16	8	8	0	0	Yes
	16970	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Stafford	Stafford	9-34S-12E	200	0	Peru	1027	35	11	9	0	5	Yes
	16971	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	Bowen	20-34S-12E	240	0	Peru	1055	15	19	6	1	0	Yes
	16972	--	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	Winchell Michel De Armond, C.H. Inglefield	15-34S-12E	310	0	Peru	984	20	20	11	0	0	Yes
	16973	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	G.B. Oakes	22-34S-12E	200	0	Peru	1020	19	11	4	0	0	Yes
	16974	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	E.E. Brooks, F.G. Hills	28-34S-12E	554	0	Peru	1055	15	32	2	2	0	Yes
	14682	No	Peru-Sedan	William V. Herbert	(D) Parker "B"	Parker "B"	26-34S-11E	80	0	Red Sand	978	9	6	0	0	0	Yes
	905	--	Peru-Sedan	Lee R. Jones, Jr. Oil Co.	(D) Crane	Crane	1-35S-11E	320	-	Peru	1170	30	14	-	-	-	No*
	6087	--	Peru-Sedan	Lee R. Jones, Jr. Oil Co.	(D) Austin	Clint Austin	7-34S-12E	160	-	Peru	950	15	6	-	-	-	No*
	6133	--	Peru-Sedan	Lee R. Jones, Jr. Oil Co.	(-) Smith-Lee	C.W. Smith, George Lee	12-35S-11E	320	-	Peru	1160	25	14	-	-	-	No*
	10679	--	Peru-Sedan	Lee R. Jones, Jr. Oil Co.	(D) Witham	O.R. Witham	18-35S-12E	220	-	Peru	1150	30	6	-	-	-	No*
	556	--	Peru-Sedan	Nunneley & Powell	(D) Kimbrell	Kimbrell	4-34S-12E	40	20	Peru	1050	18	4	0	0	0	Yes
	5477	--	Peru-Sedan	Nunneley & Powell	(P) Violet Stafford	Violet Stafford	8-34S-12E	40	0	Peru	1050	20	16	0	4	-	Yes
	6132	--	Peru-Sedan	Nunneley & Powell	(D) Big Turner	Big Turner	3-35S-12E	80	0	Peru	1000	10	2	-	-	-	Yes
	6170	Yes	Peru-Sedan	Nunneley & Powell	(P) J.R. Chance	J.R. Chance	34-34S-12E	160	40	Peru	1035	12	15	-	3	-	Yes
	"	Yes	Peru-Sedan	Nunneley & Powell	(D) Blount	Blount	34-34S-12E	160	0	Peru	1035	20	4	-	-	-	Yes
	6320	--	Peru-Sedan	Petroleum Enterprises	(P) --	Hills	22-34S-12E	-	-	Peru	1000	15	7	-	-	-	Yes
	14956	--	Peru-Sedan	Petroleum Enterprises	(P) --	Heath Murray	27-34S-11E	60	-	Peru	1130	15	9	-	-	-	Yes
	3556	No	Peru-Sedan	Shannon Brothers	(D) Turner-Johnson	Turner Johnson	7-35S-12E 6-35S-12E	80	40	Peru	1180	40	3	0	0	0	Yes
	7945	--	Peru-Sedan	The Star Producers, Inc.*	(-) Jobe	Jobe	8-34S-12E	330	0	Wiser	1000	12	4	1	0	-	--
	17888	--	Peru-Sedan	Walter H. Williams	(P) MacFarlane-DeLong	MacFarlane-DeLong	23-11S-34E	80	30	Peru	1120	20	10	0	10	0	No*
CHAUTAUQUA COUNTY TOTALS (Reported)								16,556	225				629	120	31	20	
CHAUTAUQUA-ELK COUNTIES																	
	15710	No	Hale-Inge	Traverse Corporation	(W) Inge Waterflood	Inge, Temple, Kimzey, Howell, O'Neal	26,27,34, 35-31S-12E 3-32S-12E	127	0	Stray	660	10	20	6	0	0	Yes
CLARK COUNTY																	
	6764	--	Harper Ranch	Union Oil Co. of California	(W) Harper Unit	J.C. Harper "A" K.C. Harper	2-34S-21W 11-34S-21W	1280	-	Morrow	5450	9	3	3	0	0	Yes
COFFEY COUNTY																	
	15677	No	Crandall	Reed Oil Company*	(D) LeRoy Field	Sutherland	31-22S-16E	5	0	Squir	1065	6	1	0	0	1	Yes
	17175	--	LeRoy North	Arthur Klaus	(D) C & C Oil Co.	C & C Oil Co.	22-22S-16E	80	0	Squir	1015	12	4	0	0	0	Yes
	11074	No	Neosho Falls-LeRoy	L.E. Bartlett	(W) Rue-B-Lee No. 2	--	12-23S 16E	10	-	Squir	945	7	4	-	0	2*	Yes
	11619	No	Neosho Falls-LeRoy	L.E. Bartlett	(W) Rue-B-Lee No. 1	--	35-22S-16E	30	-	Squir	962	4-12	15	-	-	-	Yes
	11714	--	Neosho Falls-LeRoy	Glenn B. Boden	(D) Boden Lease	Boden Lease	35,36-22S-16E	120	10	Prue (Squir)	970	10	8	0	1	0	Yes
	5835	--	Virgil North	French & Winterscheid, Inc.	(P) Olinger & Olinger B	Olinger	14-23S-13E	90	0	Miss Lm	1800	5	5	0	0	0	Yes
	202																
	17368	No	Virgil North	French & Winterscheid, Inc.	(-) Bahr	--	14-23S-13E	20	-	Viola	2100	-	-	-	-	-	Yes
	199	--	Virgil North	French & Winterscheid, Inc.	(P) Kelly	Kelly	14-23S-13E	90	20	Miss Lm	1800	6	9	0	0	0	Yes
	17356	--	Ottumwa	Teichgraeber Oil Operations*	(W) Metzler	Metzler	22-20S-14E	190	0	Miss	1600	10	1	1	0	0	No*

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	OH visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
17031	4	0	0	0	Irreg	0	20	Prod	-	-	U	--	--	--	35	-	29,200	206,600*	4,872	46,229*	4,872	46,229	*Since 10-1-68
17033	2	4	0	0	Irreg	350	20	Prod + Salt Sd	450	50	U	1955	S Gas	--	34	-	15,200	928,400	2,540	695,733	2,540	695,733	*Was Federal Petroleum
16970	4	2	0	0	Irreg	200	28	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	-	30,197	1,083,384	5,316	162,272	5,316	162,272	
16971	4	4	1	-	Irreg	185	55	Prod + Salt Sd	450	60	U	1965	S Gas	--	34	-	61,040	349,515	25,410	97,906	25,410	97,906	
16972	3	13	0	0	Irreg	225	33	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	-	35,792	2,370,421	8,758	581,345	8,758	581,345	
16973	2	5	0	0	Irreg	225	24	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	-	17,335	1,463,433	5,603	196,340	5,603	196,340	
16974	5	5	0	0	Irreg	325	40	Prod + Salt Sd	450	60	U	1966	S Gas	--	34	-	73,217	975,236	18,158	271,762	18,158	271,762	
14682	1	0	0	0	Irreg	-	7 1/2	Prod	-	-	U	1968	Wat	7/18	37	-	16,628	94,032	1,056	15,163	--	--	
905	1	-	-	-	Irreg	100	50	Prod	-	-	U	--	Grav	1/10	34	-	15,000	--	1,839	--	--	--	*Pump 50 bbls/day
6087	1	-	-	-	Irreg	50	30	Prod	-	-	U	--	Grav	1/10	32	-	9,000	--	245	--	--	--	*Pump 30 bbls/day
6133	2	-	-	-	Irreg	150	60	Prod	-	-	U	--	Grav	1/10	33	-	21,900	--	2,820	--	--	--	*Pump 60 bbls/day
10679	1	-	-	-	Irreg	100	80	Prod	-	-	U	--	Grav	1/10	33	-	29,200	--	2,000	--	--	--	*Pump 80 bbls/day
556	1	-	-	-	Irreg	0	10	Prod	-	-	U	1941	Grav	1/5	34	-	3,000	--	500	--	0	--	
5477	2	-	-	-	Irreg	150	40	Prod	-	-	U	1957	Grav	1/4	34	-	15,000	--	12,000	--	3,000	--	
6132	-	-	0	-	Irreg	0	10	Prod	-	-	U	--	Grav	1/3	33	-	3,000	--	1,500	--	5,000	--	
6170	2	0	0	0	Irreg	200	30	Prod	-	-	U	1958	Grav	1/5	34	-	15,000	--	6,000	--	2,000	--	
"	1	-	-	-	Irreg	0	20	Prod	-	-	U	1958	Grav	1/5	34	-	7,000	--	1,000	--	500	--	
6320	2	-	-	-	Irreg	300	50	Prod	-	-	T	--	S Gas	--	-	-	12,000	--	1,248	--	--	--	
14956	-	-	-	-	Irreg	200	75	Prod	-	-	T	1969	S Gas	--	35	-	20,000	--	3,502	--	--	--	
3556	1	0	0	0	Irreg	0	10	--	-	-	-	1953	Grav	1/3	35	-	3,600	42,400	1,124	11,124	500	10,200	
7945	0	-	0	-	--	-	-	--	1000	12	-	--	--	--	33	-	0	--	--	--	--	--	*Sold to Sunny Day Resources
17888	1	0	1	0	Irreg	50	200	Prod	-	-	-	1975	Wat + Gas Exp	3/20	34	-	117,400	117,400	11,200	11,200	0	0	*Returning produced water no make-up water
	136	84	6	0													2,093,273	37,439,903	297,363	11,816,729	230,075	9,174,805	
15710	19	1	0	0	5-spot	375	21	Prod + Salt Sd	445	20	T	1967	S Gas	1/25	32	14	147,700	2,153,212	8,206	94,207	--	--	
6764	2	4	0	0	Irreg	0	102	Prod	-	-	U	1959	S Gas	12/1	36	3	74,018	5,295,936	5,428	1,146,265	5,428	550,990	
15677	1	0	0	0	Irreg	0	1	Prod	-	-	U	1970	S Gas	1/0	20	-	365	2,650	237	1,962	0	0	*Was Cameron K. Reed
17175	1	0	0	0	4-spot	Grav	5-10	Prod	-	-	U	1973	Grav	1/1	25	25	650	--	1,600	--	100	--	
11074	1	-	0	-	3-spot	300	13000	Prod + KC	180	20	T+	--	--	--	26	-	8,385	190,635	4,917	11,592	--	--	*Used for gas †Petrofas
11619	2	-	0	-	7-spot	300	22000	Prod + KC	180	20	T&M*	--	--	--	26	-	8,832	--	474	--	--	--	*Petrofas
11714	1	0	0	0	Line	10	10	Prod	-	-	T	1965	Grav	1/1	26.2	-	3,600	50,093	1,282	42,282	600	21,000	
5835	2	0	0	0	Irreg	Vac	150	Prod	-	-	T	1960	Wat	3/2	36	-	36,500	450,000	3,690	--	2,435	57,082	
202																							
17368	1	0	0	0	Irreg	Grav	10	Prod	-	-	T	1974	Wat	9/1	-	-	0	0	0	0	0	0	
199	1	0	0	0	Irreg	90	350	Prod	-	-	T	1945	Wat	9/11	38	-	99,000	--	7,493	--	5,619	186,661	
17356	-	-	0	-	Irreg	900	400	Prod	-	-	U	1976	Wat	5/400	-	-	0	--	--	--	--	--	*Eureka Drilling Company †Just started

TABLE 1--ENHANCED OIL-RECOVERY PROJECTS, 1975--Continued

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							S - T - R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
COFFEY COUNTY (concl.)																	
	5633	--	Winterscheid	French Oil Company	(P) Pilcher	Pilcher	16-23S-14E	20	0	Miss Lm	1700	5	2	0	0	0	Yes
	13052	--	Winterscheid	Arnold Kraft	(W) Vostrez, Shotwell, McCartney	Vostrez, Shotwell, McCartney	14-23S-14E	40	0	Miss Lm	1600	15	7	0	0	1	Yes
	13346	--	Winterscheid	Arnold Kraft	(W) Scott, Wiley, Cochran	Scott, Wiley, Cochran	14-23S-14E	80	0	Miss Lm	1600	15	6	0	0	0	Yes
COFFEY COUNTY TOTALS (Reported) (Includes project in supplemental list.)								935	30				64	1	5	4	
COFFEY-WOODSON COUNTIES																	
	2863	No	Neosho Falls-LeRoy	Harold T. Newland*	(W) Unit 13, 24-23S-16E	Murray	13-23S-16E	80	-	Squir	940	12	18	2	0	0	Yes
	8745	--	Virgil North	Sun Oil Company	(W) Chris A. Bahr-Joseph B. Bahr	Chris A. Bahr Joseph B. Bahr	24-23S-16E 23-23S-13E 14-23S-13E	140	25	Miss Lm	1700	125	7	2	0	0	Yes
COFFEY-WOODSON COUNTIES TOTALS (Reported)								220	25				25	4	0	0	
COMMANCHE COUNTY																	
	17128	Yes	Collier Flats	Halliburton Oil Producing Company	(P) Collier Flats Unit	Thornhill O. Baker Norton, Schweitzer	24-33S-20W 25-33S-20W 26-33S-20W	480	40	L-KC	4777	5	2	1	0	0	Yes
COWLEY COUNTY																	
	10481	--	Albright	Deck Oil Co.	(P) Albright "A"	Albright "A"	2-34S-5E	160	0	Miss Chat	3100	12	7	0	0	0	Yes
	16740	No	Albright	W.D. Short*	(W) Albright	Brown Hart Rahn	2-34S-5E 1-34S-5E 11-34S-5E	560	0	Miss	3100	15	19	1	0	0	Yes
	11121	--	Bernstorf	Gralapp & Everly	(D) Sontag Bernstorf Unit	Bernstorf (Gralapp & Everly) Sontag (Gralapp & Everly) Bernstorf (E.F. Wakefield, Inc.)	33-31S-4E 34-31S-4E 4-32S-4E	80	140	Bartl	3049	22	3	4	0	0	Yes
	5563 7358	Yes	Biddle	Stewart Bros.	(W) Biddle NW Unit	Long "A" CSO-Holt, Long "B", Defore-Roberts, Morris, Hawkins, Holt	36-31S-4E 31-31S-5E 1-32S-4E 6-32S-5E 36-31S-4E 6-32S-5E	80	190	Cattle	2900	18	2	1	0	-	Yes
	9844	Yes	Bolack	R.R. Abderhalden	(W) Bolack W.F. Unit	---	21-32S-6E	150	16	Cattle	150	16	3	0	0	0	Yes
	17807	--	Box	K.T. Wiedemann Trust	(W) Melvin R. Stolp, Box Pool	Melvin R. Stolp	20,29-30S-7E	160	0	Miss	2854	30	8	0	0	0	Yes
	16770	--	Brandenburg	Aylward Drilling Company	(D) Brandenburg	Brandenburg	3-35S-3E	160	0	Miss	3355	3370	3	0	0	0	Yes
	16081	No	Branson	Gralapp and Everly	(W) Branson	Branson-Gralapp and Everly	29,32-32S-7E	150	-	Bartl	2900	20	6	-	0	-	Yes
	9593	--	Burden	Texaco, Inc.	(W) Burden Unit	N. Brewer, J.I. Lauppe A.S. Hill, N. Brewer, J. Fitzgerald, N. Brewer A. Sitton, E. Sitton, Hall-Higginbottom Unit, L. Higginbottom, C.C. Sitton, J.C. Ore, A.F. Sitton, Sisters of St. Joseph, O. Pierce, F. Weigle, R. Smith, B.J. Drury, Sanders, D.J. McMinn	19-31S-6E 20-31S-6E 29-31S-6E 31-31S-6E	1124	-	Bartl	2950	30	12	0	0	6	--
	16342	No	Burden	Wilson Drilling Co.	(P) Keesey-Blanchat	Keesey Blanchat Weigel	20-31S-6E 17-31S-6E 18-31S-6E	1040	0	Bartl	2820	80	13	0	4	0	Yes
	11853	No	Combs	Rex & Morris Drilling Co.	(W) Graham Unit	Graham Saxton Swain	5-30S-5E 7-30S-5E 8-30S-5E	160	0	Bartl	2875	25	2	0	0	0	Yes
	4028	No	Combs	Tomlinson Oil Co., Inc.	(D) Combs	Combs	5-30S-5E	40	0	Bartl	2830	9	3	2	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Source	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975					Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
5633	1	0	0	0	Irreg	75	90	Prod	-	-	T	1955	Wat	12/13	36	-	12,000	396,000	989	--	989	44,549	
13052	1	0	0	0	4-spot	250	65	Prod	-	-	U	1966	Wat	3/1	38	-	23,725	71,175	2,920	--	1,095	--	
13346	4	-	-	-	5-spot	350	230	Prod	-	-	F&T	1966	Wat	1/3	38	-	83,950	251,850	4,380	--	1,050	--	
	16	0	0	0													277,007	1,412,403	33,379	55,836	11,888	309,292	
2863	7	4	0	-	5-spot	300	30	Prod + KC	320	20	U	1952	--	--	26-	-	74,000	1,922,934	5,109	361,165	5,109	361,165	*Was Susmio Oil Co.
8745	1	9	0	0	Irreg	450	120	Prod	-	-	T	1961	S Gas	--	30.9	5.4	349,980	13,365,501	57,847	368,553	57,847	368,553	
	8	13	0	0													423,980	15,288,435	62,956	729,718	62,956	729,718	
17128	2	0	0	0	Irreg	0	96	Prod + L + KC	4,644	16	U	1973	S Gas	1/0	44	-	70,000	135,875	16,797	123,725	10,000	11,200	
10481	1	0	0	0	Irreg	50	150	Prod	-	-	U	1964	S Gas	1/1	39	-	54,750	321,925	13,437	275,582	5,000	17,600	
16740	2	0	0	0	Irreg	0	145	Prod+Layton	2,400	100	U	1963	Gas Exp	1/1	37	1.8	52,925	377,775	17,372	469,658	3,700	9,088	*Was Sun Oil Company
11121	1	-	0	-	Peri	125	280	Prod + Stal	1,899	-	U	1964	Wat	9/1	42	-	36,000	213,193	1,900	63,728	--	--	
5563 7358	3	0	-	-	Line	500	1010	Prod + Stal	1,000	75	U	1961	Gas Exp	4/1	39	-	213,000	9,231,165	1,467	326,071	0	0	
9844	2	0	0	0	Line	300	200	Prod + Lay	1,900	80	T	1963	S Gas	5/2	37	8	146,000	3,655,964	6,036	367,443	6,036	367,443	
17807	1	0	0	0	--	0	240	Prod	-	-	U	1975	--	14/165	39	-	59,045	171,677	6,051	293,751	--	--	
16770	1	0	0	0	Irreg	Vac	67	Prod	-	-	T	1973	S Gas	16/31	35	-	24,340	54,315	5,045	125,937	2,200	6,883	
16081	3	0	0	1	Irreg	189	100	Prod	-	-	T	1970	--	1/1	39	-	35,870	286,612	14,600	850,929	--	--	
9593	5	3	0	15	5-spot	780	299	Prod	-	-	-	1963	S Gas	217/93	38	-	546,406	27,155,723	32,787	1,311,490	32,787	1,017,494	
16342	2	0	0	0	Irreg	450	350	Prod	-	-	T	1968	Gas Exp	10/1	38.4	-	125,000	1,283	34,125	259,625	5,000	35,000	
11853	1	0	0	0	Irreg	140	180	Prod	-	-	U	1965	S Gas	3/11	40	-	65,700	--	4,875	233,774	--	--	
4028	1	2	0	0	Peri	375	275	Prod	-	-	U	1954	S Gas	--	40	-	100,244	746,373	2,700	403,410	2,700	106,359	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone			Oil producing wells (1975)			Has inj. been continuous?	
							S - T - R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
COWLEY COUNTY (cont.)																	
	16269	--	Daniels	Lee Phillips Oil Company	(P) Daniels Flood Project	Knowles	7-30S-5E	100	0	Bartl	2950	40	6	0	0	2	Yes
	16632					Holt	8-30S-5E										
	16403	--	David	American Petrofina Co. of Texas*	(P) Kurtz	Kurtz	26-30S-4E	80	0	Bartl	2945	16	1	0	0	0	Yes
	8007	--	David	Gear Petroleum Co.	(W) North David Unit	--	25,26-30S-4E	273	-	Bartl	2975	18	4	0	0	4	Yes
	7478	--	Deichman	Betty Blair	(D) Deichman	--	24-31S-4E	142	-	Bartl	2825	12	1	1	-	-	Yes
	5535	No	Eastman	The Buckeye Corporation Aztec Oil Co., Division	(W) Eastman	Eastman	6-31S-6E	60	0	Bartl	2816	62	0	1	0	0	No
	13509	--	Estep	Texaco Inc.	(P) C.W. Estep	C.W. Estep	21-34S-6E	160	-	Stal	1802	16	1	0	0	0	Yes
	7841	--	Estes	Texaco Inc.	(P) G.O. Brooks	G.O. Brooks,	1-32S-6E	560	-	Cott Gr	2136	12	4	1	0	1	Yes
						M.M. Spangler,	6-32S-7E										
						E.G. Jabara	6,31-32S-7E										
	16839	No	Estep West	Clyde M. Becker	(P) --	Dunn,	19,20-34S-6E	400	-	Miss	3100	16	6	0	2	-	Yes
						Potter,	20-34S-6E										
						Goatley	29-34S-6E										
	5863	No	Frog Hollow	E.T. Lindsay Estate*	(D) J.W. Gardner	J.W. Gardner (Eastman)	16-32S-5E	80	-	Bartl	3040	60	3	2	-	-	Yes
	7136	No	Frog Hollow	Phillips Petroleum Co.	(W) Lena Lease	Lena	17-32S-5E	25	0	Bartl	3035	25	4	0	0	0	Yes
	14230	Yes	Frog Hollow East	Merlin Hickman	(P) East Frog Hollow Unit	Josephine Devore,	11-32S-5E	427	0	Bartl	3000	13	5	-	-	1	Yes
						Glenn Miller,	12-32S-5E										
						T.E. Allen, C.L. Miller et ux,	14-32S-5E										
						G.F. Miller et ux, R.H. Miller,	15-32S-5E										
						et ux, Mabel C. Miller											
	3549	No	Geuda Springs	Earl F. Wakefield, Inc.	(D) Hower	Hower	32-33S-3E	40	0	Bartl	3300	34	1	0	0	0	Yes
	4538	--	Gibson	McNeish Oil Operations	(W) Wilson	Wilson	29-34S-3E	40	10	Bartl	3380	18	1	0	0	0	Yes
	15017	No	Graham	Berger Oil Co.*	(W) --	Nixon - West	10-33S-3E	100	-	Miss	3241	10	3	0	0	0	Yes
										Chat							
	13495	No	Graham	Crest Petroleum Inc.	(W) Bradbury-Miller	Bradbury	10-33S-3E	273	0	Miss Ch	3255	30	10	-	-	1	Yes
						Miller, Wright "A"	15-33S-3E										
	15536	Yes	Graham	Crest Petroleum Inc.	(W) Crest Graham Unit	Myer, Trego	1-33S-3E	680	0	Miss Ch	3233	26	16	0	0	0	--
						Trego, Kroth, Dobbins, L. Whitson,	12-33S-3E										
						Myer,	6-33S-4E										
						C. Whitson, Crane	7-33S-4E										
	16280	No	Graham	Crest Petroleum Inc.	(-) Nelson	Nelson, Winters	2-33S-3E	80	0	Miss Ch	3268	30	4	0	0	0	Yes
	16692	--	Graham	Crest Petroleum Inc.	(P) Wright "B"	Wright "B"	10-33S-3E	80	0	Miss Ch	3251	16	2	0	0	0	--
	8938	No	Graham	Earl F. Wakefield, Inc.	(P) Boyles	Boyles	11-33S-3E	160	0	Bartl	3275	15	4	0	0	1	Yes
	4843	--	Harvey	Aylward Drilling Company	(D) Harvey Unit	Harvey Lease	23-34S-3E	10	9	Bartl	3278	20	1	0	0	0	Yes
	14142	--	Harvey	Aylward Drilling Company	(P) Fussell Water Flood	Fussell, Pearson	14-34S-3E	80	0	L - KC	2839	6	3	0	0	0	Yes
	4536	--	Harvey	McNeish Oil Operations	(W) Snyder	Snyder	15-34S-3E	40	-	Bartl	3270	18	3	0	0	0	Yes
	16022	--	Higby	Landers & Musgrove*	(P) Higbee-Woods	Higbee, Woods	31-34S-6E	320	-	Miss Ch	3156	44	2	0	0	0	Yes
	6722	--	McKay	W.J. Lamberton	(W) McKay	Bergkamp Lease,	6-35S-4E	150	60	Bartl	3300	25	10	-	31	11	Yes
						Broce Lease,	7,8-35S-4E										
						Klink "A" Lease, Klink "B" Lease	8-35S-4E										
	14558	--	Maddix North	Roger M. Wheeler	(W) North Maddix Unit	Andes A, Andes B,	1-33S-5E	240	0	Miss	3000	15	19	2	0	0	Yes
	14880					Yadon,	2-33S-5E										
						Maddix,	11-33S-5E										
						Andes, Rockwell, Richardson, Groene,	12-33S-5E										
						Jarvis	4-33S-5E										
	17596	Yes	Murphy	Stelbar Oil Corp.	(W) Jones	Jones, Collinson, McLaughlin,	30-34S-3E	880	-	Bartl	3395	20	20	0	0	0	Yes
						Weir,											
						McMillin, Peters	31-34S-3E										
	10928	--	Posey	Moran Oil Company*	(W) Muret Lease	Muret	21-33S-4E	160	0	Miss	3150	10	4	0	0	0	Yes
	3427	--	Rahn	Rance Arnold*	(D) --	Jesse Rahn	13-34S-5E	100	0	Bartl	2900	20	1	1	0	0	Yes
	2844	--	Rahn	Landers & Musgrove*	(-) Rahn Unit	Rowe,	6-34S-5E	200	0	Bartl	2900	22	6	0	0	0	Yes
						Thompson, W. Kavanaugh,	7-34S-5E										
						D. Kavanaugh,											
						Waltschmidt	12-34S-5E										
						George Rahn	13-34S-5E										

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
16269	1	0	0	0	Irreg	50-	875	Prod	-	-	U	1971	S Gas	12/79	39	-	318,645	0	15,915	146,012	0	0		
16632						150																		
16403	1	0	0	0	Irreg	0-Vac	1.2	Prod	-	-	U	1972	S Gas	1/4	30.9	-	440	30,152	70	104,716	0	0	*Was The El Dorado Refining Co.	
8007	2	1	0	5	Irreg	400	137	Prod + Stal	1950	100	U	1960	S Gas	2/1	39	-	50,005	6,657,889	3,652	801,624	3,652	--	--	
7478	1	-	-	-	Irreg	0	50	Prod	-	-	U	1961	Grav	3/7	39	-	40,000	--	1,000	--	--	--	--	
5535	0	1	0	0	--	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
13509	1	0	0	0	Irreg	Vac	182	Prod	-	-	-	1967	S Gas	48/9	41	-	66,431	250,391	7,204	119,539	5,184	89,286		
7841	1	1	0	0	Irreg	Vac	226	Prod	-	-	U	1961	Wat	-	38.2	-	82,540	--	4,322	--	0	--	--	
16839	1	-	0	-	Irreg	0	75	Prod	-	-	U	1973	--	17/20	40	-	27,375	46,250	14,422	48,726	0	0		
5863	1	-	-	-	Irreg	Grav	500	Prod + Stal	2000	45	T	1969	S Gas	-	38	-	182,500	935,231	1,627	--	1,627	4,989	*Was E.T. Lindsay	
7136	1	0	0	0	5-spot	0	169	Prod	-	-	U	1959	Wat & S Gas	1/5.6	41	5	61,732	894,518	7,163	118,125*	7,163	117,962	*Since 3-1-59	
14230	1	-	-	0	Irreg	Grav	30	Prod	-	-	U	1968	Gas Exp	-	38	-	50,000	--	5,075	--	--	--	--	
3549	1	0	0	0	Irreg	0	400	Prod	-	-	T	1954	S Gas	-	39	-	146,000	2,769,000*	1,174	68,861	587	34,430	*Since 1954	
4538	1	0	0	0	5-spot	0	1	Prod	-	-	U	1959	S Gas	-	35	-	365	1,393,913	1,353	103,114	1,353	103,114		
15017	1	0	0	0	Line	0	38	Prod + Layton	2550	75	U	1969	Gas Exp	1/2	41	-	13,870	102,672	9,315	62,621	9,315	62,621	*Was Maggard Oil & Jenkins-Ray	
13495	5	1	0	0	Peri	Vac	60	Prod + Stal	2190	50	T	1967	S Gas	5/7	41	-	109,500	1,493,270	13,602	169,598	13,602	169,598		
15536	6	0	0	0	Peri	Vac	72	Prod + Stal	2180	68	T	1970	S Gas	43/50	40	-	157,680	1,197,392	23,441	112,504	23,441	112,504		
16280	1	0	0	0	3-spot	Vac	90	Prod	-	-	T	1971	S Gas	9/50	40	-	32,850	168,795	6,842	23,565	6,842	23,565		
16692	1	0	0	0	Line	Vac	43	Prod	-	-	T	1972	S Gas	1/5	41	-	15,695	50,964	2,960	13,942	2,960	13,942		
8938	1	0	0	0	Irreg	0	60	Prod	-	-	U	1961	S Gas	-	40	-	87,000	1,504,100*	3,082	120,615*	770	30,153*	*Since 1961	
4843	1	0	0	0	Irreg	Grav	130	Prod	-	-	T	1961	Grav	1/1	37	-	47,450	192,520	1,881	44,915	1,881	44,230		
14142	1	0	0	0	Irreg	200	16	Prod	-	-	T	1968	S Gas	-	37	-	6,000	182,050	5,008	133,716	5,008	21,819		
4536	2	0	0	0	Irreg	0	10	Prod + Arkansas River underflow	8	20	F	1955	S Gas	-	38	-	3,650	1,120,752	2,337	148,997	2,337	148,997		
16022	1	0	-	0	Irreg	180	270	Prod	-	-	T	1971	S Gas	2/5	37	-	98,550	323,550	2,555	45,855	1,277	36,684	*Was Maggard Supply	
6722	10	-	-	-	Line	200	100	Prod + Arkansas River	10	26.5	F	1959	S Gas	1/0	40	-	350,000	--	12,049	--	12,049	--	--	
5328																								
14558	4	0	0	0	Irreg	340	345	Prod + Stal-	2062	35	T	1969	S Gas	47.2/20.9	38	20	503,551	2,652,422	49,119	958,523	42,699	175,012		
14880								naker																
17596	2	0	0	0	4-spot	Vac	900	Prod + Stal-	2400	150	U	1974	S Gas	--	40	-	657,000	801,000	7,632	18,854	--	--	--	
								naker																
10928	1	0	0	0	Irreg	160	250	Prod+Stalnaker	2000	70	U	1964	S Gas	1/1	42	-	91,250	783,791	6,637	85,074	6,637	85,074	*Was Bedell-Catt Drlg. Co.	
3427	1	1	-	0	Irreg	20	300	Prod + Elgin Sd	1220	25	U	1952	S Gas	--	36	-	108,000	--	2,536	--	2,536	--	--	*Was B.B. Blair
2844	3	-	-	-	Line	0	455	Prod	-	-	U	1952	S Gas	1/0	37	-	155,125	2,569,125	7,380	756,480	5,535	756,480	*Was Jenkins & Ray	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
COWLEY COUNTY (concl.)																
3386	Yes	Rahn	W.D. Short*	(W) Rahn Unit I	Rahn Unit I, Cox, Berry, Waldschmidt	32-33S-6E	150	130	Bartl	3100	15	0	3	0	0	Yes
7468	--	Rainbow Bend West	George R. McNeish Oil Operations	(W) Rainbow Bend West Unit	Hesket, Holman, Nelson	19-33S-3E	-	-	Bartl	3180	12	4	2	0	0	Yes
3239	--	Rainbow Bend	Mead Production Co.	(D) Hunt Rainbow Bend Unit	J.U. Hunt	16-33S-3E	50	80	Bartl	3200	20	2	0	0	0	Yes
9696	--	Rainbow Bend	S & G Oil Company, Inc.	(D) J.U. Hunt	J.U. Hunt	16-33S-3E	365	0	--	-	-	1	2	0	0	Yes
6330	--	Rainbow Bend	S & G Oil Company, Inc.	(D) J.U. Hunt	J.U. Hunt	16-33S-3E	365	0	--	-	-	1	2	0	0	Yes
2918	--	Rainbow Bend	S & G Oil Company, Inc.	(D) J.U. Hunt	E.E. Hunt	21-33S-3E	365	0	--	-	-	1	2	0	0	Yes
2999	Yes	Rainbow Bend	W.D. Short*	(W) West Rainbow Bend	West Rainbow Bend Unit	20-33S-3E	300	0	Bartl	3150	30	10	0	1	0	Yes
15895	Yes	Rock	Steve Cowan*	(D) Rock Unit 1	Rock Unit 1	11-30S-4E	80	340	Bartl	2703	20	1	0	0	0	Not
3085	--	Rock	Stelbar Oil Corp.	(-) Rock Unit	Gamble Stelbar, Apco, Mobil Starkey	1-30S-4E 14, 15-30S-4E 16-30-4E	760	600	Cattle	2750	20	4	10	0	0	Yes
12366	Yes	Rock	Stelbar Oil Corp.	(W) Rock North	Shawver, Hornaday Daves, Davis	10-30S-4E 9-30S-4E	-	-	Cattle	2800	20	14	4	1	0	Yes
6951	--	School Creek North	Petroleum Enterprises	(P) --	Beamer, Davis	10-32S-7E	60	-	Layton	2140	30	15	-	1	-	Yes
6985	--	School Creek North	Petroleum Enterprises	(P) --	Miller Barger	11-32S-7E 3-32S-7E	-	-	Layton	2021	15-25	7	-	2	-	Yes
9056	Yes	Shannon	Lewis Operating	(W) Shannon Unit	--	23, 27, 35-31S-5E	1000	1000	Lay A	2360	11	19	28	56	9	Yes
8457	--	Stayton South	S.J. Roark*	(D) --	A.R. Husted	5-33S-4E	-	0	Bartl	3200	-	3	0	4	0	No
10811	Yes	Trees	Braden-Deem, Inc.	(W) Trees Waterflood	Tract 1, 2 & 3 Tract 4, 5 & 6	30-30S-4E 19-30S-4E	200	80	Bartl	2860	12	4	5	0	0	Yes
17207	--	Turner North	Hammer & Maclean	(D) Hammer	Hammer	18-32S-6E	160	-	Bartl	2800	75	8	-	-	-	Yes
16946	No	Waldschmidt	Crest Petroleum Inc.	(P) Waldschmidt-Rahn	Rahn	7-34S-6E	720	0	Miss	3065	20	7	0	1	0	Yes
8340	No	Werner	E.T. Lindsay Estate*	(D) Feaster Unit	Waldschmidt Cranston, Feaster, Kadau, Wahlenmaier-Turner	7, 8-34S-6E 30-32S-6E	240	40	Layton	2240	7.2	8	1	-	-	Yes
15713	Yes	Wilmot-Floral	Dawson-Markwell Expl. Co.	(W) Nora King Unit	Nora King Aubry Peters, W.J. Pendergraft, John Jarvis	20-31S-5E 17-31S-5E	460	60	Bartl	2884	12	4	1	0	0	No
18069	--	Wilmot-Floral	Dawson-Markwell Expl. Co.	(P) North Winfield Lake	Drake, Stuber, Meyer, Groom, Gordon	28, 32, 33-30S-5E 4, 5-31S-5E	2040	0	Miss Dol	2925	33	2	1	4	1	Yes
8785	--	Winfield	H.H. Blair Oil Co.	(D) --	Lorton	25-32S-4E	160	-	Layton	2800	20	5	-	-	-	No*
1857	No	Winfield	Gulf Oil Corporation	(D) M. Shannon	M. Shannon	24-32S-4E	30	0	Bartl	2930	-	3	6	0	0	Yes
9975	No	Winfield	Earl F. Wakefield, Inc.	(D) B.G. Thirsk	B.G. Thirsk	26-32S-4E	80	0	Bartl	2900	7	5	0	0	0	Yes
COWLEY COUNTY TOTALS (Reported)							16,779	2,746				359	81	107	37	

COWLEY-ELK COUNTIES

18027	--	Grand Summit	Petroleum Enterprises	(P) --	Denton, Ferguson	3, 4-31S-8E	-	-	Miss	1927	20	7	-	1	-	Yes
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COFFEY-GREENWOOD COUNTIES

10543	Yes	Dunaway	Larry Moore Ranch, Inc.	(W) R.W. Young	R.W. Young	22-22S-13E	20	30	Burgess	1800+	12	3	-	1	1	Yes
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CRAWFORD COUNTY

14980	--	Farlington	G.N. Babcock	(P) --	Granneman	3-28S-23E	40	0	Peru	180	15	6	0	1	0	No*
11453	--	Farlington	Walter Duncan	(W) Burge	Burge NW	2-28S-23E	85	0	Peru	175	20	30	1	0	0	Yes
9856	--	Farlington	Wel-Kan Oil Co.	(W) Holtman	Esther M. Holtman	2-28S-23E	60	0	Peru	160	20	25	0	0	0	Yes
17959	No	McCune	MOCO Oil Co., Inc.	(W) George Samp	George Samp	7-31S-22E	240	-	Bartl	202	10-12	6	-	0	-	No*

► See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
3386	1	5	0	0	Irreg	150	650	Layton	2100	100	U	1945	Gas Exp	10/1	40	0	237,250	--	--	1,158,222	--	1,158,222	*Was Continental Oil Co.
7468	2	2	0	0	Peri	0	375	Prod + Ark River underflow	16	20	F*	1960	S Gas	-	40	-	137,123	3,779,266	4,135	231,586	4,135	231,586	*In separate wells
3239	1	1	-	-	Irreg	0	150	Prod	-	-	U	1952	Wat & Gas Exp	3/2	41	-	55,000	2,161,800	4,535	307,584	--	--	
9696	1	0	0	0	Irreg	300	1300	Prod	-	-	U	1957	--	-	40	-	270,150	4,150,078	5,403	--	5,403	342,631	
6330	1	1	0	0	Irreg	0	1400	Prod	-	-	U	1952	Gas Exp	10/1	41	2.5	511,000	47,511,000	19,940	2,500,000	10,815	2,510,815	*Was Sun Oil Company
2918	1	0	0	0	Irreg	0	15	Prod	2703	20	U	--	Grav	-	38-	-	4,500	--	--	--	--	--	*Was CRA Inc.
2999	1	1	0	0	Irreg	0	15	Prod	2703	20	U	--	Grav	-	38-	-	4,500	--	--	--	--	--	+Disposing produced water
15895	1	0	0	0	Irreg	0	15	Prod	2703	20	U	--	Grav	-	38-	-	4,500	--	--	--	--	--	
3085	2	14	0	0	Line	650	158	Prod	-	100	T	1951	S Gas	-	38	-	115,651	28,662,399	9,514	--	9,514	1,275,527	
12366	7	5	0	0	Line	760	660	Prod + Stal-naker	1800	100	T	1966	S Gas	-	39	-	1,697,790	10,106,736	116,374	1,383,677	116,374	783,679	
6951	3	-	-	-	Irreg	250	280	Prod	-	-	U	1963	--	-	40	-	306,000	--	16,889	--	--	--	
6985	3	-	-	-	Line	250	150	Prod	-	-	T	--	S Gas	-	38	-	163,250	--	10,630	--	--	--	
9056	7	0	7	0	Peri	470	650	Prod + Stal-naker	1950	30	M	1962	S Gas	5/1	42	4.3	1,619,315	23,163,820	106,522	5,722,958	106,522	5,722,958	
8457	-	-	-	-	Line	-	370+	--	-	-	-	--	--	-	-	-	135,050	--	2,190	--	--	--	*Was Laura Jane Oil Co.
10811	1	3	0	0	Irreg	1100	364	Prod + Ground Water	32	10	M	1964	S Gas	10/1	40	60	132,745	1,934,531	6,473	344,990	6,473	344,990	+Put in return only
17207	1	-	-	-	Irreg	-	355	Prod	-	-	U	1975	Grav	3/17	37	-	60,365	60,365	6,626	6,626	--	--	
16946	1	0	0	0	4-spot	Vac	6	Prod	-	-	-	1973	S Gas	1/2	38	-	2,190	6,590	10,318	26,066	0	0	
8340	3	-	-	-	Irreg	Grav	250	Prod + KC Lm	2450	6	T	1961	S Gas	-	37	-	91,250	598,680	13,490	--	2,056	12,869	*Was E.T. Lindsay
15713	3	1	0	0	Irreg	300	200	Prod + Miss Ch	3000	20	T	1970	S Gas	10/1	40.5	5	265,000	470,303	11,338	59,770	--	--	
18069	1	-	1	-	Irreg	10	100	Prod	-	-	U	1975	Wat	3/5	-	-	1,500	1,500	3,819	3,819	--	--	
8785	-	-	-	-	Irreg	0	-	--	-	-	-	1961	Grav	2/3	36	-	130,000	--	4,000	--	--	--	*Irregular
1857	1	0	0	0	Irreg	-	-	Prod	-	-	U	1948	S Gas	10/29	41	-	5,658	753,971	7,488	--	0	0	
9975	1	0	0	0	Peri	20	23	Prod	-	-	T	1963	Wat	-	38	-	41,975	752,735*	1,932	66,161	483	16,540	*Since 1963
	122	41	8	21													11,525,806	197,900,949	739,951	21,476,405	493,365	16,467,716	
18027	2	-	-	-	Irreg	250	50	Prod	-	-	-	1975	--	-	32	-	600	--	659	--	--	--	
10543	1	3	0	3	Irreg	225	300	*	-	-	U	1963	Grav	4/1	37	-	109,500	1,989,250	4,713	209,264	4,713	209,264	*Returned produced water
14980	4	3	0	0	Irreg	180	15	Prod + Miss	628	67	-	1967	Gas Exp	-	29	19	16,000	111,500	900	5,280	--	--	*Purchased water
11453	27	0	0	0	5-spot	180	22.5	Prod + Miss	628	67	-	1965	--	-	31.8	18.9	206,381	1,465,226	5,201	123,424	5,201	--	--
9856	18	0	0	0	5-spot	175	15	Prod + Burgess	610	7	F	1962	*	-	31.5	18.9+	97,000	1,265,650	5,571	138,044	--	--	*WF from beginning
17959	4	3	-	-	Irreg	80-100	-	Prod + Arb (Fresh)	-	-	F	1958	Wat & S Gas	-	29	-	--	--	320	--	--	--	*Intermittent

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
CRAWFORD COUNTY (concl.)																
7487	--	Walnut Southeast	Roy Fultz	(W) Wentjen	Wentjen	27-28S-22E	40	0	Bartl	390	15	6	-	-	-	No*
3105	No	Walnut Southeast	Morris Stephens *	(W) Walnut Water Flood	Engel	28-28S-22E	205	-	Bartl	370	12	43	2	1	-	Yes
4926	--	Walnut-St. Paul	Jerry Phillips	(W) Guy	Guy	22-22S-18E	80	-	Bartl	380	10	15	0	0	0	No*
CRAWFORD COUNTY TOTALS (Reported)							750	0				131	3	2	0	
DECATUR COUNTY																
15099	--	Adell Northwest	Continental Oil	(W) Adell NW	Adell, NW	26,27,34, 35-5S-27W	333	0	L - KC	3703	23	8	2	-	-	Yes
15829	--	Altory	Raymond Oil Company, Inc.	(W) Steffen	Steffen	34-3S-27W	60	-	L - KC	3520	32	2	-	-	-	Yes
17018	No	Blees	A.L. Abercrombie, Inc.	(D) Blees	Blees, Huff "B" #1 Blees "A"	8-1S-26W 5-1S-26W	390	50	L - KC	3250	10	3	0	0	0	Yes
10845	Yes	Decatur Center	Halliburton Oil Producing Company	(W) Decatur Center Unit	Witt	16-3S-28W 21-3S-28W	800	20	L - KC	3744	30	6	0	0	0	Yes
8190	--	Jennings	Texaco Inc.	(W) Jennings	E.B. Jennings, M. Tacha, R.L. Skubal, E.J. Keenan, Keenan Noone, M.T. Munson	25-4S-27W	614	-	Howard-Lans	3715- 3500	8.7	10	2	0	0	Yes
15013	No	Jording	Halliburton Oil Producing Company	(P) Jording A	Jording	23-2S-30W 14-2S-30W	640	40	L - KC	3847	25	6	0	0	0	Yes
17441	Yes	Olive	John O. Farmer, Inc.	(-) Olive Flood	Barrett	14-2S-28W 12-2S-28W	480	-	L - KC	3468	5	4	-	0	1	Yes
16181	Yes	Paddock	Donald C. Slawson	(W) Paddock Unit	Anna Miller, Reeves Paddock Unit	28,29,32, 33-2S-28W	740	0	L - KC	3600	4	8	0	0	0	Yes
17588	No	Petracek	Okmar Oil Co.	(W) Petracek	Petracek	9-4S-27W	320	0	L - KC	3559	15	2	0	0	0	Yes
7653	Yes	Pollnow	Rocket-Schusterman Oil Account	(W) Pollnow Unit	Pollnow Unit	3,4,5,8, 9-3S-29W	740	410	Lans B	3740	4	6	1	0	0	Yes
14949	No	Pollnow	Shenandoah Oil Corp.*	(D) Amanda-Pollnow	Amanda Pollnow Rogers	5-3S-29W 5,6-3S-29W 36-2S-30W	200	-	KC	3750	4	5	-	-	-	Yes
13755	Yes	Vavroch	Halliburton Oil Producing Company	(W) Vavroch	Vavroch	33-3S-28W 4-4S-28W	320	80	L - KC	3808	25	4	2	0	0	Yes
12401	--	Warner	Cities Services Oil Company	(W) Warner Unit	Warner Unit	1,2,11,12-1S-27W	220	0	L - KC	3226	12	9	2	0	1	Yes
DECATUR COUNTY TOTALS (Reported)							5,857	600				73	9	0	2	
DICKINSON COUNTY																
15080	No	Lost Springs	Frank Jones Oil Operations	(P) Lost Springs	Wm Martin B	34-16S-4E	320	20	Miss	2280	20	9	0	0	0	Yes
DOUGLAS COUNTY																
12705	--	Baldwin	James E. Russell Petroleum, Inc.	(W) Baldwin Unit	Baldwin Unit	36-14S-20E 2-15S-21E 2-15S-20E	120	0	Squirrel	800	18	15	3	2	0	No*
6934	No	Baldwin	Russell Hays	(D) Smith-Danley	--	9-15S-20E	7	-	Squirrel	820	10	2	1	0	0	Yes
DOUGLAS COUNTY TOTALS (Reported)							127	0				17	4	2	0	
DOUGLAS-FRANKLIN COUNTIES																
8295	No	Baldwin	Layton Oil Company	(W) Baldwin Flood	N & S Finnerty, Bell Broers, Higbie Williams	14-15S-20E 23-15S-20E 24-15S-20E	157	0	Squirrel	820	24	23	0	0	0	Yes
EDWARDS COUNTY																
6178	No	Enlow	Messman-Rinehart Corporation*	(D) Hahn A	Hahn A	4-24S-16E	100	0	L - KC	3740	6	1	1	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
7487	0	-	0	-	--	320	3	Prod + Arb	-	125	M	1968	Grav	3/1	28	38.3	0	400	--	--	0	--	*Need to replace water line
3105	59	-	1	-	7-spot	370	7	Prod + Arb	950	-	F	1959†	Grav	-	28	-	150,745	2,981,930	6,100	216,122	6,100	216,122	*Was General American Oil †Pilot 1951
4926	5	0	0	0	5-spot	400	10	Prod	-	-	U	--	Wat	-	30	-	--	--	--	--	--	--	*Winter
	117	6	1	0													470,126	5,824,706	18,092	482,870	11,301	216,122	
15099	4	9	-	-	Irreg	500	516	Prod + Cedar Hills	1900	40	U	1970	S Gas	-	34.7	-	753,680	4,454,897	64,040	478,299	64,040	405,014	
15829	1	-	-	-	Irreg	600	203	Prod + Stray	62	-	M	1971	S Gas	1/0	34	-	80,267	332,315	3,695	36,897	3,695	36,897	
17018	2	1	0	0	Irreg	1200	240	Prod + Cedar Hills	1608	100	U	1973	S Gas	-	32.2	-	174,981	352,779	8,521	114,048	5,500	10,338	
10845	3	0	0	0	Line	1220	324	Prod + Cedar Hills	2150	70	T&S	1964	S Gas	2/1	36	16.7*	355,214	1,218,253	42,186	567,873	8,000	24,006	*@40°
8190	2	4	0	2	Irreg	1350	316	Prod + Cedar Hills	1680	-	U	1961	S Gas	51/177	37	-	230,420	7,171,821	27,257	629,014	27,257	411,367	
15013	1	0	0	0	Irreg	350	47	Prod	-	-	T	1970	S Gas	19/1	34	-	17,000	89,788	2,878	77,811	1,400	3,500	
17441	1	-	-	-	Irreg	800	300	Prod + Cedar Hills	1420	100	U	1974	Grav	-	37	-	105,615	187,165	29,752	42,119	14,000	18,000	
16181	4	0	0	0	Irreg	1650	173	Prod + Chey	1520	20	T	1971	S Gas	1/1	35.5	4EST	250,860	885,330	31,308	369,701	23,553	86,600	
17588	1	0	0	0	Peri	-	-	Prod + Tor	3500	5	U	1974	S Gas	21/65	34	-	32,266	36,651	8,567	142,444	916	916	
7653	2	0	0	0	--	1130	901	Prod + Dak	1425	25	M	1960	S Gas	0/1	38	-	328,903	4,055,677	12,194	815,583	12,194	385,498	
14949	1	-	-	-	Irreg	Vac	90	Prod	-	-	T	1969	S Gas	5/1	35	-	32,850	64,474	7,357	125,435	--	--	*Was Solar 8112
13755	3	1	0	0	Line	1250	378	Prod + Cedar Hills	2120	80	T&S	1968	S Gas	4/1	36	16.7*	413,442	3,329,070	63,462	1,290,264	63,462	195,025	*@40°
12401	7	1	0	0	Irreg	1097	150	Prod + Chey	1265	-	T	1966	S Gas	97/60	34	-	381,430	4,049,089	26,877	838,922	26,877	322,362	
	32	16	0	2													3,156,928	26,227,309	328,094	5,528,410	253,894	1,899,523	
15080	1	0	0	0	Irreg	0	100	Prod	-	-	T	1969	Grav	1/9	35	-	36,500	--	6,834	--	0	--	
12705	0	5	0	5	5-spot	0	0	Prod + Roubidoux	1900	-	T&S	1966	S Gas	0	26	80	0	80,400	1,579	43,098	0	17,649	*Injection began Jan.1976
6934	1	1	0	0	Irreg	Grav	-	Prod	-	-	U	1959	S Gas	-	27	-	--	--	1,702	--	1,400	11,940	
	1	6	0	5													0	80,400	3,281	43,098	1,400	29,589	
8295	20	0	0	0	Line	670	60	Sand	60	40	F	1964	S Gas	1/8	26	52.6	416,100	5,551,543	19,741	384,860	19,741	384,860	
6178	1	1	0	0	Irreg	Grav	15	Prod	-	-	U	1958	Wat	-	31	-	4,875	1,288,288	2,075	192,036	2,075	69,331	*Was Natural Gas & Oil Co.

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
ELK COUNTY																
16218	No	Bush-Denton	Perkins Oil Co.	(D) Clad Criger	Clad Criger	34-29S-9E	80	-	Miss 1m	2289	52	1	-	0	-	Yes
5118	No	Bush-Denton	Perkins Oil Co.	(D) --	Kyser "A"	10-30S-9E	200	-	Miss 1m	2375	29	9	-	1	-	Yes
16219					Kyser "B"	9,10-30S-9E										
15543																
16604	No	Dory	Ashlock & Ashlock*	(D) Cory Lease	Cory Lease	17,18,19-30S-9E	760	-	Miss 1m	2650	+	2	-	-	-	Yes
15710	No	Hale-Inge	Traverse Corporation	(W) Howell-O'Neal Pilot Waterflood	Howell O'Neal Kimzey	27-31S-12E 34-31S-12E 27-31S-12E	110	0	KC Stray	1950 695	14	0	0	18	0	No*
11830*	No	Key	W.N. Huffine	(D) E.D. Spease Lease	--	25-31S-10E	160	-	Peru (Wiser)	1650	40	3	1	0	0	No
10390	--	Moline	W.R. Gross	(D) Moline	M. Eyman	9-31S-10E	160	-	Miss	2003	17	2	0	0	0	Yes
11214	--	Schrader	Aladdin Petroleum Corp.	(P) Schrader	Schrader NW	12-31S-8E	160	0	KC	1650	40	12	0	0	0	Yes
16500	--	Webb	BMG, Inc.	(D) Durbin Lease	--	23-31S-10E	10	-	KC	2356	10	3	-	-	-	Yes
17042	No	Webb	Tomlinson Oil Co., Inc.	(D) Durbin	Durbin	13-31S-10E	80	0	Miss	1937	10	8	1	0	0	Yes
ELK COUNTY TOTALS (Reported)							1,720	0				40	2	19	0	
ELLIS COUNTY																
10613	--	Air Base	American Petrofina Co. of Texas	(W) Pratt	Pratt Airbase	27-13S-6W	80	15	Gorham	3460	15	6	0	0	0	Yes
16340	--	Air Base East	Hinkle Oil Co.	(W) Air Base East	Brungardt "A", Brungardt "B", Leiker East	25-13S-16W	200	0	L - KC	3400	15	4	0	0	0	Yes
17768	No	Antonino Southwest	Murfin Drilling Company*	(P) Feitz W.F.	Murfin Drlg. - Feitz	34-14S-19W	160	0	L - KC	3592	3	3	0	0	0	Not
12629	Yes	Beeching	Icer Addis	(W) Beeching Waterflood Unit	Beeching, Daisy, Gorham, Sarah	34,35-15S-16W	800	-	L - KC	3330	15	3	0	0	0	Yes
16660	--	Bemis-Shutts	Continental Oil	(W) Warren Mtge. Inv. Co.	Warren Mtge. Inv. Co.	3-11S-18W	20	0	L - KC	3322	131	8	0	-	-	Yes
11239	--	Bemis-Shutts	Fell & Wolfe Oil Co.*	(D) Pearl Cress	Pearl Cress	13-11S-17W	80	-	L - KC	3068	12	2	0	0	0	Yes
12116	No	Bemis-Shutts	Lario Oil & Gas Company	(P) Henderson "E"	Henderson "E"	22-11S-18W	80	0	L - KC	3100	-	3	0	0	1	No*
12788	No	Bemis-Shutts	Lario Oil & Gas Company	(P) Henderson "E"	Lario-Henderson "E", Sohio-Henderson "A"	22-11S-18W	160	0	Arb Topeka	3520	-	2	0	0	0	Yes
12976	No	Bemis-Shutts	Okmar Oil Co.	(W) Lynn-Henderson	Lynn A, Lynn B, Lynn C, Lynn D, Lynn E, Henderson	23-11S-18W	400	0	L - KC	3350	5	3	0	0	0	Yes
14315	Yes	Bemis-Shutts	Petroleum, Inc.	(W) Bemis Shutts L-KC Unit	Reeder #4, #5, #6, #8 Jensen "C" #1, #3 Truan "A" #1	22-12S-18W	200	0	L - KC	3404	7	5	0	0	0	Yes
12769	--	Bemis-Shutts	Shade and Berry	(-) --	Henderson 1-E	27-12S-18W 15-11S-18W	40	-	L - KC	3132	10	3	-	-	-	Yes
11621	--	Bemis-Shutts	Sierra Petroleum Co., Inc.	(D) Schmeidler "E"	Schmeidler "E"	8-12S-17W	160	0	L - KC	3340	224	2	0	0	0	Yes
15294	No	Bemis-Shutts	Sohio Petroleum Company	(W) Bemis "I" Lease	Bemis "I" Lease	4-12S-17W	80	0	Arb	3560	-	3	0	0	0	Yes
16345	--	Bemis-Shutts	Sun Oil Company	(W) Bemis Co-op Waterflood	Sun-Hadley "A", Phillips-Sites, Sun-Jorgensen	12-11S-18W 7-11S-17W 13-11S-18W	960	0	L - KC	2950	20	26	0	0	0	Yes
16346					Sun-Hadley "BC" & Peavey "A"											
16347					Phillips-Hendricks & Peavey											
16348																
10120	--	Bemis-Shutts	Tenneco Oil Company	(W) Frank S. Wasinger Unit	Frank S. Wasinger Unit	21-11S-18W	160	120	L - KC	3320	6	8*	0	0	0	Yes
11933	Yes	Catherine	Kewanee Oil Co.	(W) Catherine Unit	--	10,11-13S-17W	0	190	KC	3250	210	9	0	0	0	No*
10619	--	Catherine North-west	Texaco Inc.	(W) M. Wolfe "A"	M. Wolfe	4-13S-17W	-	-	Tor-Lans	3350	37	1	1	0	1	Yes
15300	Yes	Catherine South	Sterling Drilling Company	(P) Catherine South Unit	--	14-13S-17W	240	-	L - KC	3276	8	4	1	0	0	Yes
10574	--	Catherine South	Texaco Inc.	(P) L.J. Dreiling Group	L.J. Dreiling L.J. Dreiling "C" L.J. Dreiling "B"	22-13S-17W 21-13S-17W 12-13S-17W	240	-	Arb	3550	30	8	0	0	1	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
16218	2	-	0	-	Irreg	25	150	Prod	-	-	U	1971	Grav	1/19	36	-	54,750	220,000	1,324	--	700	--		
5118	6	-	-	-	Irreg	0	400	Prod	-	-	U	1955	Grav	1/19	37	-	876,000	--	17,000	--	6,000	--		
16219																								
15543																								
16604	2	-	-	-	--	-	-	Prod	-	-	U	1967#	--	-	-	-	--	--	2,000	--	0	--		
15710	15	0	15	0	5-spot	250	15	Prod + Sandstone	30	90	F	1975	S Gas	-	32	14	8,775	8,775	0	0	0	0	*Was Wayne Cross +Varies #Est. *Wat inj initiated 11-22-1975	
11830	-	-	-	-	--	-	-	--	-	-	-	--	--	-	-	-	--	--	--	--	--	--	*Temporarily Abd.	
10390	1	0	0	0	Irreg	0	250	Prod	-	-	U	--	--	-	-	-	91,250	292,000	650	1,904	--	--		
11214	2	-	-	-	Irreg	120	300	Prod	1450	30	T	--	S Gas	-	34	-	176,655	1,394,687	16,596	471,325	--	--		
16500	1	-	-	-	5-spot	300	400	Prod + Miss + KC	1975	6	U	1972	S Gas	1/20	30	-	--	--	7,291	--	--	--		
17042	1	1	0	0	Irreg	0	427	Prod	-	-	U	1973	S Gas	1/2	31.5	-	155,762	321,766	14,232	232,988	2,712	4,576		
	30	1	15	0													1,363,192	2,237,228	59,093	706,217	9,412	4,576		
10613	1	0	0	0	Irreg	450	421	Prod	-	-	U	1967	Wat	1/6	33.7	-	153,722	1,626,988	7,401	240,661	7,401	61,832		
16340	1	0	0	0	Peri	10	150	Prod + Arb	3650	50	T	1970	S Gas	3/2	40	-	54,311	299,743	16,971	350,512	13,000	106,123		
17768	1	0	0	0	Irreg	Grav	60	Prod + Dak	550	37	T	1975	S Gas	1/4	38	-	16,005	16,005	7,595	68,874	0	0	*Was 3-G Oil Company +Started inj. 4-1-75	
12629	1	0	0	0	Irreg	0	210	Prod	-	-	U	1966	Gas Exp	1/8	36	-	76,650	830,850	4,962	25,321*	2,480	20,575*	*Since 1971	
16660	1	0	-	-	--	0	200	Prod	-	-	U	1972	S Gas	-	30.3	-	730,000	3,116,317	4,436	204,900	--	--		
11239	1	0	0	0	Irreg	Vac	70	Prod + KC	-	-	U	1964	--	-	32	-	--	--	2,577	--	--	--	*Was Gulf Oil Corp.	
12116	0	0	0	0	Irreg	-	0	--	-	-	-	1965	S Gas	29/176	28	-	0	208,410	8,031	157,375	4,156	84,813	*Shut down to evaluate	
12788	1	0	0	0	Irreg	Grav	4264	Prod	-	-	U	1966	Wat	18/1515	28	-	1,556,530	13,609,588	6,511	92,104	0	0		
12976	1	0	0	0	Peri	Vac	454	Prod + Arb	3600	5	U	1966	S Gas	-	33	-	165,710	1,584,908	7,112	932,229	3,574	31,217		
14315	2	0	0	0	Line	115	324	Prod	-	-	T	1968	S Gas	9/4	30.5	15	237,040	952,688	16,099	81,721	16,099	81,721		
12769	1	0	0	0	--	Vac	400	Prod	-	-	U	1966	S Gas	-	35	-	146,000	1,265,000	2,920	--	2,000	53,000		
11621	1	0	0	0	Irreg	Grav	137	Prod	-	-	T	1965	S Gas	-	29.9	7	49,917	749,120	3,745	--	1,873	42,257		
15294	2	0	0	0	Irreg	460	86	Prod	-	-	T	1969	Wat	1/1	31.3	-	62,770	431,736	11,641	78,812	5,100	22,595		
16345	7	0	0	0	--	15	381	Prod + Arb	3300	50	T	1972	S Gas	1/3.14	-	-	787,438	2,359,089	113,913	321,814	96,800	326,181		
16346																								
16347																								
16348																								
10120	4	0	0	0	Irreg	262	227	Prod	-	-	U	1963	S Gas	30/161	27.5	-	1,229,245	4,793,131	33,984	1,857,999	33,984	425,747	*7 wells producing in L-KC 1 well producing in Arb.	
11933	0	3	0	0	Peri	0	0	Prod	-	-	U	1966	S Gas	77/1359	29	-	0	530,049	18,791	1,489,200	0	6,849	*No water injected	
10619	1	1	0	1	Irreg	Vac	219	Prod	-	-	U	1964	--	2061/3342	31	-	79,847	1,687,497	2,316	108,045	2,316	52,598		
15300	1	0	0	0	Irreg	250	150	Prod + Dak	734	734-744	U	1970	Grav	-	33	-	54,750	374,315	5,352	60,494	5,352	48,680		
10574	0	0	0	0	Irreg	0	0	Prod	-	-	U	1964	Wat	2661/5270	32	-	0	43,217	26,028	294,744	0	0		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location		Acres in project		Oil producing zone		Oil producing wells (1975)				Has in- been con- tinuous?
						S - T - R		Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	
ELLIS COUNTY (cont.)																
17121	Yes	Chrisler South	Okmar Oil Co.	(W) Madsen Unit	Snapp, Madsen	27-11S-16W	100	0	L-KC	3017	148	3	1	0	0	Yes
5605	No	Cromb	The Maurice L. Brown Company	(P) Zachman	McGuire Zachman	28-11S-16W 15-11S-20W	160	0	L-KC	3554	8	6	1	3	0	Yes
13603	No	Dechant	Icer Addis	(W) Dechant	Dechant	6-15S-18W	80	-	L-KC	3300	5	1	0	0	0	Yes
16276	--	Dechant Northwest	American Petrofina Co. of Texas*	(P) Wilson	Wilson	1-15S-19W	160	0	Arb	3646	7	4	0	0	0	Yes
16262	No	Dechant West	Thornton E. Anderson*	(D) Pfannenstiel SWDS	Pfannenstiel Lease, Dechant	1-15S-19W	50	0	Arb	3700	300	4	0	0	0	Yes
17098	No	Dinges	Palomino Petroleum*	(D) Dinges	Dinges	10-15S-18W	160	0	L-KC	3348	46	1	0	0	0	Yes
13073	Yes	Eagle Creek	Veeder Supply and Development Company	(W) Eagle Creek Unit	Eagle Creek Unit	2,10,11-11S-20W	60	150	Tor-Lans-KC	3270	25	6	2	0	0	Yes
7142	--	Emmeram	Hillenburg Oil Company*	(W) Froelich	Froelich A, B, C	4-13S-16W	20	0	L-KC	3200	22	4	0	0	0	Yes
6605	--	Emmeram Northeast	Kewanee Oil Co.	(D) Froelich E, F, & Sitz	Sitz	16-12S-16W	0	160	KC	3270	4	2	1	0	0	No
11769					Froelich E Froelich F	27-12S-16W 34-12S-16W										
5267	No	Fairport	Shenandoah Oil Corp.*	(W) Katie Austin Brungarot	Weiland C	36-12S-16W	130	-	L-KC & Dodge	3900	8	8	-	-	-	Not
14251	No	Fairport	Shenandoah Oil Corp.*	(W) Schmidt "A" & "B"	Schmidt "A" Schmidt "B"	1-13S-16W 12-13S-16W	50	20	L-KC	3050	20	4	-	-	-	Yes
8741					Weiland B	1-13S-16W	70	0	L-KC & Dodge	3050	30	7	-	-	-	Yes
10416	No	Fairport	Shenandoah Oil Corp.*	(W) Weiland B	Weiland B	1-13S-16W	70	0	L-KC & Dodge	3050	30	7	-	-	-	Yes
14253	No	Gatschet	Cecil M. Keller	(W) Gatschet Water Flood	Gatschet Lease, Sack Lease	13-13S-19W	320	160	L-KC	3368	5	3	0	4	1	Yes
6890	No	Herzog	Palomino Petroleum*	(D) Braun-Dinkle	Braun	32-13S-16W	80	0	L-KC	3227	6	1	2	0	0	Yes
15930	--	Irvin	Texaco Inc.	(P) J.A. Engle	J.A. Engle	35-13S-20W	160	-	Arb	3854	30	2	0	0	0	Yes
13599	No	Leiker East	Kewanee Oil Co.	(W) Leiker-Herl	Leiker, Herl	13-15S-18W	0	80	KC	3304	29	0	0	0	0	No*
13651	--	Leiker Southeast	Aylward Drilling Company	(W) Witt-Graf	Graf	14-15S-18W	40	0	Lans	3450	10	6	0	0	0	Yes
13428	--	Lieb	Chief Drilling Co., Inc.*	(W) Craig-Lundy Water Flood	Craig, Lundy	11-16S-11W	160	0	L-KC	3000	200	2	0	0	0	Yes
13535	--	Lieb East	Chief Drilling Co., Inc.	(W) Lundy	Lundy	16-11S-16W	120	0	L-KC	0	0	3	0	0	0	Yes
14316	Yes	Meistrell	Petroleum, Inc.	(W) Meistrell L-KC Unit	O'Brien "B", Meistrell "D"	9-11S-18W	160	0	L-KC	3262	8	3	0	0	0	Yes
13093	No	Mixer	Murfin Drilling Company	(P) Mixer Repressuring Project	Mixer "C"	7-11S-20W	160	110	L-KC	3372	19	2	0	0	0	--
18064	--	Neddham	Shade & Berry	(D) --	Wasinger, Madden	16-11S-18W	80	-	L-KC	3145	10	1	0	0	0	Yes
17979	No	Pleasant	Dane G. Hansen Trust	(D) Storm	Storm	34-13S-20W	80	0	L-KC & Arb	3499	250	3	0	0	0	Yes
17236	--	Pleasant	Murfin Drilling Company	(W) Kingsley W.F.	Kingsley	34-13S-20W	160	0	L-KC	3523	35	3	0	0	0	Yes
15916	No	Pleasant	Reed Oil Company*	(D) Storm	Storm	35-13S-20W	-	0	Squir	3840	12	3	0	0	0	--
15850	--	Rajewski	Meltzer Oil Company*	(P) Rajewski	Rajewski	28-15S-17W	80	-	KC	3400	6	1	1	-	-	Yes
13426	No	Ruder	Gulf Oil Corporation	(W) J.A. Swires	J.A. Swires	8-15S-18W	80	0	L-KC	3260	-	2	2	0	0	Yes
15955	--	Ruder	Kaiser-Francis	(D) --	Ruder "C"	8-15S-18W	60	0	Lans	3601	180	2	0	0	0	No*
16804	--	Schmeidler	Frontier Oil Company	(P) Giebler	Giebler	28-12S-17W	160	0	L-KC	3400	6	3	0	0	0	Yes
14553	No	Schoenchen	Okmar Oil Co.	(W) Wolf	Wolf	16-15S-18W	-	-	L-KC	3300	4	-	-	-	-	--*
13234	--	Solburn	NCRA	(W) Solomon-Burnett	Solomon-Burnett	28-14S-20W	70	10	Lans	3409	6	5	0	0	0	Yes
10846	No	Solomon	Okmar Oil Co.	(W) Albert	Albert, Wickham	10-11S-19W	160	-	L-KC	3244	5	4	0	0	0	Yes
14016	No	Solomon	Okmar Oil Co.	(W) Albert-Fred	Albert, Fred	15-11S-19W	120	0	Arb	3600	5	0	2	2	0	No*
13553	No	Sugarloaf South	Okmar Oil Co.	(W) Dreiling	Dreiling A, Dreiling C	15-11S-19W 28-13S-17W	60	0	L-KC	3280	5	2	1	0	0	Yes
16583	--	Sugarloaf South-east	American Petrofina Co. of Texas*	(P) Braun "B"	Braun "B"	26-13S-7W	80	0	Arb	3484	336	4	0	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells							Injected-water data				Production and injection statistics (bbls)											
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		Remarks
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
17121	2	0	0	0	Irreg	Vac	280	Prod	-	-	U	1969	S Gas	1/1	35	-	204,236	1,283,056	3,982	181,040	3,982	15,089	
5605	1	0	0	0	Irreg	161	656	Prod	-	-	T	1957	S Gas	-	28	27.5*	239,919	2,051,986	12,815	203,653	12,815	74,639	*@100°
13603	1	0	0	0	Irreg	0	6	Prod	-	-	U	--	Gas Exp	-	39	-	2,000	9,275*	1,045	6,198*	300	1,146	*Since 1971
16276	1	0	0	0	Irreg	0-Vac	1336	Prod	-	-	U	1971	Wat	1/50	28.7	-	487,720	1,812,551	8,307	284,313	0	0	*Was Imperial Oil Company
16262	1	0	0	0	Irreg	0	800	Prod	-	-	U	1971	Wat	7/93	30	-	285,000	1,297,000	25,463	258,544	800	4,800	*Was Alpine Drilling Co.
17098	1	0	0	0	Irreg	0	19	Prod	-	-	U	1973	S Gas	3/14	-	-	6,920	13,200	1,062	167,135	100	100	*Was Colorado Oil & Gas Co.
13073	4	4	0	0	Peri	50	262	Prod + Dak	800	200	T	1967	Wat & S Gas	15.3/84.7	33	-	382,550	4,212,517	10,622	133,054	10,622	133,054	
7142	1	0	0	0	--	15	30	Prod	-	-	T	1959	Wat	18/7	36	-	10,950	--	3,070	--	3,070	--	*Was Terra Resources, Inc.
6605 11769	1	1	0	0	Irreg	0	19	Prod	-	-	U	1961	S Gas	-	34	-	6,935	345,034	2,740	242,582	0	11,705	
5267	-	-	-	-	Peri	-	-	Prod	-	-	-	1957	S Gas	2/3	35	-	--	1,646,347	23,525	1,547,182	--	1,218,074	*Was Solar +Well was shut-in
14251 8741 10416	1	-	-	-	Irreg	Vac-70	340	Prod	-	-	T	1961	S Gas	2/23	35	-	118,827	1,818,129	6,062	1,661,431	6,062	1,346,138	*Was Solar
14253	1	0	1	0	Irreg	Vac	100	Prod + Chey	740-1090	250	U	1968	Wat & S Gas	5/1	35	-	107,920	710,161	13,530	89,131	10,148	66,848	
6890	1	0	0	0	Irreg	0	13	Prod	-	-	U	1962	S Gas	-	33	-	4,750	85,350	1,447	199,536	0	0	*Was Hinkle Oil Co.
15930	1	0	0	0	Irreg	Vac	1970	Prod	-	-	U	1972	--	149/409	38.4	-	718,896	3,042,899	19,063	142,986	0	99,556	
13599	0	2	0	0	Irreg	0	0	Prod	-	-	U	1967	S Gas	20/309	36	-	0	556,217	0	-	0	16,548	*Temp. shut down
13651	2	0	0	0	Irreg	400	376	Prod	-	-	U	1967	S Gas	-	35	-	274,692	1,804,078	11,518	248,205	10,400	182,719	
13428	1	0	0	0	Irreg	300	450	Dak + Chey	350	100	M	--	S Gas	-	-	-	164,250	1,336,069	2,005	13,229+	2,005	20,449	*Was Shields Drilling Co. +Since 6-1-71
13535	1	0	0	0	Irreg	300	350	Prod + Dak + Chey	-	-	U	1967	S Gas	1/4	35.8	-	127,750	1,109,276	6,805	216,672	3,200	39,675	
14316	1	0	0	0	Line	866	487	Prod + Quat	75	100	M	1968	S Gas	23/19	34.6	8	177,746	904,219	7,955	89,467	7,955	89,467	
13093	-	-	-	-	--	350	200	Prod + Arb	3650	8	T	1966	S Gas	17/8	34	-	72,360	--	3,184	--	1,270	--	
18064	1	0	0	0	--	Vac	50	Prod	-	-	U	1976	S Gas	-	35	-	--	--	--	--	--	--	
17979	1	0	0	0	Irreg	Vac	334	Prod	-	-	U	1975	S Gas	7/93	40	-	34,736	--	1,779	--	--	--	
17236	1	0	0	0	Irreg	28	548	Prod + Arb	3800	10	T	1974	S Gas	1/3	38	-	199,807	306,187	10,342	103,876	3,242	4,242	
15916	1	0	0	0	Irreg	200	400	Prod	-	-	U	1970	Wat	3/2	37	-	146,000	337,835	3,326	30,063	0	0	*Was Cameron K. Reed
15850	1	1	-	-	Irreg	Vac	20	Prod + KC	3400	6	U	1968	Grav	1/1	36	-	4,745	--	3,564	--	--	--	*Was Lee Phillips
13426	1	1	0	0	Irreg	800	883	Prod	-	-	U	1967	S Gas	4/9	33.9	-	322,274	1,981,254	5,966	48,656	4,666	38,256	
15955	-	-	-	-	--	Grav	0	Prod	-	-	U	1971	Gas Exp	6/25	31	-	0	0	1,340	98,817	0	0	*Prod. wat goes into SWDW
16804	1	0	0	0	Irreg	0	100	--	-	-	U	1972	S Gas	2/3	29	-	43,435	116,435	6,869	22,226	2,290	5,483	
14553	-	-	-	-	--	--	--	--	-	-	--	--	--	--	--	--	0	0	2,492	154,388	0	0	*Project not started
13234	4	0	0	0	Irreg	150	200	Prod + Dak	430	60	M	1970	S Gas	1.06/1	41.2*	-	289,682	1,566,755	16,669	245,023	6,063	118,010	*@60°
10846	1	0	0	0	Peri	Vac	235	Prod + Arb	3500	5	U	1964	S Gas	-	34	-	85,775	780,630	18,320	--*	7,832	66,688	*No records on individual zones prior to flood
14016	1	0	1	0	Peri Irreg	Vac	1800	Prod + Lans + KC	3200	5	U	1968	Wat	11/1125	26	-	657,000	6,439,000	15,911	--†	0	0	*Discontinued †No records
13553	1	0	0	0	Peri	Vac	143	Arb	3530	5	U	1967	S Gas	7/10	30	-	52,195	268,693	4,826	354,577	618	2,626	
16583	1	0	0	0	--	0-Vac	635	Prod	-	-	U	1972	Wat	1/2	34	-	231,717	945,079	9,161	649,641	0	0	*Was The El Dorado Refg. Co.

TABLE 1--ENHANCED OIL-RECOVERY PROJECTS, 1975--Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
ELLIS COUNTY (concl.)																
13434	No	Toulon	Willie E. Schultz*	(W) Braun	Braun	35-13S-17W	25	0	L-KC	3235	12	2	0	0	0	Yes
15682																
9849	No	Toulon South	Okmar Oil	(W) Brungardt W.F.	Brungardt Christina Goetz D	14-14S-17W 15-14S-17W 10-14S-17W	100	-	L-KC	3430	7	3	1	0	0	Yes
13544	No	Toulon Southwest	Okmar Oil	(W) Dinkel A	Dinkel A, Dinkel	16-14S-17W	50	0	Arb Lans KC	3500 3250	5 5	3	0	0	0	Yes
9229	No	Turkville	Palomino Petroleum*	(D) McCombs	McCombs	11-11S-17W	40	0	L-KC	3175	7	1	0	0	0	Yes
16041	--	Uberty	Dreiling Oil, Inc.	(D) Uberty	Uberty "A" & "B" Staab "A", Staab "B"	12,1-13S-18W 12-13S-18W	240	0	L-KC	3349	60	4	0	0	0	Yes
9694	--	Uberty Northwest	E.K. Edmiston	(W) Schmidt Lease	Schmidt	36-12S-18W	6	-	L-KC	3600	-	4	0	0	0	No*
11815	--	Uberty Northwest	Kewanee Oil Co.	(W) Crissman A & B	Crissman A Crissman B	1-13S-18W 2-13S-18W	0	60	Top & KC	3260	144	6	0	0	0	No*
11068	No	Victoria North	Richard L. Mai	(P) Schulte	Schulte Quint	8-14S-16W 7-14S-16W	160	115	L-KC	3214	6	4	0	0	0	Yes
13470	--	Wheatland	Petroleum Management, Inc.	(W) Leiker	Leiker	18-15S-17W	20	0	L-KC	3282	225	3	0	0	0	No
15655	--	Wheatland East	Petroleum Management, Inc.	(-) Wheatland East Unit	Leiker "B", Leiker "C", Gross, Leiker "D" Stecklein	17-15S-17W 17,18-15S-17W 18-15S-17W	120	40	L-KC	3338	146	17	0	0	0	Yes
15425	No	Younger	Okmar Oil Co.	(W) Hoffman	Hoffman	32-13S-17W	40	0	L-KC	3318	5	3	0	0	0	Yes
ELLIS COUNTY TOTALS (Reported)							8,291	1,230				258	16	9	4	
ELLIS-ROOKS COUNTIES																
3145	--	Krueger	Cities Service Oil Company	(W) Krueger Unit	Krueger Unit	35,36-10S-16W 1,2,3-11S-16W	352	0	Dodge L-KC	3225	4	21	0	0	0	Yes
ELLIS-RUSSELL COUNTIES																
3243	--	Fairport	Clinton Oil Company*	(W) Kate Austin Water-flood Unit	Kate Austin L.L. Austin J.J. Brungardt "A" J. Furthmyer	30-12S-15W 36-12S-16W 31-12S-15W 25-12S-16W	450	0	Lans Dodge Top	3050 3000 2750	90	11	0	0	0	Yes
5055																
5094																
12481																
14224																
ELLSWORTH COUNTY																
16438	--	Geneseo-Edwards	Cities Service Oil Company	(D) Rathbun Arbuckle	Rathbun	16-17S-8W	96	0	Arb	3206	25	4	0	0	0	Yes
13631	Yes	Lorraine	Petroleum, Inc.	(W) Lorraine Unit	Nienke, Janzen Rolf, Offner	12-17S-9W 11-17S-9W	480	0	L-KC	2870	10	5	0	0	0	Yes
10057	No	Stoltenberg	Icer Addis	(W) Zvolanek "B"	Zvolanek "B"	33-15S-10W	30	-	Simp	3246	10	1	0	0	0	Yes
16302	No	Wilson Creek	Arthur J. Gorski	(P) George Vopat A	George Vopat A	21-14S-10W	160	0	L-KC	2820	14	12	0	1	0	Yes
ELLSWORTH COUNTY TOTALS (Reported)							2,006	0				84	0	1	0	
FINNEY COUNTY																
13914	--	Damme	Palomino Petroleum*	(D) Clark	Clark	22-22S-33W	160	0	Miss	4693	10	2	0	0	0	Yes
16552	--	Damme	Texaco Inc.	(P) Garden City "B"	Garden City "B"	5-22S-33W	480	-	Marm	4412	-	10	-	-	-	Yes
9779	Yes	Nunn	The Maurice L. Brown Company	(P) Nunn	McHugh Maune Davis Nunn, Fly Aeilts, Gobleman	23-21S-34W 26-21S-34W 26,27-21S-34W 27-21S-34W 34-21S-34W	1440	160	Marm	4276	9	17	2	0	0	Yes
FINNEY COUNTY TOTALS (Reported)							2,080	160				29	2	0	0	

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
13434	1	0	0	0	Irreg	225	420	Prod + Fresh	220	80	M	1967	S Gas	3/5	33	-	153,300	868,158	4,015	54,618	4,015	54,618	*Was Sun Oil Company	
15682																								
9849	2	0	0	0	Peri	980	166	Prod + Arb	3500	3	U	1963	S Gas	-	35	-	60,574	1,959,699	9,088	514,688	5,907	92,635		
13544	1	0	0	0	Irreg	300	209	Prod	-	-	U	1960	S Gas	-	33	-	76,363	1,088,892	9,032	413,182	7,858	100,967		
9229	1	0	0	0	Irreg	0	4	Prod	-	-	U	1962	S Gas	2/3	36	-	1,460	23,285+	797	80,286	0	150	*Was Colorado Oil & Gas Co. +Estimate	
16041	1	0	0	0	--	100	150	Prod	-	-	T	1971	S Gas	7/3	34	-	15,000	148,400	6,928	208,450	5,000	86,300		
9694	0	1	0	0	Irreg	0	0	Prod	-	-	U	1963	Pump	-	28.5	-	0	--	7,147	505,518	0	--	*No wat. inj in 1975	
11815	0	2	0	0	Irreg	-	0	Prod	-	-	U	1965	S Gas	49/138	29	-	0	630,186	9,164	471,995	0	0	*No water injected	
11068	2	1	0	0	Peri	50	200	Prod	-	-	T	1964	S Gas	4/1	34	-	70,000	930,000	6,735	--	4,000	88,130		
13470	1	0	0	0	Irreg	0	0	--	-	-	U	1967	S Gas	1/0	36	-	57,645	373,962	7,672	22,870	2,190	5,815		
15655	6	0	0	0	Peri	0	138	Prod	-	-	T	1970	S Gas	2/1	37	-	302,420	1,441,135	44,732	676,973	44,732	203,740		
15425	1	0	0	0	Peri	Vac	134	Prod	-	-	U	1970	S Gas	30/67	34	-	48,075	200,693	13,064	306,891	8,950	17,088		
	82	17	2	1													11,797,177	81,219,127	697,779	19,174,846	388,481	5,773,434		
3145	10	1	0	0	--	515	460	Prod + Dak	475	-	T	1961	S Gas	155/107	37	-	1,698,016	17,485,856	71,557	3,274,909	71,557	1,146,858		
3243	3	1	0	0	Irreg	0	406	Prod	-	-	U	1956	S Gas	1/2.6	36.4	-	592,755	10,625,399	33,088	2,899,625	33,088	936,496	*Was Pan American	
5055																								
5094																								
12481																								
14224																								
16438	1	0	0	0	Irreg	780	73	Prod	-	-	F	1972	S Gas	25/420	37.3	-	28,385	99,711	6,583	534,763	1,313	4,406		
13631	1	0	0	0	Line	919	960	Prod + Dak	200	50	M	1967	Wat	693/292	35.8	7	350,340	2,468,489	14,006	135,101	14,006	135,101		
10057	1	0	0	0	Irreg	0	77	Prod	-	-	U	1962	Wat	-	37	-	28,100	346,250	1,751	7,178*	1,300	26,287	*Since 1973	
16302	2	0	0	0	Peri	300	100	Prod	-	-	U	1971	S Gas	9/1	38	-	36,500	139,500	26,000	145,000	2,600	9,500		
	15	0	0	0													1,195,475	6,400,365	211,288	3,240,998	19,219	175,294		
13914	1	0	0	0	Irreg	0	92	Prod	-	-	U	1968	S Gas	1/1	30	-	33,580	135,085	10,051	291,853	5,500	46,800	*Was Rocket Drilling Co.	
16552	1	-	-	-	Irreg	240	1206	Prod	-	-	U	1972	S Gas	688/57	28.4	-	440,190	852,362	155,991	879,137	0	0		
9779	2	3	0	0	Line	0	122	Prod	-	-	T	1958	S Gas	-	30	11.6*	89,094	2,955,069	37,984	3,378,628	18,992	218,284	*@100°	
	4	3	0	0													562,864	3,942,516	204,026	4,549,618	24,492	265,084		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unit- ized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
FINNEY-HASKELL COUNTIES																
13423	--	Pleasant Prairie	Helmerich & Payne, Inc.	(P) Pleasant Prairie Unit	Tract #3 Tract #2 Tract #6 Tract #7, #8, Tract #10, Tract #1, Tract #9, Tract #11, Tract #12, Tract #5, Tract #13, Tract #14, Tract #4, Tract #15	17-26S-34W 18-26S-34W 19-26S-34W 20-26S-34W 29-26S-34W 29, 30, 31, 32, 33-26S-34W 30-26S-34W 32-26S-34W 33-26S-34W 4-27S-34W 4, 5-27S-34W 5-27S-34W 6-27S-34W 8, 9, 16-27S-34W	-	-	St L Miss	5050	15	63	6	0	0	Yes
FRANKLIN COUNTY																
11721	No	Baldwin	Layton Oil Company	(W) Wellsville Project	Broers Wiseman A	25-14S-20E 30-15S-21E	60	0	Squir	750	18	10	0	0	0	Yes
17598	--	Paola-Rantoul	William Caenen	(P) Kurtz	Kurtz	32-16S-21E	15	0	Squir	625	10	3	-	-	-	Yes
7526	Yes	Paola-Rantoul	Elton R. Greer	(-) Wellsville Flood	Royer, Dorsey, Bell Ackley, Rice Lidikay, Rhoads	10-16S-21E 3-16S-21E 4-16S-21E	300	0	Squir	700	30	34	29	0	0	Yes
12165	--	Paola-Rantoul	Jackson Oil Co.	(W) Wellsville	Coons, Shawen, Todd, Beckmeyer Collins	32-15S-21E 31-15S-21E	-	-	Squir	720	20	39	-	3	-	Yes
5495	--	Paola-Rantoul	Glenn Layton, Jr.	(D) --	Naylor	32-16S-21E	10	0	Squir	650	15	2	-	-	-	Yes
3152	*	Paola-Rantoul	Glenn Layton, Jr.	(-) --	H. Finch	33-16S-21E	-	-	--	-	-	-	-	-	-	--
12728	--	Paola-Rantoul	Glenn Layton, Jr.	(P) Hays	Hays	20-16S-21E	20	0	Squir	625	20	4	-	-	-	Yes
15342	No	Paola-Rantoul	Reed Oil Company*	(W) Rantoul Project	Detwiler Gilliland, McCullough	20-17S-21E 19-17S-21E	59	0	Squir	610	8	18	0	2	0	Yes
5419	No	Paola-Rantoul	L.O. Tenk	(W) Carter Waterflood	Carter Lease Needham Lease, Ritckal	17, 18-18S-21E 17-18S-21E	640	0	Squir	550	17	19	0	3	0	Yes
17266	No	Paola-Rantoul	LL&B Oil Co.*	(W) LL&B Oil Co.	Finch	29-16S-21E	190	0	Up Squir+ Lo Squir	650	15	7	7	0	0	Yes
5012	No	Paola-Rantoul	Rader Oil Co.	(P) McConnell	McConnell	18-16S-21E	5	10	Squir	685	12	8	0	2	0	Yes
17259	No	Paola-Rantoul	Rader Oil Co.	(P) Coffman	Coffman	29-16S-21E	10	0	Squir	625	15	3	0	1	0	Yes
17387	No	Paola-Rantoul	Rader Oil Co.	(P) Stephens-McGlashon	Stephens, McGlashon	7-16S-21E	15	0	Squir	710	10	4	0	1	0	Yes
FRANKLIN COUNTY TOTALS (Reported)							1,324	10				151	36	12	0	
GOVE COUNTY																
13915	--	Albin	Chief Drilling Co., Inc.*	(P) --	Albin	10-14S-27W	320	0	Miss	4330	16	1	0	0	0	Yes
17846	No	Campus Siding	A.L. Abercrombie, Inc.	(D) Bloom	Bloom	2-11S-31W	240	0	L-KC	4021	3	1	0	0	0	Yes
13217	--	Castle Rock	Chief Drilling Co., Inc.*	(P) Sauer	Sauer	27-14S-27W	160	160	Miss	4300	16	1	0	0	0	Yes
16501	--	Castle Rock	Pickrell Drilling Company	(D) Albin G-H Unit	Albin G-H Unit, Leighton B-F Unit	29-14S-27W	200	0	KC	3917	12	5	0	0	0	Yes
17166	--	Chapman	Pickrell Drilling Company	(W) Chapman A	Chapman A Oshay	35-15S-26W 26-15S-26W	120	0	Marm (Ft. Scott)	4338	17	2	0	0	0	Yes*
17366	No	Missouri Flats	Donald C. Slawson	(P) Beesley "C"	Beesley "C"	27-14S-28W	320	-	L-KC	3700	6	2	0	0	0	Yes
15205	--	Rosa	Pickrell Drilling Company	(P) Rosa Becker B	Becker B	34-15S-27W	40	0	KC	4000	6	1	0	0	0	Yes
GOVE COUNTY TOTALS (Reported)							1,400	160				13	0	0	0	
GRAHAM COUNTY																
9707	--	Blazier	Cities Service Oil Co.	(W) Blazier Lansing- Kansas City Unit	Blazier Unit	12, 27, 28-7S-25W	180	0	L-KC	3800	20	4	4	0	1	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./ day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Water Injection		Production and injection statistics (bbls)				Remarks		
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	1975	Cum. 12-31-1975	Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																			1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
13423	7	0	0	0	Irreg	570	327	Prod	-	-	T	1966	Wat & S Gas	2573/3278	33.5	-	836,436	6,414,083	629,624	17,447,310	0	0		
11721	11	0	0	0	Line	700	21	Prod + Sand	60	40	F	1970	S Gas	1/5	26	-	84,315	397,006	1,287	7,964	1,287	7,964		
17598	1	-	-	-	5-spot	500	20	Prod + Pond	-	-	M	1969	--	9/1	30	-	7,000	43,000	863	3,800	863	3,800		
7526	21	61	0	0	Line	700	10	Prod + Arb	1500	300	T&S	1959	S Gas	65/29	28	40	12,770	9,602,138	11,050	847,386	-	-		
12165	15	-	-	-	Irreg	650	335	Prod + Arb	1600	10	T	1965	Grav	1/3	25	-	87,171	1,178,722	15,555	224,553	3,888	73,850		
5495	3	-	-	-	Irreg	400	20	Prod	-	-	M	--	Grav	4/1	27	-	15,000	--	575	--	575	--		
3152	-	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*Temp. shut down	
12728	4	-	-	-	Irreg	600	20	Prod + Pond	-	-	M	1940	S Gas	4/1	30	-	15,000	--	480	--	--	--		
15342	11	0	0	0	Irreg	500	29	Prod + Gravel	20	5	M	1970	S Gas	1/0	29	-	117,893	632,498	7,565	54,554	7,565	54,554	*Was Cameron K. Reed	
5419	8	0	0	0	5-spot	290	6	Prod + Miss	945	87	T&S	1957	S Gas	1/0	27	-	14,400	492,500	4,750	--	3,000	--		
17266	1	10	0	0	5-spot	400	20	Prod	-	-	-	1974	Grav	-	27	60	--	1,200	--	--	--	--	1,460	*Was Layton Oil Co.
5012	2	0	0	0	Irreg	175	15	Prod	-	-	U	1970	S Gas	10/1	26	-	12,500	54,875	2,600	--	385	1,210		
17259	2	0	0	0	Irreg	425	15	Prod	-	-	U	1975	S Gas	1/10	28	-	7,250	7,250	775	1,150	0	0		
17387	4	0	1	0	Irreg	175	15	Prod	-	-	U	1974	S Gas	1/9	27	-	12,750	19,250	1,670	2,470	425	724		
	83	71	1	1													386,049	12,428,439	47,170	1,141,877	17,988	143,562		
13915	1	0	0	0	Irreg	0	85	--	-	-	U	--	S Gas	-	36	-	31,025	75,219	4,029	21,643+	1,000	5,000	*Was Tide Water Oil Co. +Since 8-1-71	
17846	1	-	-	-	Irreg	150	6	Prod	-	-	U	1975	S Gas	10/9	38.5	-	2,140	2,140	3,226	11,196	0	0		
13217	1	0	0	0	Irreg	0	76	Prod	-	-	U	--	S Gas	-	36	-	27,740	60,838	1,772	8,921	400	1,800	*Was Tide Water Oil Co.	
16501	1	0	0	0	Irreg	0	37	Prod	-	-	U	1972	S Gas	21/7	38	2.5Est.	13,505	52,881	6,625	123,804	0	0		
17166	0	0	0	0	Irreg	0	13	Prod	-	-	-	1975	S Gas	11/18	39	2.5Est.	975	975	3,687	36,680	0	0	*Since 10-15-75	
17366	1	0	0	0	Irreg	0	58	Prod	-	-	U	1974	S Gas	5/1	38	3.5Est.	20,951	26,898	31,710	96,052	1,500	1,500		
15205	1	0	0	0	Irreg	0	12	Prod	-	-	U	1970	S Gas	6/7	38	2.5Est.	4,380	25,776	3,180	60,822	500	2,639		
	6	0	0	0													100,716	244,727	54,229	359,118	3,400	10,939		
9707	4	0	0	0	Peri	310	202	Prod + Dak	1500	-	T	1962	S Gas	1/1	39	-	363,301	3,652,943	21,694	959,650	21,694	446,578		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized:	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
GRAHAM COUNTY (cont.)																
14844	--	Bollig	Bankoff Oil Co.	(W) Bollig Inj.	Bollig, Sauer, Brungardt	28-9S-25W 35-9-25W	120	80	Lans	3870	4	3	0	0	0	Yes
17942	No	Brassfield North-east	Murfin Drilling Company	(-) Wolfe W.F.	Wolfe, Gustafson, Gustafson "C"	36-9S-22W 25-9S-22W 1-10S-22W	480	0	L-KC	3570	204	3	0	0	0	No*
15497	--	Brush Creek	Cities Service Oil Company	(W) Brush Creek L-KC Unit	Brush Creek L-KC Unit	4,9-9S-23W	106	0	L-KC	3740	10	10	1	0	0	Yes
15929	--	Brush Creek Northwest	Dane G. Hansen Trust	(D) Wilson "K"	Wilson "K", McVey	32-8S-23W	240	0	L-KC	3700	200	3	0	0	0	No*
17655	--	Brush Creek Northwest	Murfin Drilling	(P) Brush Creek Inj. (Co-op)	Fountain "A", Fountain "B", Wilson "K", McVey	5-9S-23W 32-8S-23W	480	0	L-KC	3686	40	6	0	0	0	Yes
12527	No	Cooper	Petroleum, Inc.	(W) Cooper Pilot Flood	Schmahlfeldt	24-10S-21W	160	0	Arb	3740	15	6	0	0	0	Yes
7966	--	Cooper	White Hawk Oil Company*	(P) C. Smith Unit	Denning, Rudman, Smith	32-9S-21W 5-10S-21W	160	0	L-KC	3510	6	6	0	0	0	Yes
9110	Yes	Diebolt	Sun Oil Company	(W) Diebolt LKC	Diebolt LKC Unit	16,20,21 28-10S-23W	1920	640	L-KC	3050	20	19	22	0	0	Yes
14576	--	Elrick	Shenandoah Oil Corporation*	(W) Elrick Unit	Elrick Unit	3,9,10,14, 15-10S-25W	1640	0	KC	3800	150	28	12	0	0	Yes
15410	--	Elrick East	Texaco Inc.	(-) East Elrick	J.P. Billinger, H.J. Rome "D", Frank	11-10S-25W	400	-	L-KC	3750	2.5	5	0	0	0	Yes
16551	--	Emor	Texaco Inc.	(W) D. Spies	Spies	35-9S-25W	80	-	L-KC	3800	3	2	0	0	0	Yes
10747	--	Evergreen NW	Sunflower Operating Co.	(W) Evergreen N.W. LKC Unit	Evergreen N.W. LKC Unit	8,17-9S-23W	240	0	L-KC	3703	10	6	1	0	0	Yes
11084	--	Fabricius	Cities Service Oil Company*	(W) Fabricius L-KC Unit	Fabricius Lansing-Kansas City Unit	19,23,24,25, 26-7S-23W	680	80	L-KC	3636	10	5	4	0	1	Yes
11076	--	Glen Dale South	Dreiling Oil Inc.	(D) Nickelson "B"	--	23,26-9S-24W	480	0	L-KC	3825	90	6	-	-	-	--
16842	No	High Hill	King Oil Company	(P) High Hill	D. Rush "B", Amanda Hobbs, D. Rush "A", G. Rush Estate "C", G. Rush Estate "A", G. Rush Estate "B", Hobbs "A"	17-10S-24W 18-10S-24W 20-10S-24W 19-10S-24W	880	0	L-KC	3725	250	8	0	0	0	Yes
17634	--	Holley	Cities Service Oil Company*	(W) Holley Unit	Holley Unit	33-8S-24W	460	20	L-KC	3957	4	5	0	0	2	Yes
6453	--	Holley	Fell & Wolfe Oil Co.*	(D) Blackburn	Blackburn	33-8S-24W	160	-	KC	3968	6	2	0	0	0	Yes
8742	--	Holley	Fell & Wolfe Oil Co.*	(W) Holley Pool	Ida Keith	10-9S-24W	160	-	L-KC	3924	40	4	0	0	0	Yes
10363	No	Holley	Fell & Wolfe Oil Co.*	(D) Clark	Clark	10-9S-24W	160	-	KC	3960	3-6	1	0	0	0	Yes
11613	--	Holley	Fell & Wolfe*	(-) Holley Pool	G. Keith*, Keith "A",* A.E. Hildebrand†	4-9S-24W	630	-	L-KC	3775	209	9	0	0	0	Yes
9577	--	Holley	Petroleum Management, Inc.	(W) Holley Unit	T.L. Smith et al Wm L. Bell, R. Keith, A. McKinley L. Keith, Keith "A", Keith "B" L. Keith "b-c", W.L. Bell F.E. Watte R. McKinley, D. Clark "A" A.J. Clark, W.L. Bell, Schemberger Schemberger "C"	30-8S-24W 31-8S-24W 32-8S-24W 5-9S-24W 6-9S-24W 36-8S-25W 25-8S-25W	2800	-	Lans 1m	3950	8	13	7	0	39	Yes
10367	--	Holley Southeast	Cities Service Oil Company*	(W) Holley Southeast Waterflood	Nickelson	15-9S-24W	160	0	L-KC	3847	12	1	1	0	0	Yes
15766	--	Hoof	Cities Service Oil Company	(W) Hoof L-KC Unit	Hoof L-KC Unit	9,16-10S-23W	573	0	L-KC	3850	16	16	3	0	1	Yes
16528	--	Hoof Northwest	Cities Service Oil Company	(W) Hoof N.W. L-KC Unit	Hoof N.W. L-KC Unit	31-9S-23W	253	0	L-KC	3900	6	9	0	0	0	Yes
13102	No	Hoof Northwest	Dane G. Hansen Trust	(D) Gano Input	Gano	6-10S-23W	160	0	L-KC	3700	220	6	0	0	0	Yes
13981	--	Ironclad	Glenn W. Peel Oil Operator	(D) Desair Lease	Desair	26-9S-22W	160	0	L-KC	3640	160	2	0	0	0	Yes
12174	--	Holley	Herndon Drilling Co.	(W) Keith Waterflood	Keith	9-9S-24W	90	0	KC	3882	4	3	1	-	-	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head pres. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav. deg.	Oil visc. cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
14844	1	0	0	0	Irreg	60	150	Prod	-	-	U	1969	Grav	4/1	36	-	54,750	576,190	7,470	87,297	7,000	82,827	
17942	1	0	0	0	Irreg	0	450	Prod + Dak + Arb	830 & 3908	430 & Unk	T	1975	--	1/4	38	-	60,125	60,125	9,328	55,590	2,840	2,840	*First inj. 8-18-75
15497	5	0	0	1	Irreg	400	297	Prod+Cedar Hls	1480	256	T	1970	S Gas	29/175	35	-	549,847	3,604,874	23,354	1,048,248	23,354	250,606	
15929	0	0	0	0	Irreg	Vac	191	Prod	-	-	U	1971	S Gas	1/1	31	-	69,715	385,635	5,938	33,663	--	--	*No water being injected
17655	1	0	0	0	Irreg	30	371	Prod	-	-	T	1974	Grav & S Gas	1/5	34	-	135,409	145,909	14,181	128,568	--	--	
12527	1	0	0	0	Irreg	Vac	267	Prod	-	-	U	1966	S Gas & Edgewater	1127/1417	34.8	8	97,553	877,200	12,417	700,157	12,417	174,545	
7966	1	0	0	0	Irreg	200	574	Prod	-	-	U	1960	Wat	-	35	-	209,510	3,962,151	8,235	--	8,235	148,294	*Was Natural Gas & Oil
9110	6	14	0	13	Peri	375	336	Prod	-	-	U	1962	S Gas	1/1.9	42	-	653,080	23,139,526	64,986	1,641,387	64,986	1,641,387	
14576	9	5	0	0	Irreg	0	335	Prod	-	-	T	1969	S Gas	9/1	40	3	1,102,492	12,834,295	137,195	1,780,365	97,875	1,011,090	*Was Empire Drilling Corp.
15410	6	0	0	0	5-spot	300	108	Prod + Cedar Hills	1690	190	U	1971	S Gas & Liq Exp	42/116	41	2.6	235,990	2,390,747	16,569	221,996	16,569	167,172	
16551	1	0	0	0	Irreg	Vac	132	Prod	-	-	U	1972	S Gas	45/94	41	-	48,104	159,123	16,017	70,779	0	0	
10747	-	1	0	-	Peri	0	-	Prod	3703	10	T	1964	S Gas	-	36	-	87,600	--	--	--	--	--	
11084	6	4	0	0	Peri	677	274	Prod + Cedar Hills	1435	-	T	1964	S Gas	4/1	40	-	656,844	6,482,639	22,743	1,378,035	22,743	531,700	*Was Imperial Oil Company
11076	-	-	-	-	--	100	790	Prod	-	-	T	1968	S Gas	3/1	38	-	280,000	1,770,000	13,460	330,917	10,000	105,000	
14533	-	-	-	-	--	100	790	Prod	-	-	T	1968	S Gas	3/1	38	-	280,000	1,770,000	13,460	330,917	10,000	105,000	
16842	4	0	0	0	Peri	0	87	Prod + Cedar Hills	1678	109	U	1973	S Gas	1/2	37	-	126,663	230,587	42,853	781,852	19,000	28,000	
17634	-	-	-	-	--	100	790	Prod	-	-	T	1968	S Gas	3/1	38	-	280,000	1,770,000	13,460	330,917	10,000	105,000	
9991	4	0	0	2	Irreg	843	136	Prod + Cedar Hills	1800	-	T	1963	S Gas	1/1	37	-	238,876	2,303,142	13,052	537,628	13,052	218,843	*Was Imperial Oil Company
6453	1	0	0	0	--	300	220	Prod	-	-	U	1958	S Gas	-	33	-	--	--	2,668	--	--	--	*Was Sun Oil Company
8742	1	0	0	0	--	500-600	290	Prod + Water Sand	100	-	F	1963	--	-	38.5	-	110,980	1,079,837	1,591	7,368	--	--	*Was NCRA
10363	1	0	0	0	Irreg	450	325	Prod	-	-	-	1965	--	-	31.3	-	24,891	--	4,194	--	--	--	*Was Sun Oil Company
11613	4	0	0	0	Irreg	300	1250	Prod + Water Sand	95	-	F	1965	--	-	36.7	-	290,549	3,378,447	5,230	--	--	--	*Was Champlin Pet. Co. +Was NCRA
9577	9	4	0	0	Irreg	450	138	Prod + Cedar Hills	1800	-	U	1963	S Gas	6727/8277	40	-	452,810	21,574,006	19,800	1,957,239	19,800	1,957,239	
10367	2	0	0	2	Irreg	800	100	Prod + Cedar Hills	1400	-	T	1964	S Gas	14/63	37	-	82,103	1,235,910	5,669	317,980	5,669	83,846	*Was Imperial Oil Company
15766	8	0	0	0	Peri	540	274	Prod + Cedar Hills	1556	180	T	1970	S Gas	102/453	35	-	709,280	4,925,616	75,399	3,410,854	75,399	474,612	
16528	6	0	0	0	Peri	497	335	Prod + Dak	1662	78	T	1972	S Gas	13/19	38	-	588,297	1,646,588	67,785	964,748	67,785	177,794	
13102	3	0	0	0	Irreg	Vac	293	Prod + Dak	1322	88	T	1966	S Gas	4/1	39	-	333,922	1,238,518	39,872	349,535	--	--	
13981	1	0	0	0	Irreg	Grav	18	Prod	-	-	U	1968	Wat	15/8	38	-	13,140	82,734	6,329	54,277	6,329	54,277	
12174	-	-	-	-	5-spot	0	150	Shallow Sd	40	0	F	1966	--	68/56	40	-	54,546	545,302	2,669	2,669	2,469	60,057	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is Proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
GRAHAM COUNTY (concl.)																
13960	No	Jackson Branch	Beren Corp.*	(P) H.H. Stewart	H.H. Stewart	8-9S-23W	120	35	L-KC	3625	30	1	0	0	0	Yes
16383	No	Knoll North	Dane G. Hansen Trust	(D) Hansen Estate Fee	Hansen Estate Fee	30-8S-25W	240	0	L-KC	3825	200	2	2	0	0	Yes
8035	--	Kobler	John O. Farmer	(-) Kobler	Kobler	27-8S-24W	80	-	L-KC	3854	7	2	-	-	-	No*
15310	--	Kohart	Petroleum Management, Inc.	(-) Moore-Kurtz	Kurtz Moore	34-9S-24W 27-9S-24W	40	10	L-KC	3906	997	1	-	-	-	No
13221	--	Law	Don E. Pratt*	(P) C.F. Griffith	--	--	-	-	--	--	-	2	1	5	1	No+
9379	--	Law Northwest	Burch Exploration, Inc.	(W) Law Northwest	Hildebrand	28-9S-23W	320	120	L-KC	3900	180	6	1	8	0	Yes
10386					Morris	20-9S-23W										
9536	--	Law Southeast	B-J Oil Company	(W) Southeast Law Unit	Southeast Law Unit	12-10S-23W	-	-	--	--	-	-	-	-	-	--
14298	Yes	Morel	The Maurice L. Brown Company	(W) Lansing-KC Unit	Lansing-KC	14,23-9S-21W	400	0	L-KC	3420	30	7	1	0	0	--
14977	--	Morel	NCRA	(D) Shaw	Shaw	7-9S-21W	10	0	L-KC	3641	15	1	0	0	0	Yes
11191	--	Nana Northwest	Cities Service Oil Co.	(W) Nana N.W. L-KC Unit	Nana N.W. Lansing-Kansas City Unit	32,33-7S-24W 4,5-8S-24W	55	0	L-KC	3600	10	2	2	0	0	Yes
13357	No	Nana	Tomlinson Oil Co., Inc.	(D) Goff Unit	M.G. Goff, Goff A, Goff B, Neal B	3-8S-24W	220	210	L-KC	3600	8	7	0	0	0	Yes
6240	No	Penokee	Barnett Oil, Inc.	(W) Penkoe Repressuring System	Lyon	2-8S-24W	240	200	L-KC	3790	9	1	-	-	-	Yes
9836					Paxson	11-8S-24W										
14964	Yes	Redline Northwest	Petroleum, Inc.	(W) Redline NW L-KC Unit	Ninemire (Kaiser-Francis), Ninemire (Rock Island), Lacerte, Lacerte "D", Lacerte "A", Blakley	24-9S-23W 25-9S-23W 30-9S-22W	960	0	L-KC	3800	15	6	3	0	0	Yes
8553	--	Schmied	Petroleum Management, Inc.	(W) Madden-Davis Unit	Madden-Davis B, Madden-Davis A, Madden-Davis C	17-8S-25W	400	-	Lans lm	3650	15	3	2	0	0	Yes
9396	No	Schmied	Willie E. Schultz*	(D) Madden-Davis "A"	Madden-Davis "A"	16-8S-25W	40	280	L-KC	3800	60	3	-	-	-	Yes
17324	No	Schnebly	Thornton E. Anderson	(P) Jones	Jones	9-8S-22W	40	40	L-KC	3507	3	1	0	0	0	Yes
9397	No	Shiloh	Willie E. Schultz*	(D) Minium	Minium	1,2-9S-25W	200	150	L-KC	3800	60	2	-	-	-	Yes
7334	No	Van	Koch Exploration Company	(W) Sandzen	Sandzen	14-9S-22W	70	0	L-KC	3490	20	3	0	0	0	No
10328	--	Van	NCRA	(W) Van Loenen	Van Loenen	14-9S-22W	50	10	Lans	3497	15	5	0	0	0	Yes
10172	Yes	Vesper	Petroleum, Inc.	(W) Vesper Unit	Sutor "E", Rice, Lacerte "C", Manaugh, Vesper	31-9S-23W 36-9S-23W	920	80	L-KC	3460	22	11	8	0	0	Yes
GRAHAM COUNTY TOTALS (Reported)							18,417	1,955				257	76	13	45	
GRAHAM-SHERIDAN COUNTIES																
15006	No	Lindenman	Okmar Oil Co.	(W) Lindenman Co-op	Lindenman, Ward, Vejl, Horton	31-6S-25W 36-6S-26W	130	0	L-KC	3830	5	4	0	0	0	Yes
GRAHAM-TREGO																
6808	--	Diebolt	Cities Service Oil Co.*	(W) N.W. Wakeeney Coop	Osborn, Osborn, Walker, Surmeier, Erickson, Diebolt	5-11S-23W 4-11S-23W 9-11S-23W 33-10S-23W	290	160	L-KC	3588	4	7	0	0	14	Yes
GREENWOOD COUNTY																
17019	--	Beaumont	Adair Oil Company	(P) Fowler	Fowler, Lewis	24-27S-8E	600	40	Miss	2426	16	3	0	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil vis., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975			Injection Pattern	Source	Depth, ft.						Thick., ft.	Type	Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods	
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975
13960	1	0	0	0	Peri	Vac	254	Prod	-	-	U	1968	S Gas	8½/91½	33	-	92,710	190,110	3,436	59,878	3,436	20,300	*Was Amerada
16383	1	0	0	0	Irreg	Vac	241	Prod	-	-	U	1972	S Gas	1/1	38	-	87,965	303,205	27,134	182,994	-	-	
8035	-	-	-	-	--	-	-	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	*Injection well plugged
15310	0	1	0	0	Irreg	-	-	--	-	-	-	1970	S Gas	1/0	-	-	0	0	850	3,221	0	0	
13221	-	-	-	-	4-spot	-	-	Prod	-	-	T	--	Gas Exp	-	-	-	0	--	--	--	--	--	*Was Vonfeldt Oil Co. +Inj. well repair
9379	1	0	0	0	Irreg	100	340	Prod + Dak	1600	210	U	1962	S Gas	-	36	6	125,566	2,103,581	9,519	283,270	9,519	283,270	
10386	-	-	-	-	--	-	-	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	
9536	-	-	-	-	--	-	-	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	
14298	1	1	0	0	Irreg	92	1437	Prod + Arb	3750	40	T	1968	S Gas	-	33	-	524,836	2,844,052	23,231	266,776	23,231	196,460	
14977	1	0	0	0	Irreg	Vac	60	Prod	-	-	T	1969	S Gas	1/0	32.4*	-	21,663	112,860	1,783	18,222	1,783	15,275	*@60
11191	3	0	0	0	Peri	1110	80	Prod + Cedar Hills	1432	-	T	1966	S Gas	9.5/47.5	38	-	91,388	1,493,085	8,457	443,675	8,457	153,768	
13357	2	0	0	0	Irreg	0	553	Prod	-	-	U	1966	S Gas	-	38.5	-	404,019	1,822,669	12,987	1,135,444	12,987	152,108	
6240	1	1	-	-	Irreg	350	50	Prod	-	-	U	1961	S Gas	4/1	37	-	18,250	1,764,500	816	95,116	816	48,387	
9836	1	1	-	-	Irreg	350	50	Prod	-	-	U	1961	S Gas	4/1	37	-	18,250	1,764,500	816	95,116	816	48,387	
14964	3	1	0	0	Line	Vac	987	Prod + Dak + Chey	1200	100	M	1969	S Gas	59/64	41.1	4	360,281	1,972,250	13,326	123,826	13,326	123,826	
									800														
8553	4	-	-	-	Peri	150	246	Prod + Cedar Hills	1850	-	T	1961	--	5997/8865	41	-	448,838	7,039,226	6,810	407,323	6,810	81,089	
9396	1	-	-	-	Irreg	0	350	Prod	-	-	U	1961	S Gas	1/13	40	-	127,750	1,774,745	7,300	352,720	7,300	352,720	*Was Empire Drilling Co.
17324	1	0	0	0	Irreg	0	5	Prod	-	-	U	1974	S Gas	1/1	40	-	1,000	1,900	1,679	42,419	0	0	
9397	1	-	-	-	Irreg	0	700	Prod	-	-	U	1962	S Gas	3/1	38	-	255,500	1,716,774	4,745	133,621	4,745	133,621	*Was Empire Drilling Co.
7334	0	1	0	0	Irreg	-	0	--	-	-	-	1959	Gas Exp	1/.5	35.5	-	0	1,188,753	8,610	548,285	8,610	97,906	
10328	1	0	0	1	Irreg	Vac	435	Prod	-	-	T	1963	S Gas	1/0	36.6*	-	159,402	2,496,202	6,387	204,272	6,387	110,229	*@60°
10172	6	4	0	0	Line	64.6	429	Prod + Chey + Dak	800	100	M	1963	S Gas	2850/1568	41.7	4	939,952	12,020,867	28,462	597,507	28,462	597,507	
									1200														
	114	37	0	19													11,289,497	137,126,823	826,230	21,716,702	633,085	9,983,173	
15006	1	0	0	0	Peri	Vac	540	Prod	-	-	U	1969	S Gas	120/35	36	-	197,100	1,226,718	40,448	748,587	40,448	173,623	
6808	3	1	0	5	Irreg	100	374	Prod + Cedar Hills	1500	-	T	1958	S Gas	-	40	-	451,217	7,829,326	9,376	2,079,616	9,376	742,739	*Was Imperial Oil Co.
17019	1	0	0	0	Irreg	Grav	-	Prod	-	-	U	1973	Wat	-	35	-	1,390	4,990	4,961	12,705	0	0	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location		Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
						S - T - R		Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
GREENWOOD COUNTY (cont.)																	
17096	--	Beaumont	Stewart Bros	(D) --	W.W. Edgar	2-28S-8E		250	0	Miss	2490	14	4	0	0	0	Yes
10680	--	Beaumont	K.T. Wiedemann Trust	(D) Edgar Lease	W.W. Edgar	11-28S-8E											
12117	--	Beaumont	K.T. Wiedemann Trust	(W) Temple-Lewis	W.W. Edgar	2-28S-8E		50	0	Miss	2480	24	4	0	0	0	Yes
17590					Lewis A, Lewis C, Temple	25-27S-8E		600	-	Miss	2431	-	19	0	0	0	Yes
8755	--	Browning	American Petrofina Co. of Texas*	(W) Browning "A"	Browning "A"	19-22S-10E		120	0	Bartl	2550	28	7	1	0	0	Yes
14909	--	Browning	American Petrofina Co. of Texas*	(W) Browning "C"	Browning "C"	24-22S-9E		30	0	Bartl	2550	28	2	0	0	0	Yes
2072	No	DeMalorie-Souder	R.R. Abderhalden*	(W) DeMalorie-Souder Unit	Central Unit	1,12-22S-10E		660	0	Bartl	2100	55	6	1	0	0	Yes
3123					East Unit	2,12-22S-10E											
3423					West Unit	11-22S-10E											
9297	No	DeMalorie-Souder	R.R. Abderhalden*	(W) DeMalorie-Souder (Harris Unit)	Warrenburg	12-22S-10E		200	0	Bartl	2150	25	18	0	0	0	Yes
3103	No	DeMalorie-Souder	L.B. Campbell	(D) Derbyshire Lease	Kipfer "A", "B", "C", & "D"	13-22S-10E											
					--	13-22S-11E		85	20	Bartl	2100	30	4	-	-	-	Yes
13779	No	DeMalorie-Souder	H.G. Forbes	(D) Clopton	Clopton	13-22S-10E		80	-	Bartl	2100	20	2	-	-	-	Yes
2309	--	DeMalorie-Souder	R & G Oil Co.	(-) Harris	Harris	19-22S-11E		-	0	Bartl	2060	40	2	0	0	0	--
3124	--	DeMalorie-Souder	R & G Oil Co.	(-) DeMalorie-Souder	Clopton	18-22S-11E		0	-	Bartl	2100	40	3	0	0	2	--
5619	--	Dunaway	Ale Oil Co.	(W) --	Sauder Heirs	3-23S-13E		480	0	Miss	1850	15	12	0	0	0	Yes
2252	--	Dunaway	BBL Oil Producers	(W) --	Miller, Norris	27-22S-13E		60	-	Burg	1800	10	3	-	0	-	Yes
9459	No	Dunaway	Herbert H. Hart	(D) --	Hessler	34-22S-13E		220	-	Miss 1m	1850	20	10	0	0	0	Yes
5312	--	Dunlap	Tom Grooms*	(-) --	Koenig	27-22S-13E											
					Dunlap	9-25S-9E		160	-	Bartl	2000	10	1	-	-	-	Yes
5200	--	Fankhauser	George A. Barnard*	(P) Bales Waterflood	Bales	10-22S-12E		80	10	Bartl	1750	25	2	1	0	0	Yes
2492	No	Fankhauser	George A. Barnard	(P) Swanson Unit	Swanson	10-22S-12E		160	120	Bartl	1800	15	2	0	0	0	Yes
15037																	
15638	No	Fankhauser	George A. Barnard*	(P) Norton Water Flood	Norton	22-22S-12E		40	40	Bartl	1706	30	1	0	0	0	Yes
5968	--	Fankhauser	H.L. Ellis	(D) --	Kipfer A & B Lease	5-22S-12E		160	80	Bartl	1894	20	3	2	0	0	Yes
883	--	Fankhauser	R & G Oil Co.	(-) --	Fankhauser	4-22S-12E		80	400	Bartl	1900	25	4	1	0	0	Yes
2065																	
16051	--	Gaffney	Dimick & Dimick	(P) --	Smith A, Smith C	7-24S-11E		200	-	Squir	1850	12	7	0	0	0	Yes
					Baines	12-24S-11E											
5079	--	Gaffney	Greenwood Petroleum & Ranch Mgmt., Inc.	(P) Kipfer	--	6-24S-11E		160	-	Up Bartl (Wiggins)	1800	20	10	0	0	0	Yes
17687	No	Gaffney	D.N. Lester	(D) Lindamood	Lindamood	18-24S-11E		160	0	Peru	1680	10	1	-	1	-	Yes
3340	--	Gaffney	Roy A. Wilson*	(D) Geo Gaffney Lease	Gaffney	7-24S-11E		240	-	Cattle	1870	17	5	0	0	0	Yes
7362	--	Lamont	Jackman & Jackman	(-) Fankhauser	Fankhauser	23-22S-12E		160	80	Bartl	1660	20	4	1	-	-	--
16546	--	Lamont	R & G Oil Co.	(-) Lamont Unit D	Peter Fankhauser	23-22S-12E		-	-	Bartl	1670	50	3	0	0	0	Yes
16709	No	Stanhope	Tom Grooms*	(P) --	Lose B & C	22-26S-8E		320	-	Miss	2460	20	3	0	0	0	Yes
2676	No	Quincy	Bird & Hanley	(W) Quincy	Dinius, Pusey-King	31-24S-13E		315	0	Bartl	1500	30	22	20	1	1	Yes
4497					Gilroy	6-25S-13E											
12234					Shaw, Hollister	5-25S-13E											
					Johnson	8-25S-13E											
					Hoggatt	9-25S-13E											
3342	No	Seeley-Wick	H.G. Forbes	(D) Freeburg	Freeburg	22-22S-11E		80	-	Bartl	1892	21	2	0	1	0	Yes
3565	No	Sallyards	R.R. Abderhalden	(W) Blankenship Sallyards Unit	F.H. Hull "A" & "B"	35-25S-8E		520	0	Bartl	2425	39	20	2	0	0	Yes
					A.L. Stevenson	2-26S-5E											
						11-26S-8E											
						2-26S-8E											
3482	No	Sallyards	Beard, English & Martin*	(W) Bryden-Ladd	Bryden Acct 1 & 2, L.Ladd, Moss, Hoffman, Bryden Acct 1 & 3	36-25S-8E		600	300	Bartl	2470	50	14	0	0	0	Yes
						30-25S-9E											
						31-25S-9E											

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
17096	1	0	0	0	Line	0	83	Prod	-	-	U	1973	Gas Exp	27/73	37	-	30,295	67,656	8,790	63,653	0	0		
10680	1	0	0	0	Irreg	0	25	Prod	-	-	T	1963	Grav	-	35	-	9,125	79,849	4,352	262,768	--	--		
12117	1	0	0	0	Irreg	0	208	Prod	-	-	T	1974	Wat	31/450	38	-	76,058	130,860	13,834	1,315,290	--	--		
17590																								
8755	2	0	0	0	Irreg	450	307	Prod + Doug	1421	50	U	1965	S Gas	1/5	41	-	224,881	2,007,396	6,996	574,883	6,996	102,937	*Was The El Dorado Refg. Co.	
14909	1	1	0	0	Peri	400	197	Prod + Doug	1421	50	U	1966	S Gas	1/1	40	-	71,800	1,040,242	1,211	250,752	1,211	78,404	*Was The El Dorado Refg. Co.	
2072	6	6	0	0	Irreg	600	100	Prod + Arb	2730	700	T	1949	S Gas	-	40	2.8	219,000	37,677,751	7,147	3,305,330	7,147	3,305,330	*Was Richard Soule	
3123																								
3423																								
9297	7	30	0	0	5-spot	500	85	Prod + Arb	2730	700	T	1962	S Gas	-	39	4.1	219,000	9,381,427	2,304	463,891	2,304	463,891	*Was Richard Soule	
3103	2	-	-	-	Irreg	100	300	--	-	-	T	1952	--	-	41	-	78,500	2,040,750	2,055	152,006	--	--		
13779	1	-	-	-	Irreg	50	20	Prod	-	-	U	1965	Grav	3/40	40	-	10,000	70,000	1,000	10,000	700	7,000		
2309	-	0	0	0	Irreg	0	0	--	-	-	--	--	Grav	-	39	-	0	--	2,005	--	--	--		
3124	0	0	0	7	5-spot	400	20	Prod	-	-	U	1975	Grav	-	41	-	60,000	--	2,252	--	500	--		
5619	3	0	0	0	Irreg	300	50	Prod + Doug	750	-	T	1957	Grav & Wat	1/1	34	-	51,000	913,400	14,000	104,700	3,000	--		
2252	1	-	-	-	Irreg	200	60	Prod	-	-	T	--	Grav	-	36	-	--	--	9,176	--	--	--		
9459	4	0	0	0	Irreg	0	240	Prod	-	-	U	1962	Grav	3/2	28-38	-	87,600	5,513,325	19,782	352,844	--	--		
5312	1	-	-	-	Line	50	30	Prod	-	-	U	--	Grav	2/98	39	-	10,950	--	698	--	--	--	*Was Sam P. Wallingford	
5200	1	0	0	0	Irreg	300	150	Prod	-	-	T	1975	S Gas	-	39	-	9,000	9,000	60	60	60	60	*Was L.B. Campbell	
2492	1	0	0	0	Irreg	600	200	Prod + Doug	750	20	T	1969	S Gas	-	39	-	73,000	718,312	3,266	56,830	3,266	56,830		
15037																								
15638	2	0	0	0	Irreg	100	75	Prod	-	-	T	1975	S Gas	-	38	-	9,150	9,150	30	30	30	30	*Was L.B. Campbell	
5968	1	1	0	0	Irreg	200	70	Prod	-	-	U	1958	Wat	2/3	38	-	21,000	--	1,142	--	300	--		
883	1	0	0	0	5-spot	200	230	Prod	-	-	U	--	Grav	-	40	-	83,950	--	2,194	--	730	--		
2065																								
16051	2	0	0	0	Irreg	50	30	Prod + Doug	950	-	T	1971	Wat	1/1	39	-	--	--	--	--	--	--	--	
5079	7	0	0	0	Peri	-	350	Prod + Doug	900	100	T	1957	Grav	-	40	-	180,000	3,450,000	7,000	451,833	7,000	--	--	
17687	-	-	-	-	Irreg	Vac	-	Prod	-	-	U	1973	Grav	1/10	30	-	3,000	7,500	365	1,000	200	400		
3340	-	0	0	0	Irreg	-	-	Prod	-	-	T	--	--	-	39	-	73,000	--	5,296	--	--	--	*Was Sinclair Oil	
7362	2	2	0	0	Irreg	240	220	Prod + Bartl	1600	20	T	--	Grav	-	38	-	80,300	--	1,978	--	1,978	--		
16546	1	0	0	0	Irreg	0	200	Prod	-	-	U	1975	Grav	-	40	-	48,000	48,000	1,409	1,409	0	0		
16709	-	-	-	-	--	60	450	Prod	-	-	U	--	Grav	2/98	36	-	164,250	--	2,074	--	0	--	*Was K.T. Wiedemann	
2676	6	30	1	2	Irreg	700	118	Prod + KC	700	-	T	1950	S Gas	1/0	40	5	259,074	9,014,694	35,182	536,151	35,182	536,151		
4497																								
12234																								
3342	1	-	-	-	4-spot	100	100	Prod	-	-	U	1965	Grav	1/20	40	-	30,000	200,000	1,800	20,000	800	10,000		
3565	7	4	0	0	Irreg	650	115	Prod + Doug	1400	60	T	1953	S Gas	2/1	37	-	293,825	27,683,744	11,018	3,143,165	11,018	3,143,165		
3482	4	0	0	0	5-spot	800	1250	Prod + Doug	1290	-	T	1952	S Gas	-	40	-	--	--	17,494	120,453+	11,000	113,959	*Was Marathon Oil Co. †Beard, English & Martin prod.	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
GREENWOOD COUNTY (cont.)																
12717	No	Sallyyards	Hank Martell Oil Company*	(P) Bates	Bates	30-25S-9E	64	0	Bartl	-	20	2	-	0	0	Yes
11096	No	Sallyyards	Nadel and Gussman	(W) Jackson Heirs	Jackson Heirs	23,26-25S-8E	80	20	Bartl	2400	15	9	2	0	0	Yes
14001																
5052	No	Sallyyards	Jackson Bros.	(D) Ladd "C"	Ladd	26,35-25S-8E	320	0	Bartl	2450	15	4	0	0	0	Yes
11806	--	Schindler	C.R. McClelland	(-) Schindler	Schindler	23-23S-11E	240	0	Arb	1680- 1780 2200	20 10 5	6	0	0	0	--
1264	No	Scott	The Maurice L. Brown Company	(W) Scott	--	19,30-23S-9E 24,25-23S-8E	378	-	Bartl	2600	40	11	0	0	1	No
17648	No	Seeley-Wick	George A. Barnard	(D) Rickabaugh	Rickabaugh	4-23S-11E	80	40	Bartl	1940	9	2	0	0	0	Yes
2003	No	Seeley-Wick	Beard, English & Martin*	(-) Madison Unit	Madison Unit "A" Madison Unit "B", Madison Unit "C"	11,12-22S-11E 14-22S-11E 14,15-22S-11E 22-22S-11E	1440	1000	Bartl	1850	50- 75	20	8	0	12	Yes
5095	--	Seeley-Wick	Letha Dimick	(W) BEC Unit	C.G. Beal Carson D.A. Edwards, Tom Edwards	28-23S-11E 29-23S-11E 32,33-23S-11E	490	200	Bartl	1950	12	7	0	0	1	Yes
14908																
10083	No	Seeley-Wick	H.L. Ellis	(D) --	Roy & Pearl Kipfer	12-22S-11E	40	40	Bartl	1827	55	2	0	0	0	Yes
17131	--	Seeley-Wick	Glacier Petroleum Co.	(P) Jones	Jones	6-22S-12E	20	10	Bartl	1884	10	2	-	-	-	Yes
16739	--	Seeley-Wick	Warren G. Godfrey*	(P) Lyke Lease	Lyke Lease	8-24S-12E	80	10	Bartl	1797	10	4	0	0	0	Yes
16338	--	Seeley-Wick	W.F. Harmon*	(-) Harmon	Harmon	31-23S-12E	190	-	KC	1857	2	3	-	-	-	Yes
13360	--	Seeley-Wick	Cloide J. Hensley*	(P) Cloide J. Hensley	Hensley Lease	6-22S-12E	30	-	Bartl	1775	30	3	1	-	-	Yes
8952	No	Seeley-Wick	Hank Martell Oil Co.*	(P) Humes	Humes	29,30-22S-11E	240	0	Bartl	2100	15	1	-	0	0	--
734	Yes	Seeley-Wick	The J's Oil Co.	(P) Seeley-Wick	--	5,6-23S-11E	660	-	Bartl	1925	50	3	0	0	0	Yes
12172	--	Seeley-Wick	E.C. Murphy	(-) Gardner & Winkler	Gardner, Winkler	1-22S-11E	160	-	Bartl	1900	16	2	1	0	0	--
11539	--	Seeley-Wick	George Sage	(W) --	Fry	7-24S-12E	-	-	Cattle	1588	10	4	0	-	-	Yes
11538	--	Seeley-Wick	George Sage	(W) --	Ulrich	7-24S-12E	-	-	Cattle	1600	10	4	0	-	-	Yes
10954	--	Seeley-Wick	Geo. E. Sauder	(W) Wilson-Lewis	Wilson-Lewis	8,9-24S-12E	120	20	Bartl	1700	18	8	1	0	0	Yes
11213	--	Seeley-Wick	Geo. E. Sauder	(W) Thornton-Huber-Curtis	Thornton-Huber-Curtis	7,8-22S-12E	70	20	Bartl	1720	20	5	0	0	0	Yes
11615	--	Seeley-Wick	K.E. Snyder	(D) Shaefer Flood Project	Shaefer	27-23S-11E	40	0	Bartl	1920	22	9	0	0	0	Yes
1362	--	Seeley-Wick	Tesoro Petroleum Corp.	(W) Clopton	Clopton	8-23S-11E	320	-	Bartl	1750	15	3	4	0	1	Yes
5552	--	Seeley-Wick	Tesoro Petroleum Corp.	(W) Hamilton	W. Nesbit, Ratcliff, Smith F. Nesbit, Schultz	6-24S-12E 31-23S-12E	560	400	Bartl	1800	15	23	0	-	-	Yes
11091																
10368	--	Seeley-Wick	White & Ellis Drilling, Inc.	(W) Kipfer	Kipfer	1,12-22S-11E	320	0	Bartl	1760	17	9	0	0	0	Yes
17991	No	Seeley-Wick	E.L. Williams*	(D) Galbraith	Galbraith	31-22S-11E	160	160	Bartl	1971	26	1	-	0	-	Yes
3293	--	Teeter-Scott	Berentz Drilling Co.*	(-) J.W. Teter Unit	Teter-Spencer J.W. Teter Unit 22 and 21	22-23S-9E 21-23S-9E	120	280	Bartl	2425	30-90	4	2	4	2	Yes
3357																
10274																
2737	No	Teeter-Scott	The Maurice L. Brown Company	(W) Morris	--	20,21-23S-9E	320	320	Bartl	2500	40	12	1	0	0	Yes
10170	No	Teeter-Scott	The Maurice L. Brown Company	(P) Green "A" Unit	Green "A"	2,11-23S-9E	360	0	Bartl	2333	37	5	4	0	0	Yes
10430	--	Teeter-Scott	Glacier Petroleum Co.	(P) Noller A	Noller A	9,10-23S-9E	22	17	Bartl	2450	35	5	0	0	0	Yes
14306	No	Teeter-Scott	Glacier Petroleum Co.	(P) Noller	Noller	3-23S-9E	10	-	Bartl	2450	35	2	-	-	-	Yes
14901	--	Teeter-Scott	Glacier Petroleum Co.	(P) Hartley B	Hartley B	2-23S-9E	50	-	Bartl	2450	50	6	1	-	-	Yes
11169	--	Teeter-Scott	K.E. Snyder	(D) Green "B" Flood Project	Green "B"	1,2,11,12-23S-9E	40	0	Bartl	2410	45	8	0	0	0	Yes
12236	No	Teichgraeber	King Oil Company	(P) Spencer Lease	Spencer	18-25S-9E	80	0	Bartl	2375	23	5	0	0	0	Yes
11737	No	Teichgraeber	Nadel and Gussman	(W) Welsh-Birkett	Birkett Welsh	12-25S-8E 13,14-25S-8E	300	0	Bartl	2350	15	51	-	0	-	Yes
13198	No	Teichgraeber	Nadel and Gussman	(W) Spencer	Spencer	18-25S-9E	40	0	Bartl	2400	15	4	0	0	0	Yes
1908	Yes	Thrall-Aagard	The Maurice L. Brown Company	(W) J.W. Martindell	J.W. Martindell	31-23S-10E	-	-	Bartl	2300	50	1	0	0	2	No*

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	OH visc., cp. @ 60° F	Production and injection statistics (bbls)				Remarks			
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	1975	Cum. 12-31-1975
12717	1	0	0	0	--	800	200	Prod	-	-	U	1966	S Gas	3/1	40	-	73,000	540,200	1,334	--	--	--	*Eureka Drilling Company
11096	2	4	0	0	Irreg	1200	25	Prod + Doug	1400	80	T	1964	S Gas	1/0	39	-	10,700	997,100	3,250	--	3,250	46,520	
14001																							
5052	1	0	0	0	4-spot	0	5	Prod	-	-	U	1958	S Gas	5/1	39	-	1,825	32,425	1,538	76,838	1,200	26,700	
11806	1	0	0	0	--	190	520	Prod	-	-	T	--	Grav	3/17	36	-	189,800	--	8,429	--	0	0	
1264	1	0	0	4	5-spot	0	0	Prod	-	-	T	1945	Limited Wat	-	42	4.5	3,020	32,823,349	11,098	1,335,928	11,098	1,335,928	
17648	1	0	0	0	Irreg	0	75	Prod	-	-	T	1974	Wat	-	40	-	4,500	9,000	2,463	4,653	2,463	4,653	
2003	6	-	0	-	5-spot	670	1400	Prod + Doug	1100	-	T	1954	S Gas	-	40	-	504,000	--	5,255	--	5,255	--	*Was Madison Oil Company
5095	3	-	-	2	Irreg	60	80	Prod + Doug	850	75	T+	1959	Wat	1/1	38	-	--	--	--	--	--	--	
14908											S												
10083	1	0	0	0	Irreg	250	60	Prod	-	-	U	1963	Wat	3/7	38	-	21,900	--	1,256	--	250	--	
17131	1	-	-	-	Irreg	0	26	Prod	-	-	U	1973	Grav	-	37	-	10,164	--	--	--	--	--	
16739	2	0	0	0	4-spot	300	825	Prod	-	-	T	--	S Gas	-	42	-	--	0	5,133	0	--	0	*Was Glenn Supply
16338	-	-	-	-	Irreg	100	140	Prod	-	-	T	1970	--	4/140	38-40	-	--	--	--	--	--	--	*2 wells from Tesoro Pet.
13360	1	-	-	-	Irreg	100	100	Prod	-	-	U	1968	Grav	10/1	40	-	3,500	--	1,055	--	--	--	*Was Grosshans-Peterson
8952	-	-	-	-	Irreg	0	20	Prod + Doug	1200	100	-	1961	--	7/3	36	-	7,300	237,210	304	--	--	--	*Was Eureka Drilling Co.
734	2	2	0	0	5-spot	500	750	Prod	-	-	U	--	--	1/49	39	-	2,562	--	200	--	--	--	
12172	2	1	0	0	Irreg	Vac	250	Prod + Bartl	1900	16	T	--	--	-	39	-	91,250	--	1,766	--	1,766	--	
11539	1	-	-	-	--	105	20	Prod	-	-	U	1964	--	-	-	-	7,300	--	1,825	--	--	--	
11538	1	-	-	-	--	100	150	Prod	-	-	U	1965	--	-	-	-	54,750	--	2,555	--	--	--	
10954	5	0	0	0	Irreg	300	650	Prod + Doug	600	100	T	1951	Grav	3/1	41	-	240,000	2,910,000	6,090	126,030	6,090	126,030	
11213	-	0	0	0	5-spot	400	240	Prod + Doug	600	100	T	1959	Grav	1/9	38	-	92,000	1,173,000	3,330	194,930	3,330	194,930	
11615	2	0	0	0	5-spot	0	40	Prod	1090	80	U	1972	S Gas	55/110	41	-	14,600	240,350	10,928	361,169	10,928	23,304	
1362	6	2	0	-	5-spot	400	84	Prod + Doug	650	50-75	M	1946	Gas Exp	-	43	-	183,595	3,673,373	2,776	1,289,268	--	--	
5552	7	1	-	-	5-spot	400	180	Prod + Doug	725	50	M	--	S Gas	-	40	-	459,096	7,576,756	15,228	631,949	15,228	631,949	
11091																							
10368	2	0	0	0	Irreg	150	85	Prod + Doug	700	100	T	1963	S Gas	3/1	41	-	30,000	794,200	4,011	286,984	--	--	
17991	1	-	0	-	Irreg	Grav	24	Prod	-	-	U	1975	Grav	1 1/2/24	36.5	-	8,760	--	658	--	0	--	*Was Chet Thompson
3293	1	2	3	0	5-spot	450	120	Prod + Doug	1400	60	T	1963	S Gas	-	42	5	29,200†	146,650†	2,550	13,323	2,550	13,323	*Was Sinclair
3357																							†+1,988MCF, +15,311 MCF Cum.
10274																							
2737	8	0	0	1	5-spot	205	462	Prod + Doug & L-KC	1200	75	T&S	1951	Limited Wat	-	40	3.8	1,517,623	3,523,481	24,514	177,933	24,514	148,240	
10170	2	1	0	0	Irreg	258	256	Prod	-	-	T	1963	Limited Wat	-	41	3.0	138,512	2,101,269	5,926	397,420	5,926	130,697	
10430	1	0	0	0	Irreg	600	265	Prod	-	-	U	1969	Grav	-	39	-	95,930	--	4,389	--	--	--	
14306	1	-	-	-	Irreg	150	27	Prod	-	-	U	1963	Grav	-	38	-	9,774	--	1,603	--	--	--	
14901	1	-	-	-	Irreg	50	278	Prod	-	-	U	--	Grav	-	39	-	10,035	--	10,734	--	--	--	
11169	1	0	0	0	Irreg	0	225	Prod	-	-	U	1967	S Gas	24/65	39	-	82,125	603,175	8,731	300,921	8,731	115,690	
12236	3	0	0	0	Irreg	880	110	Prod + Doug	1290	90	U	1965	S Gas	1/1	40	-	120,615	748,126	5,472	130,681	5,000	34,845	
11737	8	0	1	0	Irreg	1500	200	Prod + Doug	1000	50	T	1967	S Gas	95/5	41	-	584,000	4,552,000	61,426	--	61,426	521,114	
13198	2	1	0	0	Irreg	700	135	Prod + Doug	1000	50	T	1967	--	9/1	39	-	98,500	802,000	1,628	--	1,628	25,884	
1908	0	0	0	2	5-spot	0	0	Prod	-	-	-	1948	S Gas	-	40	4.0	0	23,032,364	1,415	2,535,187	1,415	2,535,187	*Flood depleted

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?		
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.	
GREENWOOD COUNTY (concl.)																	
	2226	Yes	Thrall-Aagard	The Maurice L. Brown Company	(W) Thrall-McKee Consolidated	Thrall-McKee Consolidated	28,29,32,33-23S-10E	640	560	Bartl	2300	31	1	0	0	3	Yes
	2743	Yes	Thrall-Aagard	The Maurice L. Brown Company	(W) Cartwright	-- Louisa Thrall, Ernestine Thrall	29-23S-10E 36-23S-9E	325	-	Bartl	2200	35	8	4	0	2	Yes
	10734	No	Thrall-Aagard	The Maurice L. Brown Company	(W) Moore-Holverson	Aagard, Moore Holverson Hill	1-24S-9E 6-24S-10E 23-24S-9E	275	0	Bartl	2120	20	6	0	0	8	No
	15438	Yes	Thrall-Aagard	The Maurice L. Brown Company	(W) George I. Miller	George I. Miller	26-24S-9E 25,26-24S-9E 28-23S-10E	40	0	Bartl	2385	25	5	0	1	0	Yes
	12156	--	Thrall-Aagard	Glacier Petroleum Co.	(-) Osmundson	Osmundson	23-24S-9E	-	-	--	-	-	-	-	-	-	No*
	14342	No	Thrall-Aagard	J & T Cooper*	(W) Zimmerman	Zimmerman	19-23S-10E	40	0	Bartl	2300	12	3	0	0	0	--
	16865	No	Thrall-Aagard	Glacier Petroleum Co.	(P) Eide-Hill	Eide, Hill	26,27-24S-9E	55	-	Bartl	2170	20	5	2	0	0	Yes
	17510	--	Thrall-Aagard	Glacier Petroleum Co.	(P) Bratton	Bratton	14-24S-9E	10	-	Bartl	2110	91	3	-	-	-	Yes
	7558	Yes	Virgil	R.R. Abderhalden*	(W) West Virgil Unit	Geist	13-24S-12E	539	0	Miss	1730	70	33	6	0	0	Yes
	15502	No	Virgil	Ale Oil Company	(D) --	Sullivan & Wayham Gruber	14-24S-12E 33-22S-13E	200	0	Miss	1850	15	4	0	0	0	Yes
	192	--	Virgil	French & Winterscheid, Inc.	(P) Hout-Meyers	Hout Meyers	4-23S-13E 11-24S-12E	50	70	Miss	1700	5	3	0	0	0	Yes
	12482	--	Virgil	French & Winterscheid, Inc.	(P) Dame	Dame	10-24S-12E 12-24S-12E	80	40	Miss	1700	6	8	0	0	0	Yes
	7811	No	Virgil	Houston-Oklahoma Oil Co.	(W) West Virgil Unit	Mennonite	11-24S-12E	55	5	Miss	1755	9-25	14	4	0	0	Yes
	9884					Sullivan Fleming	14-24S-12E 15-24S-12E										
	13251					Barnes, Sharp	7-24S-13E	139	-	Miss	1664	16	2	0	0	0	Yes
	12408	No	Virgil	Lewis C. Long	(P) Barnes	Shadel	15-22S-13E	120	60	Miss	1800	6	6	0	0	0	Yes
	221	--	Virgil North	French & Winterscheid, Inc.	(P) Shadel	Shadel											
	3259	--	Virgil North	French & Winterscheid, Inc.	(P) L. Young	L. Young	10-23S-13E	40	40	Miss	1800	6	4	0	0	0	Yes
	3915	--	Virgil North	French & Winterscheid, Inc.	(P) Lovett & Shambaugh	Lovett, Shambaugh	22-23S-13E	100	-	Miss	1700	6	7	0	0	0	Yes
	8069	No	Virgil North	Houston-Oklahoma Oil Co.	(W) Virgil Pool	W.G. Berry	28-23S-13E	80	0	Miss	1750	10	15	0	0	0	Yes
	15851	No	Virgil North	Kewanee Oil Co.*	(W) Schneider Lease	Schneider	10-23S-13E	40	0	Miss	1770	15	9	2	0	0	Yes
	1057																
	5838	--	Virgil North	Sun Oil Company	(D) Shadel	Shadel	15-23S-13E	160	95	Bartl	1540	50	3	1	0	0	Yes
	6126	--	Virgil North	Sun Oil Company	(D) Olinger "A"	Olinger "A"	15-23S-13E	10	1	Miss	1720	30	4	0	0	0	Yes
	6135	--	Virgil North	Sun Oil Company	(W) Jones "A"	Jones "A"	21-23S-13E	80	12	Miss	1670	55	7	0	0	0	Yes
	8090	--	Virgil North	Sun Oil Company	(W) Griblin "B"	Griblin "B"	28-23S-13E 21-23S-13E	160	10	Miss	1750	30	6	1	0	0	Yes
	16111	--	Virgil North	Sun Oil Company	(P) Dehlinger "B"	Dehlinger "B"	29-23S-13E	160	20	Miss	1700	10	6	0	0	0	Yes
	16617	No	Wiggins	George A. Barnard	(P) Wiggins Water Flood	Wiggins Nixon	30-24S-11E 25-24S-10E	400	320	Cattle	1830	15	5	0	0	0	Yes
	17508	No	Wiggins	George A. Barnard	(P) Lindamood Water Flood	Lindamood	19-24S-11E	80	40	Cattle	1800	25	1	0	0	0	Yes
	11036	No	Wilkerson	George E. Sauder	(D) Wilkinson Carrington	Wilkinson Carrington	7-25S-9E 6-25S-9E	40	20	Cattle	2100	30	4	-	-	-	Yes
	11069	No	Wilkerson	E. W. Sauder	(P) Olsen Lease	Olsen Lease	6-25S-9E	20	30	Cattle	2100	20	2	1	0	0	Yes
	15095	--	Willow Creek	Oscar Koepke	(-) Feltner & Feltner B	Feltner	31-22S-11E	100	0	Bartl	2000	30	1	0	0	0	--
	13840	--	Willow Creek	George E. Sauder	(D) Warren	Warren	6-23S-11E	40	0	Bartl	2050	20	10	0	0	0	Yes
	8109	--	Zimmerman	Jack & Thom Cooper*	(W) Bratton Mansfield	Bratton Mansfield	13-24S-9E	130	230	Bartl	2300	25	11	6	0	20	Yes
GREENWOOD COUNTY TOTALS (Reported)							(Includes project in supplemental list.)	18,972	5,180				663	87	8	55	
HARPER COUNTY																	
	17631	--	Runnymede	Texaco, Inc.	(-) Maude Wene	Springer Unit Litsey Unit	23,24-31S-6W 25,26-31S-6W	320	-	Lans	3613	-	12	0	0	0	Yes
	16914	No	Spring Valley	Keener Oil Company*	(P) Schenck Lease	Schenck	34-31S-5W	80	0	Simp	4654	8	2	0	0	0	Yes
HARPER COUNTY TOTALS (Reported)								400	0				14	0	0	0	

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks				
	Active	In-active	Drilled 1975	Ahd. 1975			Injection Pattern	Source	Depth, ft.						Thick., ft.	Type	Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975		
2226	1	0	0	8	5-spot	318	350	Prod + Doug	1200	-	T	1949	S Gas	-	40	3.4	127,765	58,029,272	182	6,256,564	182	3,981,100			
2743	8	12	0	7	5-spot	953	340	Prod + Doug	1200	40	T	1952	S Gas	-	40	5	930,210	28,599,144	13,350	1,278,229	13,350	1,278,229			
10734	5	0	0	16	Irreg	1182	161	Prod + Doug	1000	50	T	1963	S Gas	-	40	3.2	352,085	8,170,632	6,539	491,091	6,539	491,091			
15438	1	0	0	0	Irreg	449	407	Prod + Doug	1200	140	T	--	S Gas	-	40	3.4	145,731	712,514	13,312	110,741	13,312	106,614			
12156	-	-	-	-	--	-	-	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	--	*Injection discontinued	
14342	1	0	0	0	Irreg	1100	150	Prod + Doug	1500	100	T	--	S Gas	49/1	39	-	46,800	--	4,439	--	4,000	--	--	*Was R.R. Riss	
16865	1	-	-	-	Irreg	300	220	Prod	-	-	U	1957	Grav	-	39	-	79,420	--	2,612	--	--	--	--		
17510	1	-	-	-	Irreg	150	81	Prod	-	-	U	--	Grav	-	39	-	29,322	--	532	--	--	--	--		
7558	10	9	0	0	Irreg	150	40	Prod + Arb	2200	150	T	1958	S Gas	2/1	38	3.4	146,000	6,133,875	12,840	756,098	12,840	756,098	*Was Sun Oil Co.		
15502	1	0	0	0	Irreg	Grav	30	Prod	-	-	T	1970	Grav	1/4	39	-	9,000	69,000	1,600	26,080	500	--	--		
192	1	0	0	0	Irreg	130	125	Prod	-	-	T	1964	Wat	2/3	39	-	30,000	276,000	5,452	--	2,726	35,342	--		
12482	1	0	0	0	Irreg	300	300	--	-	-	T	1966	Wat	1/1	38	-	79,000	632,000	4,362	--	4,362	38,557	--		
7811	2	1	0	0	5-spot	120	100	--	-	-	T	1954	Wat	1/10	38.6	-	138,000	1,590,860	7,850	72,629	2,610	57,898	--		
9884																									
13251																									
12408	1	-	-	-	Irreg	-	50	Prod	16	8	U	1966	Grav	-	38	-	18,000	145,000	919	--	100	--	--		
221	1	0	0	0	Irreg	150	300	Prod	-	-	T	1955	Wat	1/1	-	-	900,000	7,221,000	2,747	--	1,373	42,212	--		
3259	1	0	0	0	Irreg	80	120	Prod	-	-	T	1955	Wat	11/9	36	-	30,000	568,000	1,836	--	918	22,829	--		
3915	1	0	0	0	Irreg	50	230	Prod	-	-	T	1956	Wat	11/9	36	-	900,000	8,100,000	4,668	--	2,334	47,842	--		
8069	1	3	0	0	Irreg	250	75	Prod	-	-	U	1959	Wat	1/3	38.2	-	50,875	2,039,781	7,300	114,783	2,650	101,650	--		
15851	2	0	0	0	Irreg	500	192	Prod	-	-	U	1944	--	5/47	39	-	140,100	764,963	6,934	1,246,883	6,934	47,006	*Was Barbara Oil Co.		
1057																									
5838	1	4	0	0	Irreg	300	650	Prod	-	-	U	1938	S Gas	-	33.8	4.5	3,248	17,494,079	4,973	185,552	4,973	185,552	--		
6126	1	0	0	0	Irreg	Grav	30	Prod	-	-	U	1959	S Gas	-	36.8	3.5	11,381	315,469	2,673	64,565	2,673	64,565	--		
6135	2	0	0	0	--	500	250	Prod	-	-	U	1958	S Gas	-	39.5	3.5	140,927	2,815,334	13,533	256,016	13,533	256,016	--		
8090	3	4	0	0	Irreg	350	231	Prod	0	0	U	1961	S Gas	1/4	34.1	3.4	183,691	8,583,520	7,210	139,070	7,210	139,070	--		
16111	2	0	0	0	Irreg	300	300	Prod	-	-	T	1971	Wat & S Gas	1/21	39.2	4	219,351	1,192,987	8,479	45,617	8,479	42,536	--		
16617	2	0	0	0	Irreg	500	250	Prod	-	-	T	1966	S Gas	-	38	-	182,500	736,715	3,786	36,094	3,786	36,094	--		
17508	1	0	0	0	Irreg	600	300	Prod	-	-	T	1974	S Gas	-	38	-	109,500	111,300	642	822	642	822	--		
11036	1	-	0	-	Irreg	450	70	Prod + Doug	1000	100	U	1964	--	7/3	38	-	25,000	317,500	3,800	-	3,800	22,900	--		
11069	1	1	0	0	Irreg	350	100	Prod	-	-	T	1964	--	-	37	-	35,000	610,500	2,190	116,970	1,200	28,200	--		
15095	1	0	0	0	Irreg	500	100	Prod + Doug	900	100	T	--	--	1/1	39	-	36,500	217,000	1,276	20,317	638	8,040	--		
13840	1	0	0	0	5-spot	200	20	Prod	-	-	-	1968	Grav	95/5	38	-	7,000	54,000	4,300	182,800	430	12,930	--		
8109	7	0	-	-	5-spot	1100	1800	Prod + Doug	1200	100	T	--	S Gas	49/1	39	-	112,300	--	9,461	--	--	--	--	*Was R.R. Riss	
	225	123	5	49													12,664,278	358,129,578	580,725	30,804,276	387,564	21,536,344			
17631	1	0	0	0	Irreg	Vac	758	Prod	-	-	U	1974	--	93/244	-	-	276,842	319,178	52,912	71,041	0	0	--		
16914	1	0	0	0	Irreg	10	100	Prod	-	-	U	1973	Wat	57/-	45	-	36,500	87,495	1,683	73,057	0	0	*Was Oasis Petroleum		
	2	0	0	0													313,342	406,673	54,595	144,098	0	0			

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
HARVEY COUNTY																
13454	Yes	Burrton	Drillers Production Co., Inc.	(W) Bott Unit	Bott Unit	6, 7, 8, 18-23S-3W	1580	0	Miss	3350	20	50	0	2	0	Yes
10087	No	Burrton	Home-Stake Production Co.	(W) Burrton Waterflood	Cunningham, Day A & B, Dick A & B, Gouldner, Krebs Martindale, LeClere, Howell, Frederick "A", Morton Short, Nelson, Norris, Schrag "A", Murphy "A"	19-23S-3W 17, 18, 20-23S-3W 30-23S-3W	1452	528	Miss	3400	35	38	1	0	0	--
17963	No	Halstead	Oil Property Management, Inc.*	(P) Haury-Cohen Leases	Haury, Haury-Cohen	11-23S-2W	480	0	Miss	2950	30	5	0	0	0	Yes
17678	--	Hollow-Nikkel	Kantor Oil Company	(W) E-M-S Flood Project	Ediger, Martens Schmidt	19-22S-3W 30-22S-3W	320	160	Hunt	3352	37	5	0	0	0	Yes
11005 11876	Yes	Hollow-Nikkel	Kewanee Oil Co.*	(W) Hollow-Nikkel W.F.	Dyck, Duerkson, Hiebert, Neufeld, Nikkel, Schroeder, Siemens	5, 8-22S-3W	200	160	Miss Hunt	3200 3500	10 22	12	0	0	0	Yes
HARVEY COUNTY TOTALS (Reported)							4,032	848				110	1	2	0	
HASKELL COUNTY																
17988	--	Eubank	Helmerich & Payne, Inc.	(P) Eubank	Eubank	28-28S-34W	640	-	Ches	5494	20	3	0	0	0	Yes
HODGEMAN COUNTY																
14869	--	Buda Southeast	American Petrofina Co. of Texas*	(W) Cheney	Cheney	1, 2-21S-26W	160	0	Miss	-	-	1	0	0	0	Yes
11855	--	Eakin Northwest	Phillips Petroleum Co.*	(P) Huling	Huling†	15-21S-21W	120	120	Miss	4325	15	2	0	0	0	Yes
16699	--	Goebel East	Pickrell Drilling Company	(P) Goebel East Unit	Goebel-East Unit	13, 24-21S-24W	560	0	Miss	4460	10	5½	0	0	1	Yes
7630	Yes	Hallet	Kewanee Oil Co.	(P) Hallet Waterflood	Hallet Waterflood	15, 22-22S-25W	640	320	Miss	4597	64	11	1	0	0	Yes
16343	No	Hanston-Oppy	Kaiser Francis*	(D) Sipes	Sipes	22-22S-22W	160	0	Top	3572	-	2	0	0	0	Yes
13232	No	Hanston-Oppy	Sun Oil Company	(P) So. Bamberger Repressuring	S. Bamberger	20-22S-22W	640	0	Miss	4258	22	5	0	0	4	Yes
14233	No	Hanston-Oppy	Petroleum, Inc.	(P) Housman Pilot Flood Project	Housman	3-23S-22W	160	0	Miss	4427	-	2	0	0	0	Yes
16441	No	Hummel Southeast	Petroleum, Inc.	(P) Work Pilot Flood Project	Work	8-22S-24W	160	0	Miss	4575	9	0	0	0	0	Yes
17767	No	Krankenber	Donald C. Slawson	(P) Krankenberg "B"	--	9-24S-23W	160	0	Miss	4730	8	2	0	-	0	Yes
17586	--	Lippoldt	Texaco	(-) E.F. Lippoldt	Lippoldt "B"	13, 14, 15, 24-23S-23W	-	-	Miss	4556	71	11	1	0	0	--
12365	No	Oppy South	Phillips Petroleum Co.*	(P) Clifton "BB"	Clifton "BB"	1-23S-23W	80	40	Miss	4430	90	2	0	0	0	Yes
16908	--	Saw Log Creek	Pickrell Drilling Company	(W) Gleason B	Gleason B Hall K	32-23S-21W 31-23S-21W	280	0	Marm	4377	20	3	0	0	0	Yes
HODGEMAN COUNTY TOTALS (Reported)							3,120	480				47	2	0	5	
JACKSON COUNTY																
12576	--	Leach	Hank Martell Oil Company*	(D) Leach	Leach Hladky Beightel	15-7S-13E 22-7S-13E 21-7S-13E	400	600	Hunt	2700	6	7	-	0	0	Yes
JOHNSON COUNTY																
11600 11601	No	Gardner	Mo-Kan Oil Group	(P) M,K,B & G Flood	McCann & McCann B, Bigelow & Griffin, Knabe	15-14S-22E	25	5	Bartl	825	10	6	0	0	0	Yes
11600	No	Gardner	Rader Oil Co.	(P) Knabe-A - Roberts	Knabe-A, Roberts	10-14S-22E 11-14S-22E	5	0	Squir	700	10	7	0	0	0	No*
11601	No	Gardner	Rader Oil Co.	(D) McCann-A	McCann-A & D	14-14S-22E	15	0	Bartl	825	10	6	0	1	0	Yes
JOHNSON COUNTY TOTALS (Reported)							45	5				19	0	1	0	

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
13454	7	0	0	1	Irreg	20	-	Prod	-	-	U	1967	Wat + Gas Cap	155/1200	38	-	1,446,028	8,211,328	82,716	2,629,023	5,000	--	
10087	18	10	0	0	5-spot	Vac	426	Prod + Equus Beds	75	40	M	1963	S Gas	-	36	-	4,441,759	98,226,619	71,228	2,015,517	71,228	2,015,517	
17963	1	0	0	0	Irreg	0	650	Prod	-	-	T	1975	Wat + Gas Exp	1/19	35	-	60,864	60,864	7,082	7,082	0	--	*Was Max Cohen
17678	1	1*	0	0	Irreg	15	1000	Prod	-	-	U	1967	Grav	-	40	-	365,000	3,450,000	15,627	--	9,057	--	*SWD
11005 11876	3	0	0	0	Irreg	600	2000	Prod + Equus Beds	35	-	F&U	1964	Wat + S Gas	1/3	42	-	2,189,677	16,896,859	37,412	1,314,720	37,412	659,502	
	30	11	0	1													8,503,328	126,845,670	214,065	5,966,342	122,697	2,675,019	
17988	1	0	0	0	Irreg	Vac	6	Prod	-	-	U	1975	S Gas	131/31	38	-	13,715	13,715	8,791	591,165	0	0	
14869	1	0	0	0	Line	0-Vac	37	Prod	-	-	U	1969	Wat	1/1	37.5	-	13,606	51,803	3,629	59,295	0	0	*Was Imperial Oil Company
11855	1	0	0	0	Irreg	750	388	Prod + Cedar Hills	900	200	T	1965	Wat	-	35	-	141,620	1,446,748	19,056	373,201	8,856	88,296	*Was Beardmore Oil Co.
16699	1	0	0	0	Irreg	0	250	Prod	-	-	U	1972	S Gas	54/21	36	2.5 Est.	91,250	212,920	15,368	459,887	0	0	†Includes Huling prod. only
7630	4	0	0	0	Peri	1550	465	Gravel	405	20	F	1960	Wat	276/90	38	-	678,382	9,936,338	42,321	1,957,199	42,321	998,251	
16343	1	0	0	0	Irreg	Vac	800	Prod	-	-	U	1972	Gas Exp	-	34	-	297,475	870,525	4,380	384,754	0	0	*Was Shell Oil
13232	1	0	0	1	Irreg	300	1488	Prod	-	-	U	1966	Wat	1/10.8	36	-	543,461	4,258,875	18,137	719,925	1,800	10,075	
14233	1	0	0	0	Irreg	Vac	545	Prod	-	-	T	1968	Wat + S Gas	4/11	30	16	198,925	742,643	13,732	196,790	0	0	
16441	1	0	0	0	Irreg	Vac	260	Prod	-	-	T	1972	Wat + S Gas	0	-	-	94,900	277,332	0	0	0	0	
17767	1	0	-	0	Irreg	0	19	Prod	-	-	U	1975	Wat + S Gas	6/1	36	3.5	6,893	6,893	24,124	24,124	0	0	
17586	1	0	0	0	--	500	1129	Prod	-	-	U	1974	S Gas	-	35.8	-	412,075	482,566	53,809	61,108	0	0	
12365	1	0	0	0	Irreg	580	997	Prod	70	15	M	1966	Wat	-	36	-	264,000	1,969,366	6,909	181,588	4,989	47,398	*Was Beardmore Oil Co.
16908	1	0	0	0	Irreg	0	102	Prod	-	-	U	1973	S Gas	23/39	24	3	37,230	84,345	8,637	191,875	0	0	
	15	0	0	1													2,779,817	20,340,354	210,102	4,609,746	57,966	1,144,020	
12576	1	-	0	0	Irreg	0	2000	Prod	-	-	U	1966	Wat	1/1	26	-	300,000	1,320,000	9,332	--	--	--	*Was Eureka Drilling Co.
11600 11601 11600	3	0	0	0	Irreg	280	25	Prod	-	-	U	1963	Grav	9/1	22	-	27,390	387,418	6,000	--	2,700	--	
11601	1	0	0	0	Irreg	40	5	Prod	-	-	U	1973	S Gas	25/1	29	-	1,720	3,845	1,350	--	0	0	*Insufficient water supply
11601	2	0	0	0	Irreg	0	25	Prod	-	-	U	1964	Grav	9/1	22	-	18,225	213,225	2,650	--	645	--	
	6	0	0	0													47,335	604,488	10,000	0	3,345	0	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. initiated?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
								Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
KEARNY COUNTY																	
	16958	--	Pleasant Prairie	Helmerich & Payne, Inc.	(P) Pleasant Prairie	USA "B" White "O"	14-26S-35W 13-26S-35W	-	-	Morr-Miss	4966	24	2	0	1	0	Yes
KINGMAN COUNTY																	
	13079 14912	--	Alameda	Texaco Inc.	(-) Alameda	Martenev, G. Richardson, JS Gurtner, Nunnemaker, H. Krehbiel, G.W. Richardson, T. Lecklider, T. Lecklider "B", J. Flickner, Jr., L. Lord, T. Lecklider "C", L. Lord	22-28S-7W 26-28S-7W 27-28S-7W 28-28S-7W 33-28S-7W 34-28S-7W	1920	-	Miss Viola Simp KC	4345	10	18	1	0	6	Yes
	16295	No	Broadway West	Lario Oil & Gas Company	(P) Clouse	Clouse	18-28S-5W	0	-	Miss	3850	50	1	0	0	0	Yes
	5422	No	Casley	Martin Oil Company	(D) Casley	Casley	11-28S-5W	160	0	Miss Dol	3770	32	2	1	0	1	Yes
	7702 8651	--	Cunningham	Skelly Oil Company	(W) Cunningham Field	Miles "A" Miles "B"	30-27S-10W 19-27S-10W	320	0	L-KC	3400	8	6	3	0	0	Yes
	16625	--	Spivey-Grabs-Basil	Pickrell Drilling Company	(P) Maple G	Maple G	30-29S-6W	40	0	Miss	4116	36	1	0	0	0	Yes
	5576	No	Spivey-Grabs-Basil	Sun Oil Company	(D) Higgins	Higgins	9-30S-8W	80	0	Miss Ch	4185	45	2	0	0	0	Yes
KINGMAN COUNTY TOTALS (Reported)								2,520	0				30	5	0	7	
KINGMAN-PRATT COUNTIES																	
	6106	Yes	Cunningham	Skelly Oil Company	(W) Cunningham "B" Unit	No. Ratcliff, J.M. Ratcliff, Interurban Realty John Miller, Krehbiel "A" East Maxedon, So. Maxedon, West Maxedon (Wells Nos. 1 & 3), J.A. Hoagland, C.J. Moore, West Maxedon (Well No. 2), C.H. Lakin, G.D. Miller	19-27S-10W 30-27S-10W 31-27S-10W 24,25-27S-11W 25-27S-11W 36-27S-11W	800	575	L-KC	3400	16	12	1	0	0	Yes
KINGMAN-SEDGWICK COUNTIES																	
	5288	Yes	Bartholomew	The Maurice L. Brown Company	(W) Bartholomew Unit	Bartholomew Unit	29,30,31-27S-4W 36-27S-5W 6-28S-4W 1-28S-5W	0	0	Miss	3700	11	11	0	0	2	No
LABETTE COUNTY																	
	7845	--	Coffeyville-Cherryvale	Dodson Production Co.	(P) Utter	Utter	23-32S-17E	40	0	Bartl	660	15-30	2	0	0	0	Yes
	9483	--	Coffeyville-Cherryvale	Dodson Production Co.	(W) Perry	Perry	25-32S-17E	20	-	Bartl	650	10-20	10	0	0	0	Yes
	16032	--	Coffeyville-Cherryvale	Dodson Production Co.	(D) Foster	Foster	24-32S-17E	5	0	Bartl	700	15	1	0	0	0	Yes
	6323	No	Mound Valley	Vot Oil Company	(-) Merrick	Merrick	33-32S-18E	80	-	Bartl	579	23	12	-	15	2	Yes
LABETTE COUNTY TOTALS (Reported)								145	0				25	0	15	2	
LABETTE-MONTGOMERY COUNTIES																	
	11991	No	Coffeyville-Cherryvale	SeKan Drilling Co.	(D) Spradling Lease	Spradling	26-32S-17E 27-32S-17E	-	-	Bartl	670	40	10	20	0	0	No*
	14745	No	Coffeyville-Cherryvale	Wayne Gregory	(D) --	Gregory Lease Marchant Lease	34,35-32S-17E 3-33S-17E	240	100	Bartl	670	15	10	11	0	10	No*
LABETTE-MONTGOMERY COUNTIES TOTAL (Reported)								240	100				20	31	0	10	

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abcd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
16958	1	0	0	0	Irreg	Vac	21	Prod	-	-	U	1973	S Gas	2/3	35.2	-	6,768*	22,610*	22,087*	37,729*	0	0	*Corrected figures
13079 14912	8	0	0	0	Peri	630	342	Prod	-	-	U	1970	Wat	8655/ 2913	43	.71	999,705	5,748,163	216,683	5,885,787	47,199	306,181	
16295	1	0	0	0	Irreg	Grav	3	Prod	-	-	U	1971	S Gas + Gas Exp	0/5	-	-	1,086	4,985	0	0	0	0	
5422	1	1	0	1	Line	0	-	Prod	-	-	U	1956	Wat	11/115	28.3	-	41,975	41,400	24,820	2,481	0	--	
7702	4	0	0	0	Irreg	0	590	--	-	-	M	1961	S Gas	-	34	-	862,272	10,046,398	26,829	1,832,424	26,829	520,298	
8651 16625	1	0	0	0	Irreg	0	11	Prod	-	-	U	1972	S Gas	7/13	33	2.5 Est.	4,015	12,840	2,611	33,138	0	0	
5576	1	0	0	0	Irreg	500	176	Prod	-	-	-	1957	S Gas	2.3/1	36	3.1	64,603	669,404	4,758	349,833	400	2,647	
	<u>16</u>	<u>1</u>	<u>0</u>	<u>1</u>													<u>1,973,656</u>	<u>16,523,190</u>	<u>275,701</u>	<u>8,103,663</u>	<u>74,428</u>	<u>829,126</u>	
6106	7	6	0	0	Irreg	150	369	Prod + Sh Sd	80	-	M	1958	S Gas	-	36	-	942,971	22,025,696	19,264	3,785,156	19,264	730,601	
5288	0	0	0	0	Peri	0	0	--	-	0	U	1957	Wat + S Gas	-	36	-	0	9,369,243	10,075	3,340,333	0	269,371	
7845	1	0	0	0	Irreg	-	-	--	-	-	-	1959	--	-	33	-	--	--	160	--	--	--	
9483	2	0	0	0	Irreg	250	35	Prod	-	-	U	1962	Gas Exp	2/3	22	-	--	--	900	--	--	--	
16032	1	0	0	0	Irreg	Grav	5	Prod	-	-	U	1971	Grav	2/3	22	-	--	--	320	--	--	--	
6323	1	-	-	-	--	200	160	Prod + Pond	-	-	M	1958	Grav	1/5	31.7	-	47,450	--	3,286	113,169	2,922	--	
	<u>5</u>	<u>0</u>	<u>0</u>	<u>0</u>													<u>47,450</u>	<u>0</u>	<u>4,666</u>	<u>113,169</u>	<u>2,922</u>	<u>0</u>	
11991	2	7	0	0	Line	250	60	Prod	-	-	U	1956	Grav	1/6	34	-	7,500	--	1,800	--	0	--	*Injecting produced water
14745	8	3	0	0	5-spot	200	15	Prod	-	-	U	1974	Sd Frac & Pump	1/9	31	-	6,000	--	--	--	--	--	*Trouble pumping wells
	<u>10</u>	<u>10</u>	<u>0</u>	<u>0</u>													<u>13,500</u>	<u>0</u>	<u>1,800</u>	<u>0</u>	<u>0</u>	<u>0</u>	

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
LANE COUNTY																
16555	--	Pendennis South	Helmerich & Payne, Inc.	(P) Leighton "A"	Anderson, Jones "D" Leighton "A"	33-16S-27W 4-17S-27W	-	-	L-KC	4120	20	5	0	0	0	Yes
18114	No	White Rock South	Beren Corp.	(W) Harlamert Lease	Harlamert	25-17S-28W 30-17S-27W	120	0	L-KC	4220	8	3	0	3	0	Yes
LANE COUNTY TOTALS (Reported)							120	0				8	0	3	0	
LINN COUNTY																
9576	No	Goodrich-Parker	Kent Drilling Co.*	(P) Linn Flood	Bertha Nolin	23-19S-22E	25	0	Bart1	650	15	4	0	0	0	No†
3165	--	Goodrich-Parker	Ulses' Oil Company	(P) Goodrich Group	Cowan Bearly, Wm Brownrigg, C. Byerley, M. Byerley, H.B. Cox, D.I. Greene, H.M. Wooten	20-20S-22E	300	0	Squir	600	30	101	0	2	0	Yes
3150	Yes	LaCygne-Cadmus	Energy Recovery Inc.*	(W) Scott	Wilbur Scott	34,35-19S-23E 2,3-20S-23E	80	0	Peru	250	17	33	29	-	-	Yes
15486	No	LaCygne-Cadmus	Energy Recovery Inc.*	(W) Baker	Baker, Light, Harvey, Croxton, Crisler, Burnett, Synder Burnett, Stroup, Baldwin	,5,8,9-20S-23E 21,31,33-19S-23E	2104	0	Peru	260	18	33	187	-	-	No†
454	--	LaCygne-Cadmus	J & J Oil Co.*	(-) J & J Oil Co.	Teagarden Lease	2-20S-23E	160	0	Peru	187	12	3	0	0	0	Yes
12025	--	LaCygne-Cadmus	J & J Oil Co.*	(W) J & J Oil Co.	Person Lease	10-20S-23E	160	120	Peru	200	12	35	2	5	0	Yes
15290	--	LaCygne-Cadmus	Charles T. Ogden*	(W)+ Calvin (P)	Edith Calvin	35-19S-24E	105	0	Squir	200	9	6	-	0	-	Yes
LINN COUNTY TOTALS (Reported)							2,934	120				215	218	7	0	
LINN-MIAMI COUNTIES																
13055	--	Beagle	Robert A. Mason	(W) --	Cook-Day Lease	15,22-19S-22E	40	0	Squir	480	15	4	0	0	0	Yes
LYON COUNTY																
5671	--	Rock Creek	C.E. Murphy	(P) Murphy	Murphy	29,32-21S-11E	240	-	Bart1	1920	12	6	-	0	0	Yes
5004	No	Rock Creek	Schankie Well Service*	(D) R.B. Byrd Lease	R.B. Byrd Lease	32-21S-11E	110	0	Bart1	1900	17	3	0	0	0	Yes
LYON COUNTY TOTALS (Reported)							350	0				9	0	0	0	
MCPHERSON COUNTY																
5631	--	Chinberg	George R. Hess	(P) Swanson	Swanson	13-19S-3W	340	0	Miss	2990	36	5	0	0	0	Yes
7365	No	Georob	Colorado Oil Company, Inc.	(D) Robinson Lease	Robinson	1-18S-2W	40	0	Miss	2790	7	3	0	0	0	Yes
2434	--	Graber	George R. Hess*	(D) Graber Water Flood	A. Hetzke, Kindblade J.P. Huxman, J.C. Goering, F.A. Hetzke, A.K. Graber, J.M. Boekner	20-21S-1W 29-21S-1W	980	640	Hunt 1m	3280	30	16	0	0	0	Yes
3017	--	Graber	George R. Hess*	(W) Graber	D.B. Jones, Carrie Jones C.C. Graber	30,31-29S-1W 32-29S-1W	200	40	Hunt	3285	25	2	0	0	0	Yes
17397	--	Graber	George R. Hess	(P) Boesker	Jones A Jones B Chavez & Boesker	32-21S-1W 31-21S-1W 8-21S-1W	560	0	Hunt	3364	4	5	0	0	0	Yes
4038	--	Gypsum Creek	George R. Hess	(P) Buckeye "C"	B Lagree & Goering Arnold	17-21S-1W 16-21S-1W	240	0	Miss	2622	20	4	0	0	0	Yes
13798	--	Hollow-Nikkel	George R. Hess	(P) Schroeder	Van Meter A, Van Meter B Bukey D	32-16S-1W 5-17S-1W	80	0	Hunt 1m	3418	20	2	0	0	0	Yes
1295	No	Jenday	Alfred D. Koehn*	(-) Wedel B	Schroeder	28-21S-3W	320	160	Miss ch	2942	20	6	0	0	0	Yes
5715	--	Jenday	Alfred D. Koehn*	(D) Ryno S.W.D.	Wedel B	7-19S-1W	80	-	Miss	2935	27	2	0	0	0	Yes
15232	No	Johnson	David Litan*	(P) Kasey-Colburn	Russell Kasey A, Kasey B, Colburn, Johnson	6-19S-1W 35-19S-3W	-	-	Miss	2990	110	5	1	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil vis., cp. @ 60° F	Production and injection statistics (bbl)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
16555	1	0	0	0	Irreg	0	166	Prod	-	-	U	1972	--	43/30	38	-	64,109	145,730	55,922	178,609	0	0	
18114	1	0	1	0	Irreg	Vac	180	Prod	-	-	U	1975	S Gas	1/4	36	-	2,700	2,700	18,177	28,123	0	0	
	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>													<u>66,809</u>	<u>148,430</u>	<u>74,099</u>	<u>206,732</u>	<u>0</u>	<u>0</u>	
9576	4	0	0	0	Irreg	400	10	Prod + Hertha	170	6	M	1962	Grav	-	29	-	1,000	251,000	1,000	352,000	1,000	126,000	*Was Buddrus & Woods †Not enough water
3165	87	0	0	0	5-spot	600	7	Prod + Arb	1400	50	M	--	Gas Exp	-	29	-	222,285	15,121,149	5,385	651,230	--	--	
3150	20	26	-	-	4-spot	260	24	Prod + Miss	1068	-	T	1940	S Gas	3/1	29	20	175,200	6,132,000	3,246	270,418	3,246	270,418	*Was Moray Oil Company Inc.
15486	33	187	-	-	4-spot	260	27	Prod + Lake	-	-	M	1974	S Gas	3/1	29	20	325,786	593,976#	2,029	22,749	2,029	22,749	*Was Moray Oil Company Inc. †Inert gas inj. stopped & wat. inj. started#+108,035
454	3	0	0	0	5-spot & Line	150	10	Peru	210	12	F&M	1963	S Gas	-	29.4	30.1	10,950	--	660	--	--	--	*Was Raybury Oil Co. MCF
12025	23	0	1	0	5-spot	150	10	Peru	200	12	F&M	1963	S Gas	-	28.9	29.6	89,200	--	4,676	--	--	--	*Was Raybury Oil Co.
15290	1	-	-	-	4-spot	200	15	Rural pipe line	-	-	F	1969	Grav	10/1	30	-	2,099	--	82	--	--	--	*Was Al Allison
	<u>171</u>	<u>213</u>	<u>1</u>	<u>0</u>													<u>826,520</u>	<u>22,098,125</u>	<u>17,078</u>	<u>1,296,397</u>	<u>6,275</u>	<u>419,167</u>	
13055	10	0	0	0	5-spot	450	8	Pond	-	-	F	1968	--	5/1	31	20	29,000	721,795	2,872	66,612	2,872	66,612	
5671	2	-	-	-	4-spot	80	75	Doug	850	40	U	--	Gas Exp	1/5	38	-	36,500	--	82,550	--	--	--	
5004	1	0	0	0	Irreg	300	55	Prod	-	-	U	1973	Grav	1/9	37	-	9,720	26,145	1,080	--	0	--	*Was Leland Dreyer
	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>													<u>46,220</u>	<u>26,145</u>	<u>83,630</u>	<u>0</u>	<u>0</u>	<u>0</u>	
5631	1	0	0	0	Irreg	0	425	Prod + Chat	3000	4	T	1957	Wat	3/7	35	-	155,125	1,332,550	290	82,290	290	2,698	
7365	1	0	0	0	Irreg	Vac	156	Prod	-	-	U	1959	Wat	15/121	35	-	56,701	545,347	4,948	250,674	2,182	28,681	
2434	6	0	0	0	Irreg	0	700	Prod	-	-	T	--	S Gas	9/1	44	-	255,500	42,510,500	33,416	15,634,016	33,416	5,114,000	*Was Continental Oil Co.
1911																							
3017	1	0	0	1	Irreg	0	210	Prod	-	-	T	1952	Wat	26/0	40	-	76,650	1,570,772	1,034	1,681,034	1,034	446,731	*Was Cities Service Oil
17397	1	0	0	0	Irreg	0	40	Prod	-	-	T	1974	S Gas	9/1	40	-	14,600	21,600	2,545	69,545	2,545	4,745	
4038	1	0	0	0	Irreg	0	425	Prod	-	0	T	1954	Wat	1/1	35	-	155,125	1,910,285	6,512	276,512	6,512	26,012	
13798	1	0	0	0	Irreg	0	200	Prod	-	-	T	1967	Wat	9/1	40	-	73,000	460,570	3,697	113,697	3,697	72,817	
1295	0	0	0	0	Irreg	Vac	500	Prod	-	-	T	--	Grav	0	34	-	15,000	--	4,800	--	0	--	*Was Barbara Oil Co.
5715	1	0	0	0	Irreg	Vac	-	Prod	-	-	T	--	Grav	-	36	-	10,000	--	2,000	--	0	--	*Was Tenneco Oil Co.
15232	1	1	-	-	Irreg	0	900	Prod	-	-	U	1969	--	-	38	-	328,500	1,706,500	15,354	--	5,000	5,000	*Was Clarence Warner

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.	
MCPHERSON COUNTY (concl.)																
15946	--	Lindsborg	Tenneco Oil Company	(W) Community B	Community B	8-17S-3W	-	-	Viola Maq	3300	0	1	1	0	0	Yes
7085 10429	No	McPherson	Lawrence & Bush	(W) Johnson	Anderson C Johnson Anderson A & B Chindberg A & B	29-18S-2W 30-18S-2W 31-18S-2W 32-18S-2W	480	0	KC 1m	2300	10	15	1	0	0	Yes
7951	No	McPherson	Mead Production Co.	(P) O.T. Bentson	O.T. Bentson	32-18S-2W	80	30	KC 1m	2350	12	2	1	-	-	Yes
6179	No	McPherson	Jo Roy Rierson	(W) Rolander	Rolander	30-18S-2W	160	-	KC	2340	10	3	-	-	-	Yes
17480	No	Paden	Rocket-Schusterman Oil Account*	(D) Schulz	Schulz	15-18S-1W	150	0	Miss	2685	25	6	0	12	4	Yes
2158	--	Ritz-Canton	An-Son Corporation	(D) Hull	Hull, Decker, Fleming	11-19S-2W	500	240	Miss	2889	40	3	3	0	0	Yes
3034	--	Ritz-Canton	An-Son Corporation	(-) Giffen "A"	Meyers	14-19S-2W	160	300	Miss	2889	-	3	0	0	0	Yes
3476	--	Ritz-Canton	C.H. Casebeer *	(D) Unruh	--	26-10S-2W	80	-	Chat	-	-	2	-	-	-	Yes
5630	--	Ritz-Canton	George R. Hess	(P) H.P. Unruh	H.P. Unruh, Maude Smith	16-19S-2W	160	0	Miss	2976	25	4	0	0	0	Yes
5682	--	Ritz-Canton	George R. Hess	(P) Flook	Flook, Johnson	1-20S-2W	320	0	Miss	2945	8	2	0	0	0	Yes
8148	--	Ritz-Canton	George R. Hess	(P) Thompson B	Thompson B, Thompson A	22-19S-2W	240	0	Miss	2943	25	2	0	0	0	Yes
17373	--	Ritz-Canton	George R. Hess	(P) G.A. & Della Nelson	G.A. Nelson, Frank Hill W.W. Johnson	3-19S-2W 4-19S-2W	400	0	Miss	2953	9	14	0	0	0	Yes
17403	--	Ritz-Canton	George R. Hess	(P) Marvin Hill	Marvin Hill, Peterson, Edna Hill, Pitts, Sadey	2-19S-2W	640	0	Miss	2955	8	7	0	0	1	Yes
2039 9787	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Lovett Lease	F.A. Lovett	13-19S-2W	160	0	Miss	2916	59	3	0	0	0	Yes
6975	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Unruh Lease	Unruh	34-19S-2W	160	0	Miss	2945	11	4	0	1	1	Yes
7969	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Kundson	Kundson	23-19S-2W	80	0	Miss	2930	30	2	1	0	0	Yes
7971	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Eaton Lease	Eaton Lease	26-19S-2W	160	0	Miss	2930	30	4	1	0	0	Yes
7617	No	Ritz-Canton	Frank Jones Oil Operations	(P) Ritz-Canton	Finkle	23-19S-2W	160	0	Miss	2900	8	5	0	0	0	Yes
14280	No	Ritz-Canton	Frank Jones Oil Operations	(P) Ritz-Canton	Opal Russell	23-19S-2W	160	75	Viola 1m	3362	8	1	0	0	0	Yes
5844	No	Ritz-Canton	Alfred D. Koehn*	(-) Miller S.W.D.	Becker	36-19S-2W	80	-	Miss Ch	2930	36	1	0	0	0	Yes
4067	--	Ritz-Canton	Homer G. Krehbiel, Sr.	(D) Koehn B	Koehn B	34-19S-2W	-	-	Miss	2963	5	2	-	2	-	Yes
8813	--	Ritz-Canton	Homer G. Krehbiel, Sr.	(D) Lacquement	Lacquement	20-19S-1W	80	-	Miss	2980	5	3	-	4	-	Yes
6760	--	Ritz-Canton	Ray Perera	(D) Drum-Somers	Drum (Somers)	35-19S-2W	-	-	--	-	-	-	-	-	-	No*
7076																
3387	--	Ritz-Canton	Elmer Unruh	(-) Wiles Lease	Wiles	25-19S-2W	140	0	Miss Ch	2930	25	4	0	0	0	Yes
14770	--	Round Hill	Leonard L. Bruce	(D) Krehbiel A	Krehbiel A	33-18S-1W	20	0	Miss	2840	10	1	0	1	1	Yes
3219	--	Roxbury South	Elmer Unruh	(D) --	Boyd No. 2, Boyd SWD, Tinkler No. 1, Tinkler No. 2	20-17S-1W 29-17S-1W	240	0	Miss Ch	2650	80	3	0	0	0	Yes
6463	--	Roxbury South	White Hawk Oil Company*	(D) Bishop-Lilly Unit	Bishop, Lilly	30-17S-1W	60	0	Miss	2685	5	1	0	0	0	Yes
17536																
14203	--	Voshell	Herman J. Schrag	(W) Schrag Flood Project	Schrag, Goering	26-20S-3W	80	60	Miss	3090	3	3	0	0	0	Yes
17603	Yes	Winsinger	Charles Carlock	(W) Winsinger Flood	Katherine Winsinger A.E. Dyck, W.J. Winsinger	18-21S-2W 13-21S-2W	240	-	Hunt	3346	12	4	-	-	-	Yes
MCPHERSON COUNTY TOTALS (Reported)							8,030	1,545				155	9	20	7	
MCPHERSON-MARION COUNTIES																
13747	Yes	Goessel	Donald C. Slawson	(W) Goessel Hunton Waterflood Unit	Goessel Hunton Waterflood Unit	1,12-21S-1W 6-21S-1E	800	0	Hunt	3400	10	8	3	0	0	Yes
MARION COUNTY																
17154	--	Elbing North	American Petrofina Co. of Texas*	(P) DeForrest "E"	J. DeForrest, J.J. Ryan	27-22S-4E	320	0	Miss	2447	1	7	0	0	0	Yes
8119	No	Covert-Sellers	Hillenburg Oil Co.*	(-) D.K. Reamey	D.K. Reamey	17-21S-4E	240	0	L-KC	1750	4	1	2	0	0	No†
13045	--	Lost Springs	Roland Jones	(D) Huna	A. Melcher	20-18S-4E	320	320	Miss	2403	40	3	0	0	0	Yes
MARION COUNTY TOTALS (Reported)							880	320				11	2	0	0	

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
15946	1	0	0	0	Irreg	0	2600	--	-	-	T	1971	S Gas	-	28.5	-	949,000	1,241,000	1,770	366,462	0	0	
7085 10429	4	1	0	0	Irreg	350	250	Prod + Miss	3000	-	-	1959	S Gas	4/1	-	-	308,413	2,664,440	18,181	781,161	16,695	252,291	
7951 6179	1	1	-	-	Irreg	25	80	Prod	-	-	U	1960	S Gas	1/9	35	-	30,000	870,719	1,430	79,562	--	--	
	1	-	-	-	Irreg	330	300	Prod + Miss Ch	-	-	T	1972	Grav	1/3	34	-	108,000	328,000	843	--	--	--	
17480	1	1	0	0	Irreg	0	187	Prod	-	-	T	1975	S Gas	1/4	36	-	63,796	63,796	16,924	1,368,556	0	0	*Union Texas
2158	1	0	0	0	--	Grav	6200	Prod	-	-	U	1949	S Gas	-	35	-	2,263,000	81,362,014	21,734	--	21,734	--	
3034	1	0	0	0	--	Grav	6100	Prod	-	-	U	1952	S Gas	-	36	-	2,226,500	63,915,696	16,264	--	16,264	--	
3476	-	-	-	-	Irreg	Vac	600	Prod	-	-	U	--	--	--	--	--	182,500	--	--	--	--	--	*Was Alfred D. Koehn
5630	1	0	0	0	Irreg	0	210	Prod	-	-	T	1957	Wat	1/1	35	-	76,650	1,171,300	7,554	157,554	7,554	14,554	
5682	1	0	0	0	Irreg	0	240	Prod	-	-	T	1958	Wat	7/3	35	-	87,600	597,850	5,974	165,974	5,974	7,714	
8148	1	0	0	0	Irreg	0	90	Prod + Chat	2950	-	T	1960	Wat	2/3	35	-	32,850	415,750	4,601	194,601	4,601	6,401	
17373	3	0	0	0	Irreg	0	900	Prod	-	-	T	1974	S Gas	1/9	37	-	328,500	344,200	16,881	576,881	16,881	26,131	
17403	1	0	0	0	Irreg	0	260	Prod	-	-	T	1974	S Gas	1/1	36	-	1,560	3,120	5,876	203,876	5,876	9,876	
2039 9787	1	0	0	0	Irreg	Vac	1500	Prod	-	-	U	1948 1962	S Gas	-	34	-	550,000	--	6,220	--	0	--	*Schusterman Oil Co.
6975	1	0	0	0	Irreg	Vac	500	Prod	-	-	U	1959	S Gas	-	35	-	182,500	1,230,000	4,620	--	0	--	*Was C.R.A.
7969	1	0	0	0	Irreg	Vac	1000	Prod	-	-	U	1960	S Gas	-	35	-	365,000	--	1,277	--	0	--	*Was C.R.A.
7971	1	0	0	0	Irreg	Vac	1000	Prod	-	-	U	1960	S Gas	-	35	-	365,000	--	7,230	--	0	--	*Was C.R.A.
7617	1	0	0	0	Irreg	0	200	Prod	-	-	U	1952	Grav	2/23	35	-	73,000	--	6,446	--	1,200	--	
14280	1	0	0	0	Irreg	0	150	Prod	-	-	U	1968	Wat	1/24	36	-	54,750	--	2,300	--	0	--	
5844	1	0	0	0	Irreg	Vac	300	Prod	-	-	T	--	Grav	--	35	-	9,000	--	1,800	--	0	--	*Was C. J. Snedeger
4067	1	-	-	-	Irreg	-	90	Prod	-	-	T	1965	Grav	1/2	36	-	1,700	165,950	--	--	--	--	
8813	-	-	-	-	Line	-	140	Prod	-	-	T	1961	--	2/3	37	-	50,400	504,700	--	--	--	--	
6760	-	-	-	-	--	-	--	--	-	-	--	--	--	--	--	--	--	--	--	--	--	--	*Temporarily discontinued
7076 3387	1	0	0	0	Irreg	Vac	275	Prod	-	-	--	--	Grav	2½/97½	36.5	-	100,900	--	3,650	--	365	--	
14770	1	0	1	1	Line	0	20	Prod	-	-	U	--	Wat	3/7	36	-	7,300	29,200	1,466	--	500	1,500	
3219	1	0	0	0	Irreg	Vac	500	Prod	-	-	--	1952	--	--	35	-	162,000	--	2,862	--	286	--	
6463 17536 14203	1	1	0	0	Irreg	0	356	Prod	-	-	U	1958	Wat	-	32	-	130,032	3,416,097	1,407	--	1,407	45,994	*Was Natural Gas & Oil
17603	1	-	-	-	Irreg	Grav	130	Shallow Water Well	70	12	F	1975	S Gas	9/1	38	-	50,000	50,000	--	250,000	3,600	3,600	
	45	5	1	2													9,920,227	208,564,856	233,056	22,295,458	158,763	6,077,901	
13747	7	1	0	0	--	700	194	Prod + Miss	3050	100	T	1968	S Gas	1/1	40	3EST	495,715	3,740,775	15,332	662,520	14,132	151,010	
17154	1	0	0	0	Irreg	450	960	Prod	-	-	U	1973	Wat	1/7	36.9	-	351,342	694,326	3,576	136,816	0	0	*Was The El Dorado Refg. Co.
8119	-	-	-	-	--	-	-	--	-	-	--	--	--	--	--	--	--	--	--	--	--	--	*Was Terra Resources Inc. †No injection started
13045	1	-	0	-	Irreg	-	-	Prod	-	-	U	1966	Grav	1/9	34	-	50	--	1,817	--	--	--	
	2	0	0	0													351,392	694,326	5,393	136,816	0	0	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
MEADE COUNTY																
6354	--	Adams Ranch	Cotton Petroleum Corp.*	(D) Adams Ranch Field	Adams "D"	25-34S-30W	240	80	Marm	5368	4	1	0	0	1	Yes
4924	--	Novinger	Cities Service Oil Company	(W) Novinger Field Unit	Novinger Field Unit	22,23,26,27,34, 35-33S-30W 3-34S-30W	3240	-	Marm	5297	-	9	0	0	0	Yes
MEADE COUNTY TOTALS (Reported)							3,480	80				10	0	0	1	
MIAMI COUNTY																
590	--	Black	Robert A. Mason	(W) South New Lancaster	Middaugh, Crume, Fernstrom	3,10-19S-24E	80	-	Peru	200	12	31	-	-	-	Yes
13497	--	Louisburg	Reese Exploration, Inc.*	(W) Louisburg	Richmond	28-16S-25E	75	9	Peru	330	14	22	-	-	-	--
5762	--	Louisburg	Reese Exploration, Inc.*	(W) Louisburg	Briggs, Miller McHale, Roger	34-16S-25E 9-17S-25E	105	-	Peru	400	11	30	2	-	-	Yes
18249	--	Louisburg	Reese Exploration, Inc.*	(W) Louisburg	McHale, Roger	9-17S-25E	105	-	Peru	400	11	30	2	-	-	Yes
12704	--	Paola-Rantoul	Herbert Kepple	(D) Kepple Fee	Kepple, Fee	17-17S-23E	53	-	Peru	360	28	3	-	8	-	No*
6816	--	Paola-Rantoul	Harold T. Beck	(W) Rantoul Pool	--	36-17S-21E	90	60	Squir	510	20	10	0	0	0	Yes
4829	No	Paola-Rantoul	Leo T. Blackstone*	(W) Schmitt	Schmitt	1-18S-21E 11-17S-22E	160	0	Squir	550	10	4	-	0	-	Not
2494	--	Paola-Rantoul	Reese Exploration, Inc.*	(W) KCS	Robert I. Nicholson, F.W. Black	11-17S-22E	480	-	Squir	700	30	30	-	-	-	Yes
4864	--	Paola-Rantoul	Reese Exploration, Inc.*	(W) Miami Flood	Murphy, Schendel, Phillips, Cayot	24-16S-21E	480	-	Squir	670	12	36	2	11	-	Yes
471	--	Paola-Rantoul	Reese Exploration, Inc.*	(W) Miami Flood	Murphy, Schendel, Phillips, Cayot	24-16S-21E	480	-	Squir	670	12	36	2	11	-	Yes
5273	--	Paola-Rantoul	Reese Exploration, Inc.*	(W) Miami Flood	Murphy, Schendel, Phillips, Cayot	24-16S-21E	480	-	Squir	670	12	36	2	11	-	Yes
9128	No	Paola-Rantoul	L.O. Tenk	(W) Miller Flood Project	Miller Lease Whiteford Lease	29-18S-23E 30-18S-23E	80	0	Peru	350	17	24	0	0	0	Yes
MIAMI COUNTY TOTALS (Reported)							1,603	69				190	4	19	0	
MONTGOMERY COUNTY																
5236	--	Coffeyville- Cherryvale	Alexander-Seaton	(W) Clark Hudson	Clark Hudson	17-34S-17E	80	0	Bartl	600	20	13	0	1	2	Yes
15114	--	Coffeyville- Cherryvale	BMG, Inc.	(D) Nancy Benson	Nancy Benson	25,36-34S-15E	-	-	Arb	1200	5	2	-	-	-	Yes
10093	No	Jefferson- Sycamore	Layton Oil Company	(W) Bolton Extension	Patterson, Blosser, Hadley, Vineyard	18,19-33S-15E 24-33S-14E	40	0	Bartl	1170	16	15	5	1	0	Yes
13620	No	Jefferson- Sycamore	Layton Oil Company	(W) Bolton Extension	McVey, Stoker Sewell, Browning	13,25-33S-14E 18-33S-15E	25	0	Bartl	1186	15	6	3	0	0	Yes
14651	No	Jefferson- Sycamore	Layton Oil Company	(W) Bolton Extension	Sewell, Browning	18-33S-15E	25	0	Bartl	1186	15	6	3	0	0	Yes
2045	--	Jefferson- Sycamore	Stekoll Petroleum Co.	(-) Fld #3	H.O. Smith, S.R. Springer, L.C. Demott	6-33S-15E	400	13	Bartl	1160	13	11	-	-	-	Yes
7871	--	Jefferson- Sycamore	Stekoll Petroleum Co.	(-) Fld #2	Hester, Banks, H.F. Adams, H.F. Adams, Fitzgerald, Weiner	15-34S-15E 16-34S-15E 21-34S-15E	600	-	Way	450	13	50	-	2	-	Yes
7077	No	Jefferson- Sycamore	Carl D. Wyckoff*	(D) Zinser	Zinser	8-33S-14E	180	-	Bartl	1190	10	3	2	0	2	Yes
12289	No	Neodesha	George J. Hempen*	(P) Nantz	Nantz	11-31S-16E	160	0	Bartl	860	15	9	0	2	0	Not
4666	--	Sorghum Hollow	BMG, Inc.	(P) Linn-(Circle Basin)	Linn (Circle Basin)	30,31-32S-14E 36-32S-13E	160	-	Weiser	850	50	6	-	-	-	Yes
4990	--	Sorghum Hollow	BMG, Inc.	(-) Fowler	Fowler	17,19,20-32S-14E	150	0	Weiser	850	25	12	-	-	-	Yes
17353	No	Tyro	Collins Oil Company	(W) East Tyro	Collins (Old Harding) Lease	4,5-35S-15E	100	-	Bartl	1220	28	4	0	1	0	Yes
14036	No	Tyro	Layton Oil Company	(W) Tyro Unit-Friedline & Dunbar Leases	Dunbar, Freidline, Grother, Wilson, Krebs Krebs	33-34S-15E 4-35S-15E	80	0	Bartl	1162	17	15	0	1	0	Yes
326	--	Wayside-Havana	Hawkins Production Co.	(W) Bragg-Riggle	Bragg, Taylor Riggle, McKerney	5-34S-14E 4-34S-14E	-	-	Way	660	30	1	0	0	0	Yes
3222	No	Wayside-Havana	H.J. Horton*	(-) Havener Lease	Havener Lease	33-33S-14E	160	120	Way Sd	700	30	7	0	0	0	Not

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
6354	1	0	0	0	--	0	10	Prod	-	-	-	1958	--	-	40	-	3,555	885,662	1,583	110,719	1,583	110,719	*Was Cities Service	
4924	9	0	0	0	Line	1291	2727	Prod	400	-	M	1956	S Gas	100/14	45	3.4	995,340	21,079,757	88,342	4,641,222	88,342	2,421,512		
	<u>10</u>	<u>0</u>	<u>0</u>	<u>0</u>													<u>998,895</u>	<u>21,965,419</u>	<u>89,925</u>	<u>4,751,941</u>	<u>89,925</u>	<u>2,532,231</u>		
590	15	-	-	-	5-spot	200	10	Prod + Pond	-	-	F	1967	S Gas	3/1	27	20	137,500	676,198	6,709	66,347	6,709	66,347		
13497	-	-	-	-	Line	350	40	Prod	-	-	M	1958	S Gas	15/1	32-	1005	160,375	4,812,358	3,420	371,870	--	--	*Was E.S. & J.M. Cook	
5762	-	-	-	-	Line	295	35	Prod + Hertha	260	5	M	1964	S Gas	95/5	32-	-	270,000	2,810,000	6,588	118,357	--	--	*Was E. Buddrus, et al	
18249	25	-	-	-	Line	295	35	Prod + Hertha	260	5	M	1964	S Gas	95/5	32-	-	270,000	2,810,000	6,588	118,357	--	--	*Was E. Buddrus, et al	
12704	3	-	3	-	Irreg	-	-	Prod	-	-	M	--	Primary	-	32-33	-	--	--	635	--	0	--	*Dump only	
6816	11	0	0	0	5-spot	500	20	River Gravel Fresh Water	-	-	M	--	Grav	1/4	28-29	-	--	--	360	--	360	--		
4829	3	-	0	-	4-spot	600	3	Prod + Hertha	280	-	U	--	Grav	-	29	20.9	1,000	--	270	--	270	--	*Was ABC Oil Co. +Return water only	
2494	24	-	-	-	5-spot	680	18	Prod + Hertha	240	5	M	--	--	-	29	-	154,300	--	3,451	--	--	--	*Was Southern Enterprises, Inc.	
4864	17	-	4	-	5-spot	680	97	Prod + Miss	-	5	M	--	S Gas	19/1	31	-	280,350	2,538,345	17,031	124,762	--	--	*Was Richard Moherman	
471	17	-	4	-	5-spot	680	97	Prod + Miss	-	5	M	--	S Gas	19/1	31	-	280,350	2,538,345	17,031	124,762	--	--		
5273	20	0	0	0	5-spot	300	3	Prod + Arb	1293	102	M	1961	S Gas	14/1	30	22	7,200	692,716	382	59,109	300	--	--	
9128	20	0	0	0	5-spot	300	3	Prod + Arb	1293	102	M	1961	S Gas	14/1	30	22	7,200	692,716	382	59,109	300	--	--	
	<u>118</u>	<u>0</u>	<u>7</u>	<u>0</u>													<u>1,010,725</u>	<u>11,529,617</u>	<u>38,846</u>	<u>740,445</u>	<u>7,639</u>	<u>66,347</u>		
5236	5	0	0	0	Irreg	275	400	Prod	-	-	U	1968	Gas Exp	-	31	-	25,000	--	3,000	--	1,500	--	--	
15114	1	-	-	-	Irreg	200	100	Prod	-	-	U	1970	Wat	-	25	-	--	--	2,528	--	--	--	--	
10093	19	0	1	2	5-spot	565	34	Prod + Miss	1322	30	U	1967	S Gas	1/8	35	4	235,581	1,099,613	11,815	60,992	11,815	60,992		
13620	19	0	1	2	5-spot	565	34	Prod + Miss	1322	30	U	1967	S Gas	1/8	35	4	235,581	1,099,613	11,815	60,992	11,815	60,992		
14651	5	0	0	0	Irreg	500	30	Prod + Arb	1370	0	U	1968	S Gas	6/1	33	-	54,706	281,981	4,012	19,676	4,012	19,676		
2045	7	-	-	-	5-spot	354	14	Prod + Fresh	-	-	-	1959	Grav	9/1	-	-	31,025	--	4,719	--	--	--		
7871	42	-	1	-	5-spot	275	18	Prod + Sheet Water	135	35	T&S	1957	Grav	7/3	32	-	298,205	--	14,358	--	--	--		
7077	1	0	0	0	Irreg	150	15	Prod	-	-	U	1960	Gas Exp	10/1	34	-	5,400	--	392	--	100	--	*Was Hester and Wright	
12289	2	0	0	0	5-spot	250	6	Prod + Oswego	600	30	U	1973	Grav	7/3	37	5	2,160	6,400	4,485	6,859	0	--	*Was Jeanbro Oil Co. +Disposing prod. wat. only	
4666	3	-	-	-	Irreg	300	50	Prod	-	-	U	--	S Gas	-	30	-	--	--	6,702	--	--	--		
4990	6	-	-	-	5-spot	300	50	Prod	-	-	U	--	Grav	-	30	14.6	--	--	3,933	--	--	--		
17353	1	0	0	0	5-spot	350	175	Prod	-	-	U	1974	Grav	1/9	33	-	54,750	75,750	533	733	365	365		
14036	13	0	0	0	5-spot	340	86	Prod + Tucker	1243	23	T	--	S Gas	-	32	-	282,522	710,457	5,919	15,795	5,919	15,795		
326	3	0	0	0	5-spot	150	6	Prod	-	-	U	1970	Gas Exp	33/67	30	0	--	--	5,300	--	--	--		
3222	1	0	0	0	Peri	200	12	Prod	-	-	U	1953	Grav	1/2	30	-	4,300	2,021,500	1,130	11,415	0	--	*Was Consolidated Oil Co. +Injected when available	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone			Oil producing wells (1975)			Has inj. been continuous?	
							S - T - R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
MONTGOMERY COUNTY (concl.)																	
	7983	Yes	Wayside-Havana	H.J. Horton*	(P) Smotherman Lease	Smotherman Lease	28-33S-14E	80	0	--	-	-	-	-	-	-	No†
	11712	--	Wayside-Havana	H.J. Horton	(W) Mantooth-Dunham	Mantooth-Dunham	28-33S-14E	246	0	Way	700	30	16	0	2	0	Yes
	15264	No	Wayside-Havana	H.J. Horton*	(P) A.D. Berry	A.D. Berry	33-33S-14E	80	0	Way	735	30	13	0	0	0	No†
	17885	50%	Wayside-Havana	H.J. Horton	(P) Kellenberger Lease	Kellenberger Lease	15-34S-14E	80	0	Wiser	759	14	4	0	0	0	No*
	17993	--	Wayside-Havana	W.H. Kurtis*	(-) Veith	Veith Lease	27-33S-14E	80	20	Way	720	45	4	1	2	0	Yes
	1439	No	Wayside-Havana	Layton Oil Company	(W) Wayside	Allen, Dyer-Brewer, Garret-Dyer	5-34S-14E	310	0	Way	700	18	75	5	36	0	Yes
	9034					Dalby	7-34S-14E										
	10447					Mitchell, Shearhart	32-33S-14E										
	10442	No	Wayside-Havana	Layton Oil Company	(W) Schneider	Schneider (Hecht)	16-34S-14E	160	0	Wiser	720	0	4	0	0	0	No*
	13726	No	Wayside-Havana	Layton Oil Company	(W) Bowersock	Defenbaugh (Bowersock)	8-34S-14E	80	0	Way	660	30	3	5	0	0	No*
	13823	No	Wayside-Havana	Layton Oil Company	(W) --	Boan	35-33S-14E	6	0	Way	650	30	2	0	0	0	No*
	18019	No	Wayside-Havana	RayGary Oil Co.	(P) Defenbaugh	--	34-33S-14E	10	0	Way	682	20	7	-	1	-	Yes
	18020	No	Wayside-Havana	RayGary Oil Co.	(W) Mantooth	--	32-33S-14E	5	0	Way	692	18	2	-	-	-	Yes
	18026	No	Wayside-Havana	RayGary Oil Co.	(P) Davidson	--	30-33S-14E	5	0	Way	660	8	2	0	2	0	Yes
	4513	--	Wayside-Havana	RayGary Oil Co.*	(P) Waston	Waston	34-33S-14E	0	0	Way	722	20	10	8	0	2	No†
	18029	No	Wayside-Havana	RayGary Oil Co.	(W) Circle C.	--	20-33S-14E	40	0	Wiser	784	14	6	0	0	0	Yes
	16035	No	Wayside-Havana	Wheeler & Haddan	(D) Snell Unit	Snell, Blex, Brown, Anderson	18-34S-15E	560	80	Way	550	30	33	7	3	-	Yes
MONTGOMERY COUNTY TOTALS (Reported)								3,877	233				335	36	54	6	
MORRIS COUNTY																	
	15416	No	Comisky	The Maurice L. Brown Company	(D) Porter "A"	Porter "A"	13-16S-9E	40	0	Viola	2930	18	1	0	0	0	--
MORTON COUNTY																	
	15918	--	Elkhart	Texaco Inc.	(W) Carthage NE Morrow A	W. Pritchett "B", W. Pritchett "A"	23-35S-43W	100	-	Morr A	4300	15	2	-	-	-	Yes
	11602	Yes	Interstate	Anadarko Production Co.	(P) Interstate Purdy Sand Oil Unit	--	8,9,16,17,20,21,28,29,30,31,32-34S-43W	3800	-	Purdy Morrow	4192	35	37	27	1	0	Yes
	15849	Yes	Taloga	Anadarko Production Co.	(W) Taloga Morrow "G" Unit	Cavanaugh, Riley C Riley, Hall, Westerfield, Watson	26-34S-42W 35-34S-42W	1280	-	Morrow G	4494	11	7	3	0	0	Yes
	13899	Yes	Taloga	Cities Service Oil Company	(W) Taloga S. Morrow G Sand Unit	Hall T, O'Dell, Cyr	2-35S-42W	3760	0	Morrow G	4553	14	13	0	0	0	Yes
	12571	Yes	Wilburton	Cities Service Oil Company	(P) Wilburton Morrow C Sand Unit	--	14-35S-42W	3840	0	Morrow C	4900	20	12	0	0	0	Yes
	13848	Yes	Wilburton	Cities Service Oil Company	(W) Wilburton S-3 L. Morrow Sd Unit	--	4,5-35S-41W 28,29,33,32-34S-41W	640	0	S-3 Lo Morrow	5050	.5	2.5	.5	0	0	Yes
MORTON COUNTY TOTALS (Reported)								17,900	0				98	31	1	0	
NEOSHO COUNTY																	
	17765	No	Erie	A.H. Alcock*	(-) Stegman #1 Water Flood	S. Stegman	2-29S-20E	80	0	Bart1	513	10	7	0	2	0	Yes
	15113	No	Erie	Forrest Crawford	(W) Ashcraft	Ashcraft	2-29S-20E	160	0	Way	120	20	0	-	-	-	No*
	17823	No	Erie	Graybol Oil Corp.*	(W) LaRue Lease	LaRue	33-27S-19E	80	0	Bart1	740	10	3	0	1	0	Yes
	11382	No	Erie	Graybol Oil Corp.*	(W) Shaw Unit	Luther, Waggoner, McCan	13-28S-19E	40	80	Bart1	600	10-20	8	6	0	2	Yes
	15249	No	Erie	Graybol Oil Corp.*	(W) Kinne Unit	O.A. Kinne B & M Kinne	13-28S-19E 18-28S-20E	80	0	Bart1	600	10-20	19	0	0	2	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil vis., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Depth, ft.	Thick., ft.	Type	Water Injection						Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods					
											1975						Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975			
7983	-	-	-	-	--	-	-	--	-	-	-	-	-	-	-	-	-	-	-	-	-	*Was Jones Oil Co. †Not in operation in 1975		
11712	4	0	0	0	5-spot	440	8.05	Prod	-	-	U	1965	Grav	1/2	29	-	11,765	73,292	5,296	50,496	1,000	20,100		
15264	1	0	0	0	5-spot	Grav	17	Prod	-	-	U	1969	Grav	1/2	29	-	6,200	21,214	2,069	12,770	477	2,297	*Was Horton Oil Co. †Injected when available	
17885	1	0	0	0	Peri	Grav	12	Prod	-	-	U	1975	Grav	1/4	30	-	2,880	2,880	1,200	1,200	0	0	*Injected when available	
17993	1	0	1	0	5-spot	100	12	Prod	-	-	U	1975	Grav	-	30	-	2,250	--	1,050	--	--	0	0	*Was Homer Fox
1439 9034 10447	39	35	55	0	5-spot	400	10	Prod + Salt Sand	430	30	U	1974	S Gas	1/5	32	-	137,912	274,481	48,079	88,484	31,251	41,477		
10442	1	0	0	0	4-spot	-	-	Prod	-	-	U	1964	S Gas	1/3	31	-	--	26,000	169	4,954	0	0	0	*Mechanical problems
13726	1	0	0	0	5-spot	440	26	Prod	-	-	U	--	S Gas	-	31	-	7,055	7,055	931	931	0	0	*Mechanical problems	
13823	1	0	0	0	Peri	300	40	Prod	-	-	U	1967	S Gas	1/2	30	-	14,600	51,515	165	2,490	165	2,490	*Mechanical problems	
18019	2	-	0	-	5-spot	300	12	Prod	-	-	T	1975	Wat	1/2	29	-	6,570	--	2,190	--	--	--		
18020	1	0	0	0	5-spot	200	10	Prod	-	-	T	1975	Wat	3/20	29	-	1,200	--	900	--	--	--		
18026	1	0	1	0	5-spot	200	13	Prod	-	-	T	1975	Wat	2/7	29	-	2,340	--	720	--	--	--		
4513	0	-	0	2	7-spot	0	0	Prod	-	-	-	--	--	29	29	-	0	--	572	--	--	--	*Was Mrs. Nadine Watson †Lease shut down	
18029	3	0	0	0	4-spot	250	30	Prod	-	-	T	1975	Wat	12/65	31	-	23,725	--	4,380	--	--	--		
16035	2	-	0	-	5-spot	0	20	Prod	-	-	U	1971	Grav	4/1	31	-	3,800	--	10,000	--	800	--		
	168	35	59	4													1,213,946	4,652,138	146,547	276,795	57,404	163,192		
15416	1	0	0	0	Irreg	0	122	Prod	-	-	T	1970	Wat	-	23	-	255,500	1,731,567	943	97,889	0	0		
15918	1	-	-	-	Peri	1000	404	Prod + Ogallala	225	400	F	1971	S Gas	-	40.4	2	147,582	592,402	33,061	76,719	66,888	74,390		
11602	10	3	0	0	Peri	510	1693	Prod + Ogallala	200	100	M	1965	S Gas	32/249	39	2.49	6,181,426	69,664,125	882,008	12,143,258	882,008	10,009,760		
15849	2	1	0	0	Peri	250	1225	Ogallala	140	80	F	1971	S Gas	6/1	43.5	2	893,926	3,503,192	7,114	42,423	7,114	42,423		
13899	7	0	0	0	Peri	600	344	Prod + Ogallala	200	45	M	1969	S Gas	42/1	39	3.15	879,507	5,271,036	86,540	539,809	86,540	338,104		
12571	7	0	0	0	Peri	1160	933	Prod + 874MCF Ogallala	200	45	M	1966	S Gas + Gas Cap	11.7/1	42	4.51	1,704,162*	13,699,957+	315,200	5,287,466	277,325	2,785,905	*Gas inj. 638,706MCF/yr †Gas inj. 5,592,565 MCF Cum.	
13848	2	0	0	0	Irreg	615	153	Prod + Ogallala	200	45	F	1968	S Gas	3499/0	42	4.5	111,803	1,224,679	14,701	199,223	14,701	102,408		
	29	4	0	0													9,918,406	93,955,391	1,338,624	18,288,898	1,334,576	13,352,990		
17765	1	0	0	0	Irreg	380	13	Prod + KC	65	10	F	1975	Primary	99/1	32	-	2,489	2,489	680	680	0	0	*Was Homer Ellsworth	
15113	-	-	-	-	--	-	-	--	-	-	--	--	-	-	-	-	0	--	0	--	0	--	*Shut down at present	
17823	2	0	1	0	Line	600	21	Prod + Surface	-	-	M	1975	S Gas	1/0	32	-	6,323	6,323	40	40	40	40	*Was Gordon Willis	
11382	2	8	0	10	Line	600	60	Prod + Canville Creek	-	-	M	1963	S Gas	1/0	32	-	51,388	--	1,634	--	1,634	--	*Was Gordon Willis	
15249	15	0	0	0	Line	600	38	Prod + Canville Creek	-	-	M	1969	S Gas	1/0	32	-	208,576	--	17,388	--	17,388	--	*Was Gordon Willis	

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone			Oil producing wells (1975)			Has inj. been continuous?	
						S-T-R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
NEOSHO COUNTY (concl.)																
15761	No	Erie	Graybol Oil Corp.*	(W) Hudson Unit	Carlson-Torrey, Hudson, Leatherman Hines, McCan "B", McCan "C" Swiler	10-28S-19E 11-28S-19E 14-28S-19E	75	20	Bartl	600	10-20	30	6	6	0	Yes
4501	--	Humboldt-Chanute	Cache Oil Corp.	(D) Bloom	Bloom	13-27S-18E	80	-	Bartl	-	-	1	8	0	-	No*
14681	No	Humboldt-Chanute	Layton Oil Company	(W) Earlton	Kepley	18-28S-18E	30	0	Bartl	800	16	3	2	1	2	No*
4121	--	Humboldt-Chanute	Walter Lacey	(P) --	Raymond Fickel	20-28S-18E	20	0	Bartl	795	20	4	0	0	0	No*
11 264 290 514 741	--	Humboldt-Chanute	Texaco Inc.*	(W) Russell Block	Russell Block	1,2,10,11,12,14, 15,21,22,26, 27-27S-18E 6,7-27S-19E	3336	-	--	700	0-40	377	-	-	-	Yes
4612 8930	--	St. Paul-Walnut	Thomas P. Dent	(W) T & G Oil Co.	Henery Van Leeuwen, Thomas P. Dent	33-28S-21E	320	0	Bartl	395	416	24	6	0	0	Yes
9986	--	St. Paul-Walnut	Jackson Oil Co.	(W) Casady	Madl, Mitchell, Morgan, Dowling	29-28S-21E	120	-	Bartl	380	20	47	-	-	-	Yes
6713	--	St. Paul-Walnut	Kanalta Resources Ltd.*	(-) Butler	Butler	30-28S-21E	100	-	Bartl	450	16	5	14	-	-	Yes
7073	--	St. Paul-Walnut	Kanalta Resources Ltd.*	(W) Dagget-Hazen	Roy L. Dagget	23-28S-20E	160	-	Bartl	450	16	8	15	-	-	Yes
8870	--	St. Paul-Walnut	MOCO Oil Co., Inc.	(-) Sisters Unit	Sisters Unit	17-29S-21E	160	-	Bartl	426- 447	21	9	-	-	-	No*
16629	--	Thayer South	Wm. S. Wright	(W) Wright-Erbe-Ross	Gildart & Gildart	11-30S-17E	160	-	Lo Bartl	931	10	4	-	5	3	Yes
8145	--	Trent	Erie Oil Co. Inc.	(W) --	Edward Stanley	22-28S-20E	60	-	Bartl	475	16	10	-	0	-	Yes
8378	--	Trent	Jackson Oil Co.	(W) McDermed	McDermed, Metzger	22-28S-20E	10	-	Bartl	480	20	26	-	-	-	Yes
6122	--	Urbana	Cache Oil Corp.	(P) Yockey	Yockey	35-28S-18E	160	-	Bartl	750	20	6	6	0	0	Yes
10978	--	Urbana	Cache Oil Corp.	(P) Hummer	Hummer	26-28S-18E	80	-	Bartl	750	20	2	1	0	0	No*
NEOSHO COUNTY TOTALS (Reported)							5,311	100				593	64	15	9	
NESS COUNTY																
9920	No	Aldrich	Thornton E. Anderson*	(D) Edwards Lease	Edwards	22-18S-26W	40	0	Miss	4500	10	1	0	0	0	Yes
14618	--	Aldrich	Continental Oil	(W) Aldrich	C.R. Aldrich	7,8-18S-25W	320	0	Miss	4350	12	3	0	-	-	Yes
2952	--	Aldrich	Hillenburg Oil Company*	(W) Aldridge	Thompson, Daisy, Bateman A, Everett A, Sutton A Lythe, Harkness C	24-18S-26W 23-18S-26W	100	60	Miss	4430	8	3	0	0	0	Yes
4276 7632	--	Aldrich	Tenneco Oil Company	(-) Louise Everett	Louise Everett	8-18S-25W	40	20	Miss	4390	37	1	1	0	0	Yes
3740	--	Aldrich	Barnett Oil, Inc.	(P) Shearer "B"	Shearer "B"	26-17S-25W	80	-	Miss	4300	30	2	-	-	-	Yes
13483	No	Aldrich Northeast	Phillips Petroleum Co.†	(-) Stutz "BB" SWD Sys Dol	Amstutz	10-17S-24W	0	-	Cher	4490	10	0	0	0	0	Yes
17208*	--	Amstutz														
14896	No	Bellesprit	Walters Drilling Co.	(P) Ryan	Ryan, Irvin	22-16S-21W	160	40	Cher	4260	15	3	0	4	1	Yes
10347	No	Dickman	Walters Drilling Co.	(P) Dickman	Dickman, Elmore Tilley Humphrey	17-17S-24W 8-17S-24W 18-17S-24W	400	0	Miss	4500	40	6	1	10	3	Yes
16010	--	Dumler	Pickrell Drilling Company	(W) Dumler Unit	Dumler Unit	2,11-17S-26W	120	80	Miss	4500	15	3	2	0	0	Yes
10676	No	Petersilie	Kewanee Oil Co.	(P) Petersilie	Petersilie	14-20S-24W	80	0	Miss	4388	22	2	1	0	0	Yes
17321	--	Petersilie	Meltzer Oil Company*	(D) Petersilie	Petersilie "A", Petersilie "B"	14-20S-24W	320	-	Miss	4406	4	3	-	-	-	Yes
17417	--	Prairie Ridge	Empire Drilling Company	(P) Armstrong	Armstrong	7-16S-26W	120	0	Miss	4520	-	2	-	-	-	Yes
17407	No	Stutz East	Patrick Petroleum Corp.	(P) Rupp "F" Lease	Rupp "A" Rupp "B", Rupp "E" Ryan "C", Ryan "E" Stutz	10-17S-25W 9-17S-25W 16-17S-25W 8,17-17S-25W	-	0	Miss	4440	20	8	0	2	0	Yes
NESS COUNTY TOTALS (Reported)							1,780	200				37	5	16	4	

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc. cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
15761	15	1	0	0	Line	600	45	Prod + KC lm + Surface wat	150	10	M	1970	S Gas	1/0	32	-	247,807	--	20,872	--	20,872	--	*Was Gordon Willis
4501	-	-	-	-	5-spot	-	-	--	-	-	U	--	Wat	-	32	-	--	--	--	--	--	--	*Didn't pump last year
14681	4	7	0	0	5-spot	440	30	Prod + Sand	400	60	U	1968	S Gas	1/8	33	-	9,019	300,347	278	16,284	278	16,284	*Mechanical problems
4121	1	0	0	0	Irreg	550	40	Prod	-	-	U	1963	--	1/20	33.6	-	1,900	--	680	--	0	--	*Disposal well
11	96	-	-	-	5-spot	700	40	Prod + Arb	1500	0	M	1974	S Gas	-	32	-	1,418,655	1,787,107	22,343	25,608	22,343	25,608	*Ross Keas Oil Inc.
264																							
290																							
514																							
741																							
4612	23	10	0	0	Irreg	380	420	Prod + Miss	850	-	M	--	Wat	4/1	33	-	350	127,750	5,000	5,000	--	--	
8930																							
9986	28	-	-	-	Line	500	401	Prod + Arb	1280	20	T	1963	Grav	10/1	31	-	196,086	1,560,119	29,025	296,271	9,578	101,202	
6713	0	10	-	-	5-spot	500	17	Prod + Miss	848	20	T	1958	Grav	2/1	29	-	--	--	467	10,137	467	10,137	*Was Trico Oil Co.
7073	6	3	-	-	5-spot	350	17	Prod	-	-	M	--	Wat	-	29	-	--	--	893	7,002	893	7,002	*Was Trico Oil Co.
8870	3	-	-	-	Irreg	Grav	-	Prod	-	-	U	--	Wat	-	30	-	--	--	400	--	--	--	*Intermittent
16629	4	-	5	-	5-spot	200	10	Prod + Oswego	620	-	-	1973	Grav	99/1	27	22.7	7,000	--	1,000	--	700	--	
8145	9	-	0	-	5-spot	-	-	Prod	-	-	M	--	S Gas	9/1	29	-	1,700	183,800	1,200	51,125	1,000	--	
8378	4	-	-	-	5-spot	550	44	Prod + Arb	1200	10	T	1968	Grav	1/1	30	-	26,363	189,408	2,445	22,120	806	7,988	
6122	3	0	0	0	5-spot	350	20	--	-	-	U	--	--	-	--	-	--	--	--	--	--	--	
10978	1	0	0	0	4-spot	300	10	--	-	-	U	--	--	-	--	-	--	--	--	--	--	--	*Shut down in winter
	217	39	6	10													2,177,656	4,157,343	104,345	434,267	75,999	168,261	
9920	1	0	0	0	Irreg	0	50	Prod	-	-	U	1963	Partial Wat Drive	1/4	37	-	17,500	192,500	405	64,037	0	0	*Was High Plains Production Co.
14618	1	0	-	-	Line	650	500	Prod	-	-	U	1968	Wat	-	36.1	-	182,519	1,311,852	9,807	71,792	4,641	25,036	
2952	1	2	0	0	5-spot	52	1210	Prod	-	-	T	1956	Wat	11/14	36	-	441,650	--	15,327	--	15,327	--	*Was Terra Resources, Inc.
4276																							
7632																							
3740	1	0	0	0	Irreg	75	190	--	-	-	T	1955	S Gas	-	-	-	--	--	2,233	297,274	--	--	
13483	1	-	-	-	Irreg	380	650	Prod	-	-	U	1967	S Gas	1/4	37	-	237,000	1,390,850	26,021	457,952	5,500	36,900	
17208	1	0	1	0	Irreg	30	607	Prod	-	-	U	1973	Grav & S Gas	-	-	-	221,672	373,231	0	0	0	0	*Pressure maintenance well for offsetting lease +Was Beardmore Oil Co.
14896	1	0	1	0	Irreg	200	139	Prod	-	-	U	--	Partial Wat Drive	19/1	33.7	-	100,957	--	16,321	268,626	8,161	60,000	
10347	1	0	1	0	Irreg	250	215	Prod	-	-	U	1963	Partial Wat Drive	19/1	35	-	470,000	--	28,192	653,431	14,096	--	
16010	2	0	0	0	Line	270	787	Chey	1075	20	U	1971	S Gas	68/73	36	2.5EST	287,170	1,129,215	13,884	289,287	910	3,147	
10676	1	0	0	0	Irreg	150	271	Prod	-	-	U	1964	Wat	80/81	38	-	98,754	1,157,128	7,370	388,133	0	0	
17321	-	-	-	-	Irreg	-	200	Prod	-	-	U	1974	--	1/9	36	-	73,000	--	5,044	--	0	--	*Was Artnell Co.
17417	1	-	-	-	Peri	800	46	Prod + Cedar Hills	1600	200	T	1974	S Gas	78/22	37.8	-	16,757	24,382	9,928	9,928	0	0	
17407	1	0	0	0	Irreg	125	518	Prod	-	-	T	1974	Wat & Grav	1/1	37	-	146,000	184,800	68,621	155,040	0	0	
	13	2	3	0													2,292,979	5,763,958	203,153	2,655,500	48,635	125,083	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
						S - T - R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
NORTON COUNTY																
17985	No	Harting	Robert E. Davis*	(W) Harting	Harting	2-4S-23W	120	0	Reag	3701	10	4	0	0	0	Yes
PAWNEE COUNTY																
16981	No	Badger Hill	Walters Drilling Co.	(P) Zugg	Zugg	7-23S-18W	120	0	L-KC	4200	10	3	0	3	0	Yes
6115	--	Benson	Cities Service Oil Co.	(W) Benson Unit S.E.	Benson S.E. Unit	31,32-23S-15W	77	35	L-KC	3700	35	4	1	0	3	Yes
18063	No	Dunes North	Kaiser Francis	(D) Fertig B	Fertig B	15-22S-15W	80	0	L-KC	3512	231	1	0	0	0	Yes
8878	No	Garfield	A.L. Abercrombie, Inc.	(D) Hutchinson "D"	Hutchinson "D"	9-23S-17W	25	275	Miss	4228	26	2	0	0	0	Yes
13723	No	Garfield	A.L. Abercrombie, Inc.	(D) Fertig	Fertig	15-23S-17W	20	140	Miss Congl	4220	30	2	0	0	0	Yes
10116	No	Garfield	The Maurice L. Brown Company	(P) Garfield	Fergus A, Fergus "C" Hutchinson B-C, Hutchinson D	16-23S-17W 17-23S-17W 18-23S-17W	480	960	Mise Miss	4300 4200	15 15	4	0	0	0	Yes
12708					Wilson	20,21-23S-17W										
4616	--	Lovett	C.H. Todd, Inc.	(D) Lovett	Lovett	35-22S-15W	40	-	L-KC	3685	8	2	0	0	0	Yes
13114	--	Oro	NCRA	(W) Hagerman-Matoush	Hagerman, Matoush	10-20S-19W 9-20S-19W	60	10	Cher	4184	22	4	0	0	0	No*
14134					Van Rensselaer	5-20S-19W										
14971	--	Oro Northwest	NCRA	(W) Van Rensselaer	Van Rensselaer	5-20S-19W	160	0	Pawnee Sd	4194	7	2	1	0	0	Yes
14328	No	Rutherford	Murfin Drilling *	(-) Almquist W.F.	Almquist	5-20S-16W	160	125	Arb	3795	5	2	0	0	0	Yes
8460	--	Shiley	Cities Service Oil Company	(W) Shiley Waterflood	Risse "A"	14-20S-20W	70	130	Basal	4170	7	2	0	0	4	Yes
12417					Jennings "C" & Jennings "D"	13-20S-20W			Penn Sd							
PAWNEE COUNTY TOTALS (Reported) (Includes project in supplemental list.)							1,292	1,675				28	2	3	7	
PHILLIPS COUNTY																
16225	--	Beckman	Petroleum Management, Inc.	(W) Beckman South Project	Beckman, Flanigan Roeder	10-4S-19W 9-4S-19W	680	0	L-KC	3248	116	10	1	0	0	Yes
17599	No	Huffstutter	Leland R. Baird	(-) Wolf Lease	Roeder, Clark Wolf Lease	10-4S-19W 15-1S-18W	160	0	KC 1m	3286	46	4	0	1	0	Yes
8461	--	Huffstutter	Petroleum Management, Inc.	(W) Center Huffstutter Unit	Unitized	31,32-18W 5-2S-18W 6,7-2S-18W	1220	280	L-KC	3365	235	37	9	-	-	Yes
13834	--	Huffstutter	Petroleum Management, Inc.	(W) Huffstutter NW	W.A. Jackson, Rakestraw, Huffstutter "C"	31-1S-18W	130	0	L-KC	3350	235	4	1	0	0	Yes
8141	Yes	Huffstutter	Phillips Petroleum Co.	(-) Huffstutter Coop Unit	Huffstutter Coop Unit	13-2S-19W	345	0	L-KC	3400	50	5	0	0	0	Yes
9984	Yes	Huffstutter	Phillips Petroleum Co.	(W) Huffstutter	Huffstutter Unit	12-2S-19W 7-2S-18W	520	0	L-KC	3400	50	13	0	0	0	Yes
15283	--	Huffstutter	Phillips Oil Operating Co.	(P) O'Neill Press. Maint.	O'Neill	22-1S-18W	80	20	L-KC	3327	20	1	0	0	0	Yes
8195	--	Huffstutter	Sierra Petroleum Co., Inc.	(W) Kelly Unit	Hopper, Kelly	23-2S-19W	80	160	L-KC	3280	176	2	0	0	0	Yes
13887	--	Logan	Dane G. Hansen Trust	(D) Stephens-Ross	Stephens, Ross	35-4S-20W	200	0	L-KC	3200	220	2	0	0	0	Yes
6898	--	Mont Sol	Petroleum Management, Inc.	(W) Mont Sol LKC Unit	Krause "A"	1-4S-19W	100	-	L-KC	3200	28	2	0	0	0	Yes
15215					Krause "B" Sophia Meyers	7-4S-18W 6-4S-18W 12-4S-19W										
15367	--	Slinker	Petroleum Management, Inc.	(W) Slinker	White, Merklein Slinker	19-4S-19W 19-4S-19W 24-4S-20W 18-4S-19W	40	20	L-KC	3180	152	2	0	0	1	Yes
16645	--	Slinker	Petroleum Management, Inc.	(W) Adee Unit (PMI Project)	Boethin Lutz	17,18-4S-19W 30-4S-19W	-	0	Lans	3162	150	5	0	0	0	Yes
13967	Yes	Slinker	C.H. Todd, Inc.	(W) Slinker Toronto & Lansing KC	Adee, Schneider A Schneider A Schneider B	29,30-4S-19W 19,29,30-4S-19W	425	-	Tor L-KC	3098 3118	20	6	4	0	0	Yes
					Donahey, Lynch B, Slinker Fox Lynch A, Radlaff	25-4S-20W 30-4S-20W 36-4S-20W										

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
17985	1	0	0	0	Peri	10" Vac	196	Prod	-	-	U	1975	S Gas	10/1	28	-	41,160	41,160	10,343	104,702	2,400	2,400	*Was A. Ainsworth
16981	1	0	1	0	Peri	Vac	71	Prod	-	-	U	--	--	19/1	41.6	-	77,545	--	34,128	348,707	8,500	108,500	
6115	3	1	0	1	Peri	487	460	Prod + Wat Sd	67	-	M	1958	S Gas	17/40	41	-	555,200	7,225,504	11,975	861,318	11,975	346,186	
18063	1	0	0	0	Irreg	Vac	35	Prod	-	-	U	1975	Gas Exp	-	26	-	350	350	10,000	--	0	0	
8878	1	0	0	0	Irreg	Vac	8	Prod	-	-	U	1965	S Gas	1/1	35	-	2,930	1,402,655	2,410	602,041	0	0	
13723	1	0	0	0	Irreg	Vac	115	Prod	-	-	U	1967	S Gas	1/3	35	-	41,599	380,002	3,949	326,697	500	2,682	
10116 12708	1	0	0	0	Irreg	C	119	Prod	-	-	T	1963	Limited Wat	-	37	5.61*	42,825	1,326,779	6,429	1,364,781	3,214	41,262	*@100 ^O
4616	1	0	0	0	Irreg	10" Vac	14	Prod	-	-	T	1964	Wat & S Gas	5/2	23	-	5,110	46,592	4,327	127,768	514	917	
13114 14134 14971	0 1	3 0	0 0	0 0	Irreg	550	250	Prod + Dak	374	47	M	1966	S Gas	1395/0	39	-	175,065	1,790,523	6,231	116,894	5,101	83,845	*Inactive since Sept, 1975
14328 8460 12417	1 1	0 0	0 0	0 2	Irreg Line	1200 775	180 261	Prod Prod + Dak	- 362	-	T M	1968 1961	S Gas S Gas	- 1/1	42 36	- 5	65,700 97,447	565,891 1,973,315	2,813 7,491	343,376 522,758	2,813 7,491	49,500 300,378	*Was Sun Oil Company
	12	4	1	3													1,172,347	15,125,712	123,392	4,946,789	40,108	933,270	
16225	5	0	0	0	Irreg	600	97	Prod + Dak	-	-	T	1971	--	2.2/1	36	-	176,908	745,073	24,572	272,293	24,572	95,541	
17599	1	0	0	0	Irreg	360	50	Prod	-	-	T	1974	Grav	5/3	36	-	26,081	29,235	16,231	97,559	--	--	
8461	13	-	-	-	--	450	118	Dak	1050	-	T	1961	S Gas	1/0	37.3	-	561,879	7,599,281	90,754	2,083,919	90,754	2,083,919	
13834	3	0	0	0	Irreg	350	150	Dak	-	-	T	1967	--	1/0	37	-	163,805	1,176,453	8,257	224,783	8,257	224,783	
8141 9984	2 6	1 0	0 0	1 0	Irreg Irreg	35 275	380 228	Prod + Dak Prod + Dak	871 1000	30	U	1972 1963	S Gas S Gas	3/2 1/1.7	35 36	- 9	277,055 498,631	2,176,312 3,701,699	27,722 37,347	839,801 876,652	25,202 33,767	262,651 450,029	
15283 8195 13887 6898 15215	1 2 1 1	0 0 0 -	0 0 0 -	0 0 0 -	Irreg Irreg Irreg Line	350 - Vac 325	76 105 83 129	Prod Prod Prod Prod + Dak	- - - 1130	-	T T T T	1969 1961 1967 1960	S Gas S Gas S Gas S Gas	- - 1/1 10/3	34 32 28-31* 36	- - - -	27,740 38,284 28,090 46,910	166,415 1,189,012 166,365 1,361,142	2,553 1,915 4,806 4,122	18,108 110,943 37,666 323,158	2,100 1,915 -- 4,122	8,690 110,943 -- 323,158	*& 33-36
15367	1	0	0	0	Irreg	550	289	Prod	-	-	U	1970	S Gas	99/1	35	-	105,547	273,817	2,861	13,545	2,629	7,529	
16645	1	0	0	0	Irreg	300	192	Prod	-	-	U	1972	Wat	2/1	36	-	70,101	199,582	10,047	85,824	689	16,152	
13967	5	0	0	0	Peri	850	1832	Prod + Dak Sd	740	220	M	1967	S Gas	1/1.09	37	3.6	668,721	4,820,902	35,175	1,228,839	35,175	381,184	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni-tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
PHILLIPS COUNTY (concl.)																
14227	--	Stoneman	T.W. Jackson	(-) T.W. Jackson	Elsie #5, Jackson #3	20-4S-18W	400	-	Lans	-	-	-	-	-	-	Yes
14228																
12729	--	Stoneman	Petroleum Management, Inc.	(-) Stoneman Field Waterflood	Morgan Stoneman Sutley	21-4S-18W 20-4S-18W 29-4S-18W	1140	0	L-KC	3105	235	13	3	0	0	Yes
12730																
12731	--	Stoneman	Santa-Fe Pipe & Supply, Inc.*	(W) Bredemeier	Bredemeier	28-4S-18W	80	40	KC	3050	18	2	0	0	0	Yes
6112	--	Stuttgart	Petroleum Management, Inc.	(W) Stuttgart	--	13, 14, 23-3S-19W	165	-	L-KC	3200	35	2	2	0	0	Yes
6131																
16728	--	Veeh	Petroleum Management, Inc.	(W) Grau	Grau, Emma	35-3S-19W	160	-	Lans	3208	223	3	-	-	-	Yes
PHILLIPS COUNTY TOTALS (Reported) (Includes projects in supplemental list.)							9,805	520				153	21	1	1	
POTTAWATOMIE COUNTY																
16182	No	Casey	Venus Oil Co.	(P) Casey Lease	Casey	9-7S-12E	160	0	Viola	3304	26	2	0	1	0	Yes
PRATT COUNTY																
4080	--	Chitwood	Raymond Oil Company, Inc.*	(W) Chitwood	--	14, 22, 23, 26, 27-28S-12W	1200	-	Simp	4390	23	4	-	-	-	Yes
16091	Yes	Cunningham	Braden-Deem, Inc.	(W) Cunningham W.F.	--	3-28S-11W	400	-	L-KC	3430	15	5	0	0	0	Yes
16624	--	Frisbie	Clinton Oil Company	(W) A.E. Frisbie	A.E. Frisbie	5-26S-13W	80	0	L-KC	3948	50	2	0	0	0	Yes
5215	--	Frisbie	Range Oil Company, Inc.	(P) F. Smith	F. Smith	6-26S-13W	160	-	Lans	-	15	4	-	-	-	Yes
15235	--	Gereke West	Petrominerals Corporation	(W) Gereke Unit	Neelly D, Neelly C, Curtis C, Neelly #1 & #2, Curtis, Piland Curtis #6, Curtis F	2-26S-15W 11-26S-15W	420	0	L-KC	3980	6	5	0	0	0	Yes
7970	--	Iuka-Carmi	BM&N Oil Co., Inc.	(-) --	Honeman	10-26S-15W 31-26S-12W	160	-	Simp	4210	48	4	-	-	-	No*
13600	--	Iuka-Carmi	Getty Oil Company	(W) Miskimen-Simpson	V.E. Miskimen Lease L.R. Freymiller Lease	32-26S-12W 5-27S-12W	160	0	Simp	4214	30	5	0	0	0	Yes
9116	No	Iuka-Carmi	W.L. Kirkman, Inc.*	(W) --	Lunt	25-26S-13W	160	150	Lans	3725	5	1	-	0	1	Yes
11870	No	Iuka-Carmi	W.L. Kirkman, Inc.*	(W) Petrowsky	Petrowsky	29-26S-12W	40	30	Lans	3700	5	1	-	-	-	Yes
11041	--	Iuka-Carmi	Ronald Russ Prater Inc.	(W) C.J. Binger	C.J. Binger	31-26S-12W	144	-	Simp	4175	30	3	-	0	-	No*
6895	--	Iuka-Carmi	Skelly Oil Company	(W) Iuka-Carmi Helmke Unit	Helmke "H", Helmke "J", Helmke "B", Beck "A", Luders "B", F.B. Wagner	6-27S-12W 7-27S-12W	680	100	Simp	4230	18	7	10	0	0	Yes
8202	--	Iuka-Carmi	Skelly Oil Company	(W) South Iuka-Carmi Unit	Luders "B", F.B. Wagner S.Beck J.E. Brown, M.D. Burkner, M.A. Justice	7-27S-12W 12-27S-12W 18-27S-12W	680	0	Simp	4270	16	8	6	0	0	Yes
11297	No	Iuka-Carmi	Skelly Oil Company	(W) V.E. Miskimen Waterflood	V.E. Miskimen	32-16S-12W	100	50	Simp	4200	25	4	0	0	0	Yes
11392	No	Iuka-Carmi	Terra Resources, Inc.	(D) Iuka-Carmi North Sector	Calbeck "A" McFadden "C"	1-27S-13W 6-27S-12W	160	130	Simp	4236	33	4	0	0	0	Yes
15384*	No	Iuka-Carmi	TGT Petroleum Corporation	(D) Knop (Hoeme)	Knop	25-26S-13W	160	0	Viola	4120	25	2	0	0	0	Not
4827	No	Iuka-Carmi	C.H. Todd, Inc.	(P) --	Briggeman A Briggeman B, Hoener B	34-26S-13W 35-26S-13W	30	-	L-KC	3992	7	3	0	0	0	Yes
16490	No	Moore West	Thornton E. Anderson *	(P) Henderson Lease	Henderson Collins	4-26S-14W 3-26S-14W	80	-	L-KC	3804	8	2	1	0	0	Yes
13954	Yes	Rolingson	Beren Corp.*	(W) North Rolingson Simpson Unit	Helmke Josserand, Rollingson Humphrey Grier, Bergher Humphrey	19-27S-12W 30-27S-12W 31-27S-12W 25-27S-13W 36-27S-13W	560	160	Simp	4310	7	6	4	0	0	Yes
PRATT COUNTY TOTALS (Reported)							5,374	620				70	21	0	1	

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
14227	2	0	0	O	--	500	75	--	-	-	-	--	-	-	-	53,942	53,942	--	--	--	--		
14228																							
12729	6	0	-	-	Irreg	450	100	Prod + Dak	960	100	T	1966	S Gas	1/1	38	-	135,880	2,773,120	43,867	884,880	43,867	300,190	
12730																							
12731	1	0	0	O	Peri	550	20	Prod + Cedar Hills	950	150	U	1966	S Gas	3/2	39.3	-	11,473	237,271	2,067	31,250	2,067	--	*Was Hershberger Explor.
6112	1	6	0	O	Irreg	450	196	Prod	-	-	U	1952	S Gas	2/1	35.3	-	143,289	6,231,808	1,972	57,290	1,972	57,290	
6131																							
16728	1	-	-	-	Irreg	500	202	Prod	-	-	U	1973	--	-	-	-	131,533	170,602	9,910	67,213	1,371	28,131	
	80	11	0	1													4,111,215	47,881,041	431,270	11,347,222	385,551	6,153,120	
16182	1	0	0	O	Peri	0	900	Prod	-	-	U	1971	Wat	11/30	25	-	328,000	--	11,300	92,508	--	--	
4080	4	-	-	-	Irreg	Vac	448	Prod	-	-	U	1955	S Gas	-	38	-	725,000	38,646,411	11,974	3,806,849	11,974	3,806,849	*Was Lion Oil Company
16091	4	0	0	O	Irreg	800	1374	Ground	40	60	F&M	1971	S Gas	1/1	36	-	501,335	2,859,077	7,756	46,356	1,500	4,500	
16624	1	-	-	-	Irreg	0	64	Prod	-	-	U	1972	S Gas	8/9	31.5	-	23,264	77,409	4,599	17,323	4,599	15,210	
5215	2	-	-	-	Peri	0	300	--	-	-	U	--	S Gas	1/4	30	-	109,500	--	5,011	25,445	1,253	6,361	
15235	6	0	0	O	Peri	300	354	Prod + Meade	50	100	M	1969	S Gas	4/1	38	-	774,750	4,272,400	10,670	77,116	8,210	40,619	
7970	0	4	-	-	Irreg	0	0	Prod	-	-	F&M	--	Wat	-	-	-	--	--	--	--	--	--	*Not used since attainment in 1973
13600	1	0	0	O	Irreg	18	42	Prod	-	-	U	1967	S Gas	1.71/1	39	-	15,258	385,471	25,475	401,685	25,475	401,685	
9116	1	-	-	-	--	0	30	Prod	-	-	U	--	S Gas	-	36	-	11,000	--	900	--	--	0	*Was Robert L. Austin
11870	1	-	-	-	--	0	-	Prod	-	-	U	--	S Gas	-	32	-	24,000	--	400	--	--	--	*Was Robert L. Austin
11041	1	3	0	O	Peri	0	90	Sand	150	-	U	1964	S Gas	-	38	-	32,000	2,943,850	8,055	108,148	8,055	108,148	*Mechanical problems
6895	6	3	0	O	Irreg	300	1114	Shallow Sands	90	-	M	1961	S Gas	3314/347	38	-	2,441,135	18,320,025	11,509	3,782,873	11,509	1,646,073	
8202	5	3	0	O	Irreg	200	438	Prod + Shallow Sands	90	-	M	1961	S Gas	3929/2792	38	-	800,324	9,914,404	24,581	2,441,200	24,581	1,060,988	
11297	3	0	0	O	Irreg	0	348	Shallow Sands	90	-	F	1964	S Gas	118/167	40	-	381,054	3,767,283	20,615	836,430	20,615	243,361	
11392	1	0	0	O	Irreg	26" Vac	1074	Prod + Pleistocene Gr	117	55	T	1959	S Gas	17/33	37.6	-	390,139	9,858,807	15,042	2,016,610	15,042	1,044,415	
15384	0	1	0	O	Irreg	0	0	Surface Sand	35	10	F	--	--	1/10	36	-	0	0	2,203	15,177	0	0	*Inactive +Well is sanded up
4827	1	0	0	O	Peri	480	325	Prod	-	-	T	1965	S Gas	4/7	36	-	118,625	1,109,675	4,568	43,706	3,228	28,384	
16490	1	0	0	O	Irreg	0	70	Prod	-	-	U	1972	S Gas	1/4	36	-	25,000	90,000	3,355	175,055	0	0	*Was Dunne-Gardner
13954	1	2	0	O	Peri	150	165	Prod	-	-	U	1968	S Gas	40/33	38	-	60,225	--	14,083	770,549	11,266	--	*Was Amerada-Hess
	39	16	0	0													6,432,609	92,244,812	170,796	14,564,522	147,307	8,406,593	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- fied?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
RAWLINS COUNTY																
17253	No	Cahoj	Kern Co.*	(W) A. Sramek	A. Sramek	18-1S-34W	40	-	L-KC	4045	10	2	-	-	1	No†
15518	Yes	Cahoj	Halliburton Oil Producing Company	(P) S.E. Cahoj	Thieler, Fikan, Rosa Dozbaba Cahoj "H"	15-1S-34W 16-1S-34W	1120	0	L-KC	4047	20	9	0	0	0	Yes
16643	Yes	Cahoj	Skelly Oil Company	(W) Cohoj LKC Waterflood	Micek, Richard Dozbaba Cahoj (LKC) Unit	21, 22-1S-34W 3, 4, 8, 9, 10, 16, 17, 18, 20-1S-34W	2880	0	L-KC	4062	156	35	3	0	0	Yes
11929	--	Cahoj West	Burch Exploration, Inc.	(-) Cahoj	Chadderdon Sis Savage	13-1S-35W 12-1S-35W 14-1S-35W	400	0	L-KC	4514- 4294	24	3	0	0	0	Yes
14615	--	R.H.P.	Empire Drilling Company	(P) R.H. Palmer Waterflood	R.H. Palmer Cora Graves	6-1S-33W 7-1S-33W	100	40	L-KC	4078	6	6	0	0	0	Yes
15426	--	R.H.P.	Petroleum Management, Inc.	(W) Palmer	Palmer "B" Palmer "C", Bucy	5-1S-33W 8-1S-33W	160	10	Oread	3825	8	4	0	0	0	Yes
17400	Yes	Wilhelm	Skelly Oil Co.	(W) Wilhelm Unit	--	16, 17, 20, 21, 28, 29-1S-32W	1440	-	L-KC	3900	225	11	1	3	-	Yes
16985	No	Wilhelm	Donald C. Slawson	(P) Wicke 'C'	Wicke 'C'	17, 18-1S-32W	240	0	L-KC	3900	6	2	0	1	1	Yes
RAWLINS COUNTY TOTALS (Reported)							6,380	50				72	4	4	2	
RENO COUNTY																
10925	No	Albion North	Harry A. Sprague	(P) Graber Pressure Maintenance Project	H.D. Graber, Martin Graber, Krehbiel "A", Krehbiel "B"	11-26S-6W	240	0	Viola- Simp	3990	10	3	2	0	0	Yes
15881	No	Burrton	J.A. Allison	(P) Seedle "A"	Collins "A", Seedle "A"	16-24S-4W	-	-	Hunt	3318	30	2	1	0	0	Yes
13167	No	Burrton	R.L. Evans Trust	(D) Evans B	Evans "B"	23-23S-4W	160	80	Miss	3285	10	4	0	0	0	Yes
10414	No	Burrton	Harold J. Milburn*	(D) Haury	--	1, 2-23S-4W	100	40	Miss	3245	40	2	0	0	0	Yes
11618	No	Burrton	Okmar Oil Co.*	(P) Evans & Base W.F.	Evans, Base	36-23S-4W	80	0	Miss	3258	40	8	0	0	0	Yes
12044	--	Burrton	S & K Oil Co.*	(D) Fast-Smith	Fast, Roberts Smith	25-23S-4W 36-23S-4W	640	0	Miss	3308	52	6	0	0	0	Yes
12204	--	Burrton	S & K Oil Co.*	(D) Sabin B	Sabin B	11-23S-4W	30	30	Miss	3260	80	2	0	0	0	Yes
5368	No	Burrton	S & K Oil Co.*	(D) Teten	Teten	12-23S-4W	20	60	Miss	3400	15	6	0	0	1	Yes
14675	No	Burrton	TGT Petroleum Corporation	(P) Strawn	Banz, Harper, Hill Miller, Miller A, Sabin A	27-23S-4W 22-23S-4W	500	0	Miss	3330	12	18	0	0	2	Yes
15373	No	Hilger Southwest	Woodman-Iannitti Oil Co.	(P) C.J. Genbelle	C.J. Genbelle, A.J. Genbelle	20-26S-4W 29-26S-4W	320	-	Mise	3970	5	4	0	0	0	Yes
5139	No	Nicklaus	Phillips Petroleum Co.	(P) Prough Lease	Prough Lease	3-26S-4W	40	-	L-KC	2880	20	2	0	0	0	Yes
2754 4456	--	Zenith-Peace Creek	Cities Service Oil Company	(W) Peace Creek Unit	Peace Creek Unit	30, 31-22S-9W 6-23S-9W 35, 36-22S-10W 1, 2, 11, 12-23S-10W	380	1840	Viola	3750	16	5	2	0	28	Yes
RENO COUNTY TOTALS (Reported)							2,510	2,050				62	5	0	31	
RENO-RICE COUNTIES																
6188	--	Sterling	Phillips Petroleum*	(P) --	Mayer "B" Sylvia Mayer U "A", Stubbs "F"	4-22S-8W 9-22S-8W	400	-	Miss	3420	10	8	0	0	0	Yes
RENO-STAFFORD COUNTIES																
12893	Yes	Zenith-Peace Creek	Braden-Zenith Inc.	(W) Zenith Waterflood Unit	--	6, 7, 18-24S-10W 1, 2, 3, 10, 11, 12, 13, 14, 15, 23, 24-24S-11W	1000 Est	5235 Est	Mise & Viola	3760 3780	20 40	5	4	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
17253	0	0	0	0	Line	-	-	Prod	-	-	U	--	S Gas	16.5/8.5	35.4	14	0	0	5,281	48,168	0	0	*Anderson Oil & Gas Co. †Project not started
15518	7	1	0	6	Peri	800	148	Prod + Dak	2215	335	S	1970	S Gas	3.5/1	36	-	378,768	764,473	36,741	727,563	2,000	8,000	
16643	18	0	0	0	5-spot	250	428	Prod + Dak	2312	78	U	1973	S Gas	7104/8664	34.2	-	2,814,105	5,832,379	180,610	4,276,446	23,344	53,344	
11929	-	-	-	-	Irreg	0	26	Prod + Cedar Hills	2500	70	U	1964	S Gas	1/1	36	6	9,508	681,689	9,589	73,265	9,589	73,265	
14615	2	0	0	0	Irreg	750	231	Prod + L-KC	-	-	T	1968	Grav	67/33	38	-	84,537	629,254	25,269	394,911	20,000	139,000	
15426	2	0	0	0	Irreg	200	137	Prod	-	-	T	1970	S Gas	1/3	25	-	100,371	361,631	17,014	191,854	17,014	68,183	
17400	4	-	1	-	5-spot Irreg	304	365	Prod + Lo Morr + Permian	2265	235	U	1974	S Gas	1/.55	34	-	407,224	468,456	67,935	951,991	41,535	48,048	
16985	1	0	0	0	Irreg	0	34	Prod	-	-	U	1973	S Gas	1.5/1	32	6 Est	5,146	12,032	2,091	29,333	1,000	2,000	
	34	1	1	6													3,799,659	8,749,914	344,530	6,693,531	114,482	391,840	
10925	1	0	0	0	Peri	0	800	Prod	-	-	U	1964	Wat	--	42	-	292,000	3,243,500	8,912	273,257	300	77,300	
15881	1	-	-	-	Irreg	Vac	600	Prod	0	0	T	1970	Wat	3/2	40	-	216,000	861,000	0	0	--	--	
13167	1	0	0	0	Irreg	0	0	Prod	-	-	U	1967	S Gas	1/9	32	-	500,000	3,269,000	2,850	--	0	0	
10414	1	0	0	0	Irreg	0	140	Prod	-	-	U	1963	S Gas	1/9	36	-	49,280	--	2,106	--	1,000	--	*Was Tomlinson Oil Co.
11618	1	0	0	0	Peri	Vac	749	Prod	-	-	U	1965	S Gas	-	34	-	273,376	1,461,711	45,953	495,230	43,349	224,458	*Was Sarobee
12044	1	0	0	0	Irreg	0	936	Prod	-	-	U	1966	Wat	1/11	38	-	336,960	3,687,204	30,326	81,210	951	2,548	*Was General American
12204	1	0	0	0	Irreg	0	2394	Prod	-	-	U	1965	Wat	-	37.3	-	861,840	3,215,693	7,188	42,489	7,188	42,489	*Was Sun Oil Co.
5368	1	0	0	0	Irreg	0	884	Prod	-	-	U	1961	Wat	1/26	38	-	318,240	3,566,379	6,688	1,009,752	6,688	1,009,752	*Was General American
14675	2	0	0	0	Irreg	0	2846	Prod	-	-	U	1970	Wat S Gas	1/30	38	-	2,077,616	6,015,395	99,623	439,540	20,000	85,000	
15373	1	0	0	0	7-spot	0	32	--	-	-	--	--	--	--	--	--	--	--	--	--	--	--	
5139	1	0	0	0	Irreg	15	64	Prod	-	-	U	1956	S Gas	1/.8	35	10	22,662	829,132	1,909	303,421	0	0	
2754 4456	8	0	0	1	Line	14	552	Prod + Wat Sd	185	-	F&U	1951	S Gas	7/38	39	-	2,723,017	43,835,366	42,401	8,057,131	42,401	1,663,908	
	20	0	0	1													7,670,991	69,984,380	247,956	10,702,030	121,877	3,105,455	
6188	1	0	0	0	Peri	0	20	Surface Sd	50	20	M	1958	S Gas	9/1	35	-	7,372	996,817	5,569	460,465	4,863	117,865	*Was Thomas H. Allan
12893	7	4	0	0	Line	60	1486	Prod + Meade	40	60	M	1966	S Gas Grav	7/93	41	5 Est	3,796,914	50,560,515	29,761	342,927	29,761	316,906	

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.	
RENO-STAFFORD COUNTIES (concl.)																
13339	Yes	Zenith-Peace Creek	Stelbar Oil Corp.	(W) Zenith Waterflood	--	21, 29, 30, 32-23S-10W 25, 36-23S-11W 5, 6-24S-10W	-	-	Viola	3700	10	3	3	0	0	Yes
RENO-STAFFORD COUNTIES TOTALS (Reported)							1,000	5,235				8	7	0	0	
RICE COUNTY																
12968	Yes	Bull Creek	Isern Petroleum Company*	(W) Bull Creek Miss. Unit	Driver & Swartz Estate McFarland & Thode Martin Culbertson	25-21S-8W 26-21S-8W 35-21S-8W 36-21S-8W	480	0	Miss Ch Penn Congl	3400	4	2	0	0	0	Yes
16326	--	Calf Creek	Range Oil Company, Inc.	(P) Buehler "B"	Buehler "B"	33-18S-10W	90	-	Lans	2850	7	4	-	-	-	Yes
13524	No	Chase-Silica	Icer Addis	(W) Schubert	Schubert	9-20S-10W	160	-	Simp	3400	5	1	1	0	0	Yes
15792	No	Chase-Silica	Icer Addis	(W) Merrill J. Behnke	Behnke Brandenstein Appleton Ott	15-19S-10W 10-19S-10W 14-19S-10W 11-19S-10W	480	-	Doug	2842	7	9	1	0	0	Yes
11507	--	Chase-Silica	Ralph G. Bowen	(D) Specht "A" & "B"	Specht A & B	16-20S-10W	120	0	L-KC Arb	3300	20	2	0	0	0	Yes
16251	--	Chase-Silica	Cities Service Oil Co.	(W) DeWitt	DeWitt	33-19S-9W	105	40	Arb	3195	31	3	1	0	0	Yes
7692	--	Chase-Silica	Clinton Oil Company *	(W) Heinrich Roth	Heinrich Roth	29-19S-10W	160	0	L-KC	2957	107	2	0	0	0	Yes
10470	No	Chase-Silica	Fell & Wolfe Oil Co.*	(D) Bayer "B"	Bayer "B"	20-20S-10W	160	0	L-KC	3005	-	1	0	0	0	Yes
16477	No	Chase-Silica	Fell & Wolfe Oil Co.*	(D) Tatlock Unit	A.J. Bayer H. Drews, Steuder	7-20S-10W 5-20S-10W	-	-	Arb	3264	8	3	0	0	0	Yes
7836	No	Chase-Silica	Don Fox*	(D) Wolf	Wolf	20-19S-10W	80	-	KC	3000	8	1	2	0	-	Yes
12543	No	Chase-Silica	F.G. Holl	(W) Wenke	Wenke, Hirsch	18, 19-20S-10W	60	0	L-KC	3106	8	1	-	1	-	Yes
15526	No	Chase-Silica	Meltzer Oil Company*	(P) Layton-Project	Layton	29-19S-9W	80	-	KC	2937	4	1	0	1	0	Yes
15609	No	Chase-Silica	Phillips Petroleum Co.	(P) Kate Lease	Kate	18-19S-8W	40	0	Arb	3270	10	2	0	0	0	Yes
16354	No	Chase-Silica	Rocket-Schusterman Oil Acct*	(D) Houston Community	Houston Community	19-20S-10W	0	-	Lans	3020	6	0	0	0	0	Yes
6043	--	Chase-Silica	Range Oil Company, Inc.*	(W) Bernstorf "D"	Bernstorf "D"	23-19S-10W	80	-	L-KC	3140	12	3	-	-	-	Yes
11993	--	Chase-Silica	Southern States Oil Company	(P) Altenbaumer	Altenbaumer Brandenstein	12-19S-10W 11-19S-10W	160	-	L-KC	2956	50	9	8	0	1	Yes
14299	--	Chase-Silica	Southern States Oil Company	(P) Feldman	Feldman	15-19S-10W	160	0	L-KC Doug Arb	2870	18	6	1	0	0	Yes
9916	--	Chase-Silica	Ira Stephens Jr.	(D) --	Keller	5-19S-9W	80	80	Arb	3235	-	2	0	0	0	Yes
10600	--	Chase-Silica	Everett Swander	(W) B.G. Proffitt	B.G. Proffitt	25-19S-10W	0	0	--	-	-	1	0	0	0	No*
11795	--	Frederick	National Cooperative Refinery Association*	(P) Staatz-Schroeder Unit	Staatz, Staatz "A" Schroeder	11-18S-9W 10-18S-9W	320	0	Simp	3252	12	5	1	0	0	Yes
17026	--	Geneseo-Edwards	Clinton Oil Company	(W) Geneseo Field WFS (congl.)	A.H. Johnson, R. Michells, C. Wood J.A. Lewis J.A. Williams	12-18S-8W 14-18S-8W 13-18S-8W	480	0	Penn Congl	3150	10	4	5	0	1	Yes
7243	--	Geneseo-Edwards	Continental Oil	(W) Geneseo Simp. Sn. Un.	Geneseo Simp. Sn. Un.	30, 31-18S-7W 25, 30, 36-18S-8W	290	0	Simp	3170	16	11	7	-	-	Yes
12620	--	Geneseo-Edwards	Continental Oil	(P) Geneseo Jt. LKC Repr.	S. Ainsworth, J.R. Lansing, J.R. Lansing A	25-18S-8W	260	0	L-KC	2875	50	22	2	-	-	Yes
15998	--	Geneseo-Edwards	Continental Oil	(P) Gray-Hamilton 'A'	B.C. Gray, Wm. Hamilton 'A'	19-18S-7W	320	0	L-KC	2850	8	7	2	-	-	Yes
9585	No	Geneseo-Edwards	Fell & Wolfe Oil Co.*	(D) Bolton	Ira O. Bolton	31-18S-7W	80	40	Simp	3216	8	2	0	0	0	Yes
11875	--	Geneseo-Edwards	Kaiser-Francis*	(P) Zajic	Zajic	13-18S-8W	-	-	Lans	2789	250	5	0	0	0	Yes
12712	--	Geneseo-Edwards	Murfin Drilling	(W) Geneseo Unit W.F.	Geneseo Unit	3, 4, 9, 10-18S-8W	720	550	B Penn Congl	3200	9	8	2	0	1	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
13339	1	3	0	0	Peri	Grav	400	Prod	-	-	F	1967	S Gas	-	37	-	147,600	12,848,900	1,932	--	1,932	39,089		
	8	7	0	0													3,944,514	63,409,415	31,693	342,927	31,693	355,995		
12968	1	0	0	0	Irreg	100	250	Prod	-	-	U	1967	Gas Exp	19/31	36	-	91,250	1,664,877	4,714	58,958	0	0	0	*Was Union Oil of Calif.
16326	1	-	-	-	Irreg	-	200	Prod	-	-	U	1971	S Gas	2/3	30	-	73,000	--	2,771	12,959	693	3,240		
13524	1	0	0	0	Irreg	0	200	Prod	-	-	U	1967	Gas Exp	1/9	52	-	78,433	636,410	5,245	11,683*	2,500	20,760	*Since 1973	
15792	2	0	0	0	Irreg	300	330	Prod	-	-	U	1970	Gas Exp	7/3	28	-	120,325	748,787	12,466	209,307*	4,500	32,185	*Since 1967	
11507	1	0	0	0	Irreg	Vac	365	Prod	-	-	U	1965	S Gas	-	40	-	127,480	1,488,718	4,633	26,534	3,960	23,353		
16251	2	0	0	1	Irreg	200	153	Prod	-	-	U	1971	S Gas	46/279	47.7	-	112,425	409,746	16,006	2,434,951	3,388	20,052		
7692	1	0	0	0	Irreg	0	172	Prod	-	-	U	1960	S Gas	1/1	44.9	-	62,918	726,532	7,175	666,618	7,175	92,656	*Was Pan American	
10470	1	0	0	0	--	200	160	Prod	-	-	U	1963	--	--	--	--	--	--	154	--	--	--	*Was NCRA	
16477	1	0	0	0	Irreg	Vac	600	Prod + Arb	3325	-	U	--	--	--	36.8	-	--	--	2,282	--	--	--	*Was Herman Geo. Kaiser	
7836	1	-	0	-	Irreg	0	100	Prod	-	-	--	--	S Gas	-	40	-	36,000	--	3,561	--	1,000	--	*Was Clinton Oil Co.	
12543	1	-	-	-	Peri	0	250	Prod	-	-	T	1966	S Gas	3/15	39.7	-	91,250	973,250	2,449	194,673	1,600	3,400		
15526	0	0	0	0	Irreg	550	200	Prod + Arb	3300	0	U	1969	--	7/3	46	-	3,600	--	43,000	--	0	--	--	*Was Siegrist Oil Company
15609	1	0	0	0	Irreg	0	391	Prod	-	-	U	1970	Wat	1/34	47	-	142,734	500,509	2,373	408,780	0	0		
16354	1	0	0	0	--	0	73	Prod	-	-	U	1972	Wat	1/50	39	-	26,596	137,596	8,069	421,822	0	0	*Was Union Texas	
6043	-	-	-	-	--	0	253	Prod	-	-	U	1958	S Gas	-	37	-	92,345	--	1,367	--	342	--	--	*Was Skelly Oil Company
11993	1	0	0	0	Irreg	1600	420	Prod	-	-	T	1965	Grav	-	36	-	152,450	912,573	9,077	79,849	9,077	79,849		
14299	2	1	0	0	Irreg	1200	325	Prod	-	-	F	1967	Grav	-	27	-	235,750	1,224,855	13,040	113,693	13,040	113,693		
9916	1	0	0	0	Irreg	0	120	Prod	3235	-	T	1963	Wat	-	43	-	0	--	2,359	22,700	--	--	--	
10600	1	0	0	0	Irreg	180	250	Prod	-	-	U	1963	S Gas	1/19	45	-	25,979	--	1,367	--	0	--	--	*Irregular or random
11795	2	2	0	0	Irreg	250	125	Prod	-	-	T	1963	Limited Wat	-	46	2.4	135,989	573,151	15,944	858,317	0	2,739	*Was Maurice L. Brown	
17026	2	0	0	0	Irreg	1853	228	Prod	-	-	U	1973	S Gas	1/2.5	36.2	-	166,338	350,801	23,626	5,930,221	23,626	56,706		
7243	5	8	-	-	Line	2100	294	Prod + Arb + Lans	-	-	T	1960	S Gas	-	36.2	-	536,783	9,703,919	15,278	1,290,357	15,278	1,106,573		
12620	3	2	-	-	Irreg	1000	570	Prod	-	-	U	1966	Wat	-	36.2	-	624,000	5,539,547	0	--	0	--	--	
15998	2	0	-	-	--	0	400	Prod	-	-	U	1971	S Gas	-	32.9	-	294,480	1,350,431	0	--	0	--	--	
9585	2	0	0	0	--	400	300	Prod + Simp	3230	12	U	--	--	--	31.8	-	--	--	851	--	--	--	--	*Was Sinclair Oil & Gas Co.
11875	1	0	0	0	Irreg	380	1000	Prod	-	-	T&S	1965	Gas Exp	-	32	-	365,000	3,233,615	7,850	3,473,999	2,000	18,800	*Was Shell Oil Company	
12712	5	2	0	1	Peri	1250	212	Prod + Arb	3400	15	T	1967	S Gas	5/1	40	10	464,459	3,591,069	13,594	--	13,594	158,739		

TABLE 1--ENHANCED OIL-RECOVERY PROJECTS, 1975--Continued

County	Is Proj. ini- tiated?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
RICE COUNTY (concl.)																
13839	Yes	Lyons West	Kewanee Oil Co.	(W) West Lyons Unit	West Lyons Unit	16,17,20,21,28, 29,30,31,32, 33-19S-8W 5-20S-8W	1980	1540	Kind	3320	15	13	36	0	0	Yes
12960	Yes	Mary Ida South	Pioneer Operations Co., Inc.	(W) Mooney Manke	Mooney Manke	6,7,8-19S-10W	640	150	L-KC	2950	150	17	0	0	0	Yes
4823	--	Odessa	Atlantic Richfield Co.	(W) Odessa Unit	Odessa Field Unit	4,28,29-18S-6W	800	220	Marm	3090	8	9	0	0	0	Yes
8206						32,33-19S-6W										
3875	--	Orth	Meltzer Oil Company*	(D) Habiger	Habiger	27-18S-10W	80	-	Top	2434	250	3	-	-	-	Yes
3953	No	Orth	Skelly Oil Company	(W) Volkland "A"	Volkland "A"	27-18S-10W	60	0	Top 1m	2670	16	3	0	0	0	Yes
14317	No	Orth West	J.A. Allison	(P) Feist #2	Feist, Manke	20-18S-10W	110	30	Lans	3218	10	6	1	0	0	Yes
14786	--	Orth West	R.M. Edwards	(P) --	Reichuber, Heinz, Poppetreiter, Oberle	16,17-18S-10W 17-18S-10W	880	0	Lans	3200	20	14	0	0	0	Yes
7522	No	Ringwald	Rocket-Schusterman Oil Account*	(W) Ringwald WF	Ringwald Lease, Gemeinhardt Lease	32-18S-10W 29-18S-10W	140	40	Lans G	2930	39	3	1	0	0	Yes
14300																
10813	--	Rino	NCRA*	(W) Rino Pressure Maintenance	Wellman "G", Wellman "I"	33-21S-9W	40	0	Simp	3499	10	4	0	0	0	Yes
16771	Yes	Tobias	Aspen Drilling Co.	(W) Southwest Tobias Lansing Unit	Shuyler, Altman, Mosher, Lipp, Werner	3-21S-9W 3,4-21S-9W	476	0	L-KC	2958	4	4	0	0	0	Yes
13650	No	Tobias	I.O. Miller Inc.*	(D) Lipp	Lipp, Read, Brown	11-21S-9W	160	-	L-KC	2948	8	3	0	6	3	Yes
10096	Yes	Tobias	Thunderbird Drilling, Inc.	(W) Tobias Simpson Unit	Tobias, Fair "B", Schafer, Koons, Cuskey, Fair "A", Fair "C", Pulliam, Faler, Gillen, Harrison,	25-20S-9W 26-20S-9W 35-20S-9W 36-20S-9W 35-20S-9W 2-21S-9W	830	605	Simp	3300	16	17	17	38	4	Yes
10559																
14464																
9071	No	Welch-Bornholdt	Phillips Petroleum Co.*	(P) Welch-Bornholdt	Unit A, Unit B, Bengston, Fry "G", Fry "C", Fry "E", Fry "J", Hubenett, Ekholm, Hokr, Malm Unit, Malm "D", Mattson, Johannsen, Lindholm "C", Lee, Lindholm "B", Wernett, Johnson "D", Belden, Fair "B", Duvall "A", Duvall "B", Moll, Libby, Alexander	11-20S-6W 13-20S-6W 15-20S-6W 22-20S-6W 23-20S-6W 24-20S-6W 25-20S-6W 26-20S-6W 27-20S-6W 28-20S-6W 33-20S-6W 34-20S-6W 4-21S-6W	1400	840	Miss	3300	-	33	4	0	0	Yes
10733																
10740																
12187																
12367																
6848	--	Welch-Bornholdt	Shade & Berry	(D) --	Mattson, Anderson, Mattson	25-19S-6W	-	-	Miss Ch	3435	14	11	0	0	0	Yes
16994	No	Wherry	Kaiser-Francis*	(D) Gossman	Gossman	8-21S-7W	80	50	Miss	3352	18	2	0	0	3	Yes
RICE COUNTY TOTALS (Reported)							12,641	4,185				259	92	46	13	
ROOKS COUNTY																
14067	Yes	Andreson	Davis Bros. Oil Prod., Inc.	(W) Andreson Waterflood	Andreson C, Gasaway D, Gasaway E, Gasaway F	31-10S-18W	110	75	L-KC	3500	75	2	0	0	0	Yes
13518	Yes	Barry	Continental Oil	(W) Barry LKC	Barry LKC Un.	35-8S-19W 1,2,3,10,11 12-9S-19W	1540	0	L-KC	3200	12	18	4	-	-	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)				Remarks			
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	1975	Cum. 12-31-1975
13839	10	5	0	0	9-spot	1150	490	City of Lyons (wells)	-	-	F	1968	S Gas	1363/475	40	-	1,788,360	15,345,764	96,834	4,863,598	39,725	653,093	
12960	5	0	0	0	Irreg	980	259	Prod + Arb	3200	30	T	1966	S Gas	2/3	38	-	473,405	4,245,881	20,177	--	19,250	--	
4823 8206	7	0	0	0	Irreg	260	168	Prod + L-KC	2900	90	U	1959	S Gas	70/36	28	13	431,180	7,932,720	24,572	1,321,958	24,572	976,873	
3875	0	0	0	0	Peri	Vac	330	Prod + Top	24	250	U	1954	Wat	-	29	-	94,000	--	6,993	--	--	--	*Was Artnell
3953	1	0	0	0	Irreg	400	498	Prod	-	-	U	1954	S Gas	442/882	30	-	181,998	3,006,094	7,113	295,220	7,113	211,254	
14317	6	1	0	0	Peri	1200	72	Prod + Arb	3266	20	T	1968	Gas Exp	99/1	39	-	25,550	327,950	15,498	310,704	15,498	151,762	
14786	4	1	0	0	--	1875	900	--	-	-	T	1969	S Gas	*	41	-	402,425	1,787,126	29,436	510,743	--	--	*Trace of water
7522 14300	2	0	0	0	--	1000	419	Prod	-	-	U	1961	S Gas	1/4	40	-	152,839	2,530,926	17,688	943,760	15,444	218,317	*Was Union Texas
10813	1	0	0	0	Irreg	1000	290	Prod	-	-	T	1973	S Gas	19/463	39	-	105,457	201,204	5,606	19,043	0	2,103	*Was Thunderbird Drlg., Inc.
16771	1	0	0	0	Irreg	250	120	Prod + Fresh water sand	46	-	M	1972	S Gas	1/0	41.5	3.6	130,517	292,828	7,561	150,335	4,095	4,095	
13650	1	-	-	-	Irreg	Grav	50	Prod	-	-	--	S Gas	1/3	40	-	18,250	--	2,463+	142,192	--	--	--	*Was I.O. Miller Estate †Attributed to primary reserves
10096 10559 14464	5	-	6	1	Peri	275	500	Prod + Arb	3350	200	T	1968	S Gas	698/11	45	1.88	1,039,800	8,390,975	225,052	4,589,625	225,052	2,870,435	
9071 10733 10740 12187 12367	9	5	0	0	Irreg	500	149	Prod	-	-	U	1958	S Gas Grav	-	36	-	490,415	12,252,989	38,051	1,590,035	15,491	255,069	*Was Cardinal Petroleum Co.
6848	1	0	0	0	Irreg	Vac	180	Prod	-	-	U	1959	--	-	33.6	-	66,000	984,000	--	--	--	--	
16994	1	0	0	0	Irreg	Vac	6	Prod	-	-	T&S	1973	Gas Exp	1/3	35	-	2,190	7,285	4,015	663,396	0	0	*Was Grace Oil Company
	<u>96</u>	<u>27</u>	<u>6</u>	<u>3</u>													<u>9,461,970</u>	<u>91,072,128</u>	<u>720,310</u>	<u>31,616,030</u>	<u>468,013</u>	<u>7,075,746</u>	
14067	2	0	0	0	Peri	625	165	Prod	-	-	T	1968	Grav	3/2	34	5	120,143	945,894	7,453	199,392	7,453	97,411	
13518	8	18	-	-	--	475	485	Prod	-	-	U	1968	S Gas	-	35.3	-	1,415,100	12,920,468	55,224	639,356	55,224	464,356	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unit- ized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
ROOKS COUNTY (cont.)																
16334	No	Barry Southeast	Rocket-Schusterman Oil Account*	(D) Bedard WI	Cabbage	7-9S-18W	0	0	Arb	3495	-	0	0	0	0	Yes
16521	No	Baumgarten	A.L. Abercrombie, Inc.*	(D) Sollenberger	Sollenberger, Hilgers Unit	30-9S-18W	240	0	L-KC	3280	3	4	0	0	0	Yes
9977	--	Chesney	Kaiser-Francis*	(P) Chesney	Chesney	12-8S-17W	60	0	L-KC	3060	13	3	1	0	0	Yes
12545	--	Dopita	Cities Service Oil Co.	(W) Reeder Lease	Reeder,	19-8S-17W	40	0	Tor +	3090	20	4	0	0	0	Yes
16960					McMillen "B"	25-8S-18W			L-KC							
4089	--	Dopita	Clinton Oil Company*	(W) Pearl McMillen	Pearl McMillen	24-8S-18W	80	0	Tor +	3136	197	3	0	0	0	Yes
8544									Lans							
1665	No	Dopita	K & G Oil Company	(P) Disposal	Russ Lease	31-8S-17W	240	0	Arb +	3459	1137	5	0	0	0	Yes
									KC Neva	2322						
16100	No	Dopita	Murfin Drilling*	(W) Thompson W.F.	Thompson	5-9S-17W	160	0	Tor +	3150	60	3	0	0	0	Yes
									+ Top							
15831	No	Dopita	Okmar Oil Co.	(W) Moos	Moos	6-9S-17W	40	-	Arb	3370	3	2	0	0	0	Yes
11324	No	Dopita	Samson Resources Company *	(W) Krug WF	Krug	19-8S-17W	150	0	Tor +	3100	6	5	0	0	0	Yes
									Lans							
2957	--	Dorr	Cities Service Oil Company	(W) Dorr Unit	Dorr Unit	16, 17, 20,	601	19	Dodge +	3141	45	21	2	0	2	Yes
9161						21-9S-16W			L-KC							
13728	--	Dorr	Theodore Gore	(P) Casey	Casey,	21-9S-16W	240	0	L-KC	3445	251	2	-	-	-	Yes
					Meyers	16-9S-16W										
15586	--	Dorr	Harold Krueger	(P) Overholser	Overholser	20-9S-16W	20	0	KC 1m	3350	4	1	1	0	0	Yes
					Andreson	21-9S-16W										
15048	No	Eilers	Davis Bros. Oil Prod., Inc.	(P) Eilers	Eilers A	27-10S-18W	90	50	L-KC	3500	75	3	0	0	0	Yes
					Eilers B, Eilers C, Shepard I	22-10S-18W										
7789	Yes	Finnesy South	Davis Bros. Oil Prod., Inc.	(W) South Finnesy Water-flood	Shepard A,	23, 24-10S-18W	190	90	Lans	3500	75	4	0	0	0	Yes
					Shepard C	24-10S-18W										
14007	No	Finnesy South	Davis Bros. Oil Prod., Inc.	(P) Shepard B	--	23-10S-18W	80	55	L-KC	3376	22	1	0	0	0	Yes
12595	No	Grover	A.L. Abercrombie, Inc.	(D) Roy "B"	Roy "B", Roy, Grover	22-7S-19W	120	300	L-KC	3085	10	5	1	0	0	Yes
10258	--	Kruse	Cities Service Oil Company	(W) Kruse Unit	Kruse Unit	2, 11-10S-16W	93	12	Dodge +	3050	34	4	0	0	0	Yes
									L-KC							
3504	--	Laton	Cities Service Oil Company	(W) Laton Pool Coop. Waterflood	Adams "D" & Holy Cross	4-9S-16W	370	0	Dodge	3070	53	16	1	0	2	Yes
					Adams "A", "B" & "C"	33-8S-16W			L-KC							
					Dennis, Hodson	34-8S-16W										
6619	No	Laton	Co-Co, Inc.*	(W) Doane-Swisher Cooperative WF	Doane, Swisher	34-8S-16W	320	220	Tor +	3020	52	6	0	0	0	Yes
									L-KC							
7166	No	Laton	Co-Co, Inc.*	(W) Gamble-McFadden "E" Cooperative W.F.	Gamble, McFadden "E"	3-9S-16W	320	280	Tor +	3070	52	6	1	0	0	Yes
12140									L-KC							
7831	No	Laton	Co-Co, Inc.*	(W) Luhman Cooperative W.F.	Co-Co, Inc. - Luhman	11-9S-16W	160	60	Tor +	3180	34	2	0	0	1	Yes
					Jones-Campbell-Sarver	12-9S-16W			L-KC							
12702	No	Laton	Co-Co, Inc.*	(W) Blank Cooperative W.F.	Blank	14-9S-16W	100	80	Tor +	3190	45	2	0	0	0	Yes
									L-KC							
10499	--	Laton	Harold Krueger	(W) Laton Flood Project	Beardmore, Luhman-Johnson, Tatkenhorst B, Tatkenhorst E, Buell	10-9S-16W	420	0	KC 1m	3240	3-6	15	1	0	0	Yes
					Tatkenhorst C, Home	11-9S-16W										
6050	No	Laton	Murfin Drilling *	(W) Li-Be-Bax W.F.	Baxter "A", "B", Beardmore	2-9S-16W	800	-	L-KC	3100	30	14	0	0	0	Yes
9350					Baxter "D", "E"	3-9S-16W										
11184					Livingood	11-9S-16W										
11185																
11333																
8118	Yes	Laton	Murfin Drilling Company *	(W) North Laton Unit	North Laton Unit	27-8S-16W	400	260	L-KC	3060	50	6	0	0	0	Yes
13043					(Unitized)	28-8S-16W										
14469	No	Lone Star	Okmar Oil Co.	(W) Luther-Arndts Co-op	Luther,	8-8S-17W	40	0	L-KC	3037	5	2	0	0	0	Yes
					Arndts	9-8S-17W										
15302	--	McClellan	Clinton Oil Company *	(D) McClellan	Velma McClellan	9-9S-19W	80	0	L-KC	3267	180	3	0	0	0	Yes
15529	No	McClellan	Robert E. Davis *	(W) McClellan Flood	Bayard, McClellan, Stull, Whisman	8-9S-19W	320	0	L-KC	3500	5	13	0	0	0	Yes
9412*	--	Marcotte	B-J Oil Company	(W) Tribble	Tribble	28-10S-20W	-	-	--	-	-	-	-	-	-	--

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbl)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
16334	1	0	0	0	--	0	1874	Prod	-	-	U	1972	Wat	1/50	28	-	684,000	2,390,000	9,987	1,152,302	--	--	*Was Union Texas	
16521	1	0	0	0	Irreg	0	35	Prod	-	-	U	1972	Wat	13/220	30	45	12,889	88,127	3,751	18,179	300	980	*Was Myrlin Monroe	
9977	-	-	-	-	--	210	440	Prod	-	-	T	1963	S Gas	1/1	36	-	160,600	2,672,593	4,745	138,586	4,745	--	*Was Cities Service	
12545	2	0	0	0	Irreg	30	38	Prod	0	0	T	1966	S Gas	21/23	27	-	22,413	155,977	9,461	268,650	1,610	47,627		
16960	1	0	0	0	Irreg	0	197	Prod	-	-	U	1965	S Gas	1/8.6	29.5	-	72,054	1,020,545	5,935	307,813	5,935	99,531	*Was Pan American	
4089	1	0	0	0	Irreg	250	275	Prod	-	-	T	1947	--	-	-	-	100,375	--	1,443	--	0	--		
8544	1	0	0	0	Irreg	250	275	Prod	-	-	T	1947	--	-	-	-	100,375	--	1,443	--	0	--		
1665	1	0	0	0	Irreg	250	275	Prod	-	-	T	1947	--	-	-	-	100,375	--	1,443	--	0	--		
16100	1	0	0	0	Irreg	Grav	563	Prod	-	-	T	1971	S Gas	1/4	36	-	205,586	535,586	5,513	--	2,200	15,200	*Was Sun Oil Company	
15831	1	0	0	0	Line	350	256	Prod	-	-	U	1974	S Gas	-	30	-	93,440	148,920	2,238	120,891	615	1,117		
11324	3	1	0	0	Irreg	30	401	Prod	-	-	T	1965	S Gas	1/3	29	-	146,281	2,346,870	8,090	743,957	8,090	169,864	*Was Shell Oil Co.	
2957	15	0	0	0	5-spot	148	327	Prod + Dak	800	-	T	1962	S Gas	148/209	38	-	1,707,649	18,632,599	57,412	2,940,295	57,412	1,149,387		
9161	1	-	-	-	Irreg	200	468	Prod	-	-	T	1962	Wat	-	39	-	170,820	2,349,921	4,133	--	1,377	62,790		
13728	1	-	-	-	Irreg	200	468	Prod	-	-	T	1962	Wat	-	39	-	170,820	2,349,921	4,133	--	1,377	62,790		
15586	1	0	0	0	Line	Vac	50	Prod	-	-	T	1970	S Gas	1/2	37	-	18,250	103,250	1,967	63,059	0	0		
15048	1	0	0	0	Irreg	70	195	Prod	-	-	T	1969	Grav	3/7	32	15	71,179	446,884	10,446	562,856	2,612	54,145		
7789	2	0	0	0	Peri	560	.8	Prod + Dak	450	300	T	1960	Grav	9/1	34	6	430,971	6,499,539	11,573	380,112	11,573	380,112		
14007	0	1	0	0	Peri	-	-	Prod	-	-	T	1967	Grav	1/2	34.5	-	--	1,660,094	2,545	83,503	2,545	83,503		
12595	1	0	0	0	Irreg	200	180	Prod	-	-	U	1966	S Gas	-	33	-	65,244	636,475	10,041	248,863	6,000	88,912		
10258	2	2	0	1	Peri	710	355	Prod + Dak	730	-	T	1963	S Gas	50/75	37	-	273,031	2,228,249	11,984	556,699	11,984	193,324		
3504	7	0	0	1	Irreg	249	345	Prod + Dak	850	-	T	1953	S Gas	124/55	33	-	795,262	9,298,934	49,331	2,089,059	49,331	1,182,774		
6619	3	0	0	0	Irreg	630	225	Prod + Dak	800	50	M	1962	S Gas Grav	3/7	39- 40	-	246,768	3,284,550	15,595	585,363	15,595	585,363	*Was Max Cohen	
7166	3	2	0	0	Irreg	250	238	Prod + Dak	870	50	M	1963	S Gas Grav	3/7	39- 40	-	260,791	4,354,965	20,314	364,231	20,314	364,231	*Was Max Cohen	
12140	3	2	0	0	Irreg	250	238	Prod + Dak	870	50	M	1963	S Gas Grav	3/7	39- 40	-	260,791	4,354,965	20,314	364,231	20,314	364,231	*Was Max Cohen	
7831	2	0	0	0	Irreg	190	257	Prod + Dak	950	50	M	1965	S Gas Grav	3/7	39- 40	-	187,493	1,117,908	3,576	50,969	3,576	50,969	*Was Max Cohen	
12702	2	0	0	0	Irreg	250	277	Prod + Dak	950	50	M	1966	S Gas Grav	7/13	39	-	202,148	963,894	5,496	74,997	5,496	74,997	*Was Max Cohen	
10499	3	1	0	0	Irreg	Vac	135	Prod	-	-	T	1965	S Gas Grav	1/1	38- 40	-	147,669	1,844,799	38,465	1,251,328	25,642	424,201		
6050	12	4	0	0	Irreg	105	285	Dak	600	200	M	1966	Grav	6/94	38	-	1,039,087	4,066,187	36,435	--	36,435	1,297,847	*Was Clinton Oil Company	
9350	12	4	0	0	Irreg	105	285	Dak	600	200	M	1966	Grav	6/94	38	-	1,039,087	4,066,187	36,435	--	36,435	1,297,847	*Was Clinton Oil Company	
11184	4	0	0	1	Peri	300	269	Prod + Dak	600	200	M	1966	S Gas Grav	3/32	38	-	392,419	3,124,541	18,676	--	18,676	201,015	*Was D&D Drilling Company	
11185	4	0	0	1	Peri	300	269	Prod + Dak	600	200	M	1966	S Gas Grav	3/32	38	-	392,419	3,124,541	18,676	--	18,676	201,015	*Was D&D Drilling Company	
11333	4	0	0	1	Peri	300	269	Prod + Dak	600	200	M	1966	S Gas Grav	3/32	38	-	392,419	3,124,541	18,676	--	18,676	201,015	*Was D&D Drilling Company	
8118	4	0	0	1	Peri	300	269	Prod + Dak	600	200	M	1966	S Gas Grav	3/32	38	-	392,419	3,124,541	18,676	--	18,676	201,015	*Was D&D Drilling Company	
13043	1	0	0	0	Irreg	125	235	Prod + Arb	3300	5	U	1969	S Gas	1/30	33	-	85,775	420,320	3,736	208,581	2,465	6,257		
14469	1	0	0	0	Irreg	125	235	Prod + Arb	3300	5	U	1969	S Gas	1/30	33	-	85,775	420,320	3,736	208,581	2,465	6,257		
15302	1	0	0	0	Irreg	0	94	Prod	-	-	T	1970	S Gas	1/6.9	32	-	34,233	288,268	2,738	41,254	2,738	19,925	*Was O.A. Sutton	
15529	3	0	0	0	Peri	0	333	Prod	-	-	U	1969	Wat	2/3	35	-	364,785	2,167,368	22,182	374,316	14,982	62,070	*Was Kathol Petroleum, Inc.	
9412	-	-	-	-	--	-	-	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	--	*Not active during 1975

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							S-T-R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
ROOKS COUNTY (concl.)																	
	16628	--	Marcotte	Kaiser-Francis Oil Company	(D) Gish	Gish "C"	36-9S-20W	80	65	Arb	3825	4	1	0	0	2	No*
	12517	No	Marcotte	Nadel and Gussman	(W) Stithem-Eliza	Stithem & Eliza	14-10S-20W	60	30	L-KC	3693	17	20	13	0	-	Yes
	15992	No	Marcotte	Nadel and Gussman	(W) Gish	Gish	6-10S-19W	0	0	L-KC	3480	10	2	4	0	2	No*
	10570	No	Marcotte	Okmar Oil Co.	(W) Marcotte	Marcotte A	18-10S-19W	74	30	L-KC	3500	5	1	1	0	0	Yes
	16483	--	Natoma	Cities Service Oil Company	(W) Natoma L-KC Unit	Natoma L-KC Unit	14,15-10S-16W	92	0	L-KC	3250	8	4	0	0	0	Yes
	11849	--	Nettie	Phillips Petroleum Co.	(W) Nettie Unit	Nettie Unit	33,34-9S-17W 3,4-10S-17W	560	0	Top Tor L-KC Arb	3225- 3525	60 5	28	2	0	0	Yes
	15389	--	Nettie Northwest	Davis Bros. Oil Prod., Inc.	(D) Rempe A & B	--	28,29-9S-17W	75	50	L-KC	3289	30	2	0	0	0	Yes
	11302	--	Nyra	Southern States Oil Company	(P) Thompson	Thompson	9-9S-17W	160	-	Arb KC	3194	10	3	1	0	0	Yes
	15129																
	15855	Yes	Paradise Creek	Paul H. Williams*	(-) Paradise Creek	South Paradise Creek	27,28-9S-18W	50	-	L-KC	3324	5	1	0	0	0	Yes
	12384	Yes	Plainville	Davis Bros. Oil Prod., Inc.	(W) Plainville Waterflood Unit	Bice Unit, Collins E Kleinschmidt B, Ross C, Ross D	6-10S-17W 7-10S-17W	790	450	L-KC	3500	75	17	0	0	0	Yes
	13187	Yes	Plainville	Davis Bros. Oil Prod., Inc.	(W) Winters Plante No. 2 (Plainville Waterflood No. 2)	Plante B, Winters C, White A, White B	8-10S-17W	550	265	L-KC	3500	75	8	0	0	0	Yes
	14009	Yes	Plainville	Davis Bros. Oil Prod., Inc.	(P) So. Plainville Unit No. 3	Garvert O, Hoffman D, Plante A, Vohs E, Ganoung A	18-10S-17W 17-10S-17W	380	250	L-KC	3500	75	9	0	0	0	Yes
	16341	--	Riffe	Sierra Petroleum Co., Inc.	(W) Riffe Unit	Riffe Dryden Dryden Desmarteau	4-7S-19W 5-7S-19W 8-7S-19W 9-7S-19W	460	0	L-KC Tor	3180	7	9	0	0	0	Yes
	16831	No	Simons	Thornton E. Anderson	(P) Simons Lease	Simons Lease	11-7S-17W	60	0	L-KC Top	2758	20	2	0	0	0	Yes
	16056	--	Trico	Cities Service Oil Company	(W) Trico L-KC Arb Unit	Trico L-KC Arb Unit	33-10S-20W	280	0	L-KC Arb	3580	24	8	0	0	5	Yes
	7906*	No	Trico	Colorado Oil Company, Inc.	(P) Williams Lease	Williams	27-10S-20W	0	50	L-KC	3400	200	1	0	0	0	Yes
	13998	--	Trico	Kaiser-Francis Oil Co.	(D) Williams	Williams	28-10S-20W	80	0	Arb	3747	6-11	2	0	0	0	Yes
	10794	--	Trico	Murfin Drilling	(P) Briggs/Harlan W.F.	Briggs	34-10S-20W	40	22	L-KC	3500	37	1	0	0	0	Yes
	17404	--	Twin Mounds	Pickrell Drilling Company	(W) Twin Mounds Unit	Twin Mounds Unit	3,4-9S-17W	640	0	Pleas	3426	7	7	0	0	0	Yes
	12298	No	Vohs	Atlantic Richfield Co.	(W) H.J. Vohs "A"	H.J. Vohs "A"	13-10S-19W	120	-	L-KC	3280	32	5	0	0	0	Yes
	13602	--	Vohs	Clinton Oil Company*	(W) Felix Senecal	Felix Senecal	12-10S-19W	40	0	Lans	3303	105	1	0	0	0	Yes
	14335	No	Webster	Phillips Petroleum Co.	(W) Fidelis Lease	Fidelis	33-8S-19W	100	0	L-KC	3180	20	3	1	0	0	Yes
	10080	--	Westhusin	Atlantic Richfield Co.	(W) Robert J. McClay	Robert J. McClay	12-9S-17W	80	-	L-KC	3130	254	4	1	0	0	Yes
	13645	--	Westhusin	Harold Krueger	(P) Colahan	Colahan, Dougherty B	18-9S-16W	80	0	KC 1m	3150	3-5	3	1	0	0	Yes
	13647	--	Westhusin	Harold Krueger	(P) Mary Dougherty	Mary Dougherty	13-9S-17W	120	0	KC 1m	3150	3-6	8	0	0	0	Yes
	17200	--	Westhusin	Murfin Drilling	(P) Hrabe W.F.	Hrabe "A", Hrabe "B", Hrabe "C"	1-9S-17W	160	0	L-KC	3150	15	7	0	0	0	Yes
	10108	No	Westhusin	Terra Resources, Inc.	(D) Westhusin	Baxa, Dora Smith, McClay Westhusin Unit, J. Westhusin	12-9S-17W 11-9S-17W	80	70	L-KC	3130	20	10	1	0	0	Yes
	6557	No	Zurich	Veeder Supply & Dev. Co.	(W) Casey	Casey	35-10S-19W	160	20	L-KC	3300	*	1	0	0	1	Yes
	6581	No	Zurich	Veeder Supply & Dev. Co.	(W) McCullough	McCullough, Johnson "B" Johnson "A"	35-10S-19W 26-10S-19W	380	40	L-KC	3300	*	3	0	0	0	Yes
	17039	--	Zurich Townsite	Cities Service Oil Company	(W) Zurich Townsite Unit	Zurich Townsite Unit	27-9S-19W	560	0	Tor L-KC	3360	1	6	0	0	0	Yes
ROOKS COUNTY TOTALS (Reported)								13,735	2,843				362	37	0	15	

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks						
	Active	In-active	Drilled 1975	Abd. 1975			Injection Pattern	Source	Depth, ft.						Thick., ft.	Type	Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods					
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975				
16628	-	-	-	-	--	-	-	Prod	-	-	U	1972	Gas Exp	9/226	27	-	0	0	2,920	242,232	0	0	*Prod. wat. goes into another SWDS				
12517	1	1	0	0	Peri	0	280	--	-	-	T	1966	S Gas	4/1	29	-	14,900	311,650	42,694	--	7,115	14,515					
15992	0	0	0	0	Irreg	0	0	Prod + L-KC	3480	10	T	--	+	1/3	29	-	0	0	4,202	--	0	0	*Not started †Not specified				
10570	1	0	-	0	Peri	Vac	365	Prod + Arb	3770	10	U	1969	S Gas	-	33	-	133,225	1,332,400	1,907	503,693	1,095	35,207					
16483	4	0	0	0	Peri	290	304	Prod + Chey	690	62	T	1972	S Gas	27/167	35	-	435,328	1,328,153	18,768	403,451	18,768	86,437					
11849	8	0	1	0	Irreg	105	420	Prod	-	-	U	1965	Wat S Gas	1/4.3	35	10	1,226,391	10,825,200	80,712	2,635,770	71,952	912,809					
15389	1	0	0	0	Peri	0	297	Prod	-	-	T	1969	Grav	3/2	30.4	-	108,369	401,526	3,079	86,477	1,539	16,181					
11302	1	0	0	0	Irreg	-	272	Prod	-	-	T	1965	Grav	-	29	-	128,024	773,435	6,973	269,651	6,973	269,651					
15129	3	0	0	0	4-spot	10	210	Prod	-	-	M	--	S Gas	3/20	36	-	229,950	--	2,400	--	--	--	*Was Cities Service Oil				
15855	3	0	0	0	Peri	1015	248	Prod + Dak	700	300	T	1965	Grav	3/1	34	5	451,787	6,884,674	36,974	708,251	36,974	76,722					
12384	5	0	0	0	5-spot	1015	248	Prod + Dak	700	300	T	1965	Grav	3/1	34	5	451,787	6,884,674	36,974	708,251	36,974	76,722					
13187	3	0	0	0	5-spot	680	278	Prod + Dak	700	300	T	1967	Grav	3/1	34	6	304,424	2,416,761	21,969	328,624	21,969	328,624					
14009	2	0	0	0	5-spot	700	29	Prod	-	-	T	1968	Grav	3/1	34	5	20,986	1,508,989	7,013	127,199	7,013	127,199					
16341	2	0	0	0	Line	560	687	Prod + Chey	945	50	T	1972	Grav	17/83	34.5	-	249,028	875,885	13,975	68,609	0	0					
16831	1	0	0	0	Irreg	150	70	Prod	-	-	U	1973	S Gas	3/7	38	-	24,000	74,000	6,986	93,963	500	1,500					
16056	5	0	0	0	Peri	532	178	Prod + Dak	650	40	T	1972	S Gas	17/47	31	-	504,235	2,075,177	26,166	1,151,492	26,166	126,358					
7906	1	0	0	0	Irreg	100	107	Prod	-	-	U	1960	Wat	-	30	-	40,849	1,076,515	5,390	--	0	0	*SWD into Arbuckle				
13998	2	0	0	0	--	Grav	98	Prod	-	-	U	1968	Gas Exp	-	29.5	-	35,770	35,770	6,570	297,843	0	0					
10794	1	0	0	0	Irreg	Grav	65	Prod	-	-	T	1964	S Gas	3/2	28	-	23,725	225,790	3,892	71,877	2,800	--					
17404	1	0	0	0	Irreg	453	74	Lo Dak	509	135	U	1974	S Gas	35/13	34	2.5 Est	26,996	59,980	25,382	274,528	14,067	23,337					
12298	2	0	0	0	Irreg	Vac	879	Prod + Arb	3596	6	U	1966	Gas Exp Grav & Wat Drive	8/17	34	5.5	539,872	3,796,673	16,801	236,806	16,801	224,982					
13602	1	0	0	0	Irreg	0	114	Prod	-	-	T	1967	S Gas	1/5.8	35.4	-	41,681	348,631	5,894	365,837	5,894	75,868	*Pan American				
14335	2	0	0	0	5-spot	0	256	Prod + Cedar Hills	830	0	U	1968	S Gas	1/6.3	36	9	186,853	1,052,297	2,638	307,194	1,498	3,501					
10080	4	0	0	0	Irreg	Vac	507	Prod	-	-	U	1963	S Gas	2/5	35	4.8	823,129	10,000,688	12,149	1,044,117	12,149	295,891					
13645	1	0	0	0	Line	Vac	100	Prod	-	-	T	1967	S Gas	4/1	37	-	36,100	450,125	7,337	196,618	2,445	23,915					
13647	1	0	0	0	Irreg	Vac	201	Prod	-	-	T	1967	S Gas	7/3	37	-	73,445	773,195	11,312	254,001	3,770	50,018					
17200	1	0	0	0	Irreg	Grav	80	Prod	-	-	T	1974	S Gas	1/4	36	-	29,200	51,100	10,139	220,099	--	--					
10108	3	0	0	0	Irreg	119	434	Prod	0	0	T	1963	S Gas	17/33	36.1	-	473,435	7,359,699	24,637	1,344,402	24,637	473,375					
6557	1	0	0	1	Irreg	400	27	Prod + Dak	600	150	M	1958	S Gas	1/10	31	-	9,855	500,091	730	15,833	730	10,730	*4 zones 25 ft.				
6581	1	0	0	1	4-spot	590	202	Prod + Dak	600	150	M	1958	S Gas	2/5	32	-	73,666	778,491	8,239	91,446	4,078	87,285	*4 zones 25 ft.				
17039	3	0	0	0	Peri	0	462	Prod + Wat	48	30	M	1974	S Gas	1/7	-	-	358,302	473,964	15,992	449,618	5,517	5,517					
														147	30	1	5										
														16,129,980	142,504,584	849,688	25,254,242	669,375	10,447,530								

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
								Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
RUSH COUNTY																	
	16776	--	Basgall West	Clinton Oil Company	(W) D.R. Roth	D.R. Roth	4-16S-17W	70	0	L-KC	3200	13	3	0	0	0	Yes
	16358	--	Pleasant View	Frontier Oil Company	(P) Basgall-Burgardt-Urban "J"	Basgall "C" Burgardt "A" Urban "J"	10-16S-17W 15-16S-17W 14-16S-17W	480	0	L-KC	3300	6	5	0	0	0	Yes
RUSH COUNTY TOTALS (Reported)								550	0				8	0	0	0	
RUSSELL COUNTY																	
	14534	--	Baxter	Cities Service Oil Co.	(W) Baxter "A"	Baxter "A" Lease	33-14S-15W	24	0	Tor L-KC	3082 3118	28	2	0	0	0	Yes
	17274	--	Boxberger West	Helmerich & Payne, Inc.	(P) Morgenstern	Morgenstern	34-15S-15W	160	-	Lans	3200	26	3	0	0	0	Yes
	11475	--	Davidson	Marvin E. Lebow	(P) Chegwiddden	Chegwiddden	29-15S-11W	160	-	L-KC	3020-3024 3163-3174	15	2	0	0	0	Yes
	12723	--	Davidson	Duke Drilling Co.	(D) Pelz-Schreiber	Pelz-Schreiber	34-15S-11W	0	0	Lans	3045	4	1½	1½	-	-	Yes
	14451	--	Eulert	Atlantic Richfield Co.	(W) Eulert Unit	Eulert Unit	35-11S-15W	400	100	Top L-KC	2990	14-30	9	0	0	0	Yes
	16754	--	Eulert West	Shields Oil Producers, Inc.	(D) Eulert	Eulert	34-11S-15W	80	0	Arb	3260	10	1	0	0	0	Yes
	11553	--	Fairport	Aylward Drilling Company	(P) Booth	Booth	32-11S-15W	80	0	L-KC	2850	22	6	0	0	0	Yes
	4976	--	Fairport	Clinton Oil Company*	(W) Frank Booth "A"	Frank Booth "A"	32-11S-15W	80	0	Dodge Lans	2875	10	3	0	0	0	Yes
	15009	--	Fairport	Clinton Oil Company*	(W) Ed Oswald Unit	Ed Oswald	8-12S-15W	130	30	Lans	2911	31	13	0	0	0	Yes
	11344	--	Fairport	Clinton Oil Company*	(W) Ed Oswald Unit	Ed Oswald	8-12S-15W	130	30	Lans	2911	31	13	0	0	0	Yes
	14502	No	Fairport	John O. Farmer, Inc.	(-) Fairport Waterflood	Cleve Miller, Driscoll	20-12S-15W	160	-	L-KC	3000	5	4	-	-	1	No
	12911	--	Fairport	Louis M. Mai Operations	(W) Beller Wtr. Flood	Beller "A", Beller "B", Beller "C"	10-12S-15W 16-12S-15W 15-12S-15W	160	20	L-KC	2970	6	11	0	0	0	Yes
	13149	--	Fairport	Louis M. Mai Operations	(W) Sutton "B"	Sutton "B"	9-12S-15W	80	0	L-KC	2961 2968	6	6	0	0	0	Yes
	16012	--	Fairport	Louis M. Mai Operations	(W) Milke-Krug	Milke, Krug	20-12S-15W	120	0	L-KC	3000	6	10	0	0	0	Yes
	15693	--	Fairport	R.P. Nixon Operations	(D) Gibbs	Gibbs	20-12S-15W	160	0	L-KC	3001	30	3	4	0	0	Yes
	13056	No	Fairport	Sohio Petroleum Company	(W) Deckert Lease	Deckert	30-12S-15W	46	-	L-KC	3020	36	4	0	0	0	Yes
	13057	No	Fairport	Sohio Petroleum Company	(W) Rusch "A" Lease	Rusch "A"	19-12S-15W	50	-	L-KC	3020	36	2	2	0	0	Yes
	13058	No	Fairport	Sohio Petroleum Company	(W) Rusch "B" Lease	Rusch "B"	19-12S-15W	29	-	L-KC	3020	36	3	0	0	0	Yes
	16180	No	Fairport	Sohio Petroleum Company	(W) Oswald-Wilcox Coop	Ed Oswald "A", Ed Oswald "B", Oswald-Wilcox "A", C.C. Oswald, Sutton "A", Sutton "B" Oswald-Wilcox "B", American Investment Co.	8-12S-15W 5-12S-15W 17-12S-15W	-	-	L-KC	2954	-	31	3	5	0	Yes
	6472	--	Fairport	Texaco Inc.	(W) P. Jacobs	P. Jacobs	31-12S-15W	155	-	Lans	3000	34	6	0	0	1	Yes
	13077	No	Gorham	C.L. Hanes	(P) VonFeldt	VonFeldt	6-15S-14W	80	0	KC	2964	5	3	0	0	0	Yes
	9137	No	Gorham	Home-Stake Production Co.	(W) Gorham Waterflood	Carter, Linenberger, Baxter Mermis "C" & "D" Marg Dortland, Mermis "B", J. Dortland, Dortland "C", Mills "B", Witt "D", Foster "A", Foster "B", Witt E	32,33-13S-15W 4,5-14S-15W 3,4-14S-15W	1080	720	L-KC	3050	28	30	1	0	0	Yes
	11901	No	Gorham	J.L. King	(P) Schwein-Hall Unit	Hall Schwien	36-14S-15W 1-15S-15W	240	0	Gor	3210	6	9	0	0	0	Yes
	12022	No	Gorham	J.L. King	(P) Dumler-Mudd Unit	Dumler Mudd	31-14S-14W 6-15S-14W	160	10	Gor	3190	15	5	0	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
16776	1	0	0	0	Line	1498	208	Dak	268	75	M	1973	S Gas	9/1	35.3	-	73,023	180,907	19,194	162,421	19,194	42,530	
16358	2	0	0	0	Irreg	0	100	Prod	0	0	U	1972	S Gas	9/1	36	-	87,600	197,100	5,739	23,922	1,913	7,974	
	3	0	0	0													160,623	378,007	24,933	186,343	21,107	50,504	
14534	1	0	0	0	Irreg	0	14	Prod	-	-	-	1968	S Gas	4/3	32.2	-	4,164	25,380	4,285	70,489	0	2,555	
17274	1	0	0	0	Irreg	0	83	Prod + Dak	345	70	U	1974	S Gas	-	32	-	29,536	29,536	6,862	257,933	0	0	
11475	1	0	0	0	Irreg	-	115	Prod	-	-	U	1965	Combina- tion	-	35	-	42,079	554,624	2,307	--	--	--	
12723	1	-	0	-	Irreg	0	40*	Prod	-	-	U	1966	S Gas	-	37	-	10,940	623,190	863	50,027	0	--	*½ yr.
14451	7	0	0	0	Peri	Vac.	680	Prod + Arb + L-KC	3290	14- 400	U	1968	S Gas	104/771	38.8	3.5	1,606,544	10,202,087	41,889	413,491	41,889	337,525	
16754	1	0	0	0	Irreg	0	400	Prod	-	-	U	1972	Wat	-	33	-	146,000	408,750	3,416	13,990	500	1,000	
11553	1	0	0	0	Irreg	Vac.	695	Prod	-	-	T	1965	S Gas	-	30	-	253,593	1,922,493	9,450	317,315	9,450	116,011	
4976	1	1	0	0	Irreg	0	205	Prod	-	-	U	1956	S Gas	1/4.1	33.4	-	76,878	3,013,984	7,584	1,040,128	7,584	279,161	*Was Pan American
15009	4	0	0	0	Irreg	0	469	Dak	325	233	U	1964	S Gas	2.6/1	35.9	-	685,297	6,581,266	37,615	3,169,151	37,615	404,056	*Was Pan American
11344	4	0	0	0	Irreg	0	469	Dak	325	233	U	1964	S Gas	2.6/1	35.9	-	685,297	6,581,266	37,615	3,169,151	37,615	404,056	
14502	1	-	-	-	Irreg	0	70	Prod	-	-	-	1968	Grav	-	39	-	--	--	1,100	--	0	--	
12911	4	0	0	0	Irreg	400	187	Prod	-	-	T	1966	S Gas	1/2¼	36	-	274,123	2,583,236	23,176	1,169,872	20,858	271,773	
13149	3	0	0	0	Irreg	350	259	Prod	-	-	T	1970	S Gas	1/2	37.6	-	283,426	931,052	22,243	199,800	9,050	56,567	
16012	2	0	0	0	Irreg	50	531	Prod	-	-	T	1971	S Gas	1/4	36	-	387,958	1,224,396	18,476	397,284	12,476	37,883	
15693	2	0	0	0	Irreg	0	480	0	-	-	T	1970	S Gas	3/2	38	-	168,000	672,165	14,957	--	7,478	51,271	
13056	1	0	0	0	Irreg	520	155	Prod + Fresh	409	24	M	1967	S Gas	1/15	34.9	-	56,680	822,794	36,185	214,855	12,900	92,807	
13057	1	0	0	0	Irreg	520	476	Prod + Fresh	409	24	M	1967	S Gas	1/14	37.8	-	173,939	975,372	9,676	161,373	9,676	110,301	
13058	2	0	--	0	Irreg	520	374	Prod + Fresh	409	24	M	1967	S Gas	1/11	38.6	-	273,450	1,892,686	7,704	77,087	7,704	52,141	
16180	1	0	0	0	Irreg	0	196	Prod	-	-	T	1972	S Gas	1/11	37	-	71,590	290,244	168,784	528,022	12,252	128,024	
6472	2	0	0	0	Irreg	25	443	Prod	-	-	U	1958	S Gas	3000/ 223	33	-	323,433	6,113,248	20,651	494,868	20,651	322,139	
13077	1	0	0	0	Peri	500	385	Prod	-	-	U	1966	Grav	2/3	34.5	-	140,525	947,325	11,513	100,392	8,634	59,965	
9137	10	2	0	0	5-spot	550	700	Prod	-	-	T	1962	S Gas	-	36	-	2,557,214	49,380,243	65,293	2,098,853	65,293	2,098,853	
9846																							
11901	1	0	0	0	Irreg	-	1200	Prod + L-KC	3175	-	T	1965	Wat	4/1	32	-	432,000	4,762,850	13,282	--	5,976	64,026	
12022	1	0	0	0	Irreg	-	1150	Prod	-	-	U	1965	Wat	4/1	32	-	414,000	4,862,120	4,294	--	1,932	25,952	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
						S-T-R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
RUSSELL COUNTY (cont.)																
17573	--	Gorham	R.P. Nixon Operations	(-) Atherton	Atherton	4-13S-14W	160	0	L-KC	3070	35	5	0	0	0	Yes
11631	No	Gorham	Okmar Oil Co.	(W) Rexroat Co-op	Rusch Seeley, Hummel, Rexroat B, Rusch Rexroat C, Solbach S, Solbach N Solbach E	30-14S-14W 31-14S-14W 32-14S-14W	-	-	L-KC	3235	12	3	0	0	0	Yes
12345	No	Gorham	Okmar Oil Co.	(W) Vaughn	Vaughn	17-14S-14W	90	0	L-KC	3180	8	4	2	0	0	Yes
1354	No	Gorham	Phillips Petroleum Co.	(-) Carroll Lease	Carroll	18-14S-14W	70	0	L-KC	3100	50	4	1	0	0	Yes
17645	No	Gorham	Samson Resources Company*	(-) Reinhardt	Reinhardt Lease	24-14S-15W	80	40	Arb	3250	-	1	0	3	2	Yes
4105 15950	No	Gorham	Terra Resources, Inc.	(D) Reinhardt	Reinhardt "D"	19-14S-14W	30	100	L-KC	3055	18	2	0	0	0	Yes
4098 10618	--	Gorham	Texaco Inc.	(W) D. Brandenburg	D. Brandenburg	20-14S-14W	160	-	Lans	3100	-	1	0	0	0	Yes
7370	--	Gorham	Roy Vonfeldt*	(W) --	Dumler Unit	11-14S-15W	160	10	KC	3033	5	5	2	-	-	Yes
9974	--	Hall-Gurney	A-B Oil Co., Inc.*	(P) Dumler	Carl Dumler	16-14S-13W	160	-	Tark	2370	10	1	-	-	-	Yes
14595	Yes	Hall-Gurney	Earl Allen	(D) Kaufman	Kaufman	33-15S-12W	40	0	KC	3028	48	1	0	0	0	Yes
6968	--	Hall-Gurney	American Petrofina Co. of Texas*	(W) Tarkio Unit	Ehrlich "B", Rein "C", Rein "F"	17-14S-13W 20-14S-13W	210	0	Tark	2315	10	5	5	0	0	Yes
9395	--	Hall-Gurney	American Petrofina Co. of Texas *	(W) J. Blehm	J. Blehm	11-14S-14W	160	0	Tark	2380	10	3	0	0	0	Yes
9516	--	Hall-Gurney	American Petrofina Co. of Texas*	(W) Rein	G.Rein H. Rein G. Rein	17-14S-13W 19-14S-13W 20-14S-13W	320	120	Tark	2410	10	3	6	0	0	Yes
14923	--	Hall-Gurney	American Petrofina Co. of Texas *	(D) Kuhnle	Kuhnle	4-15S-12W	80	0	L-KC	2953	28	2	0	0	0	Yes
4543	--	Hall-Gurney	Aylward Drilling Company	(P) Holl "A"	Holl "A"	22-14S-14W	60	40	L-KC	3000	22	8	0	0	0	Yes
7167	--	Hall-Gurney	Aylward Drilling Company	(P) J. Boxberger	J. Boxberger	26-14S-14W	80	0	L-KC	2292	18	4	0	0	0	Yes
7165	--	Hall-Gurney	Aylward Drilling Company	(P) Herbel "B"	Herbel "B"	26-14S-14W	80	0	L-KC	2924	20	3	0	0	0	Yes
7946	--	Hall-Gurney	Aylward Drilling Company	(P) Holl "A"	Holl "A"	22-14S-14W	10	50	Tark	2425	22	1	0	0	0	Yes
7947	--	Hall-Gurney	Aylward Drilling Company	(P) Holl "B"	Holl "B"	22-14S-14W	80	10	Tark	2425	22	1	0	0	0	Yes
7950	--	Hall-Gurney	Aylward Drilling Company	(P) Holl "B"	Holl "B"	22-14S-14W	140	20	L-KC	2950	22	10	1	0	0	Yes
8293	--	Hall-Gurney	Aylward Drilling Company*	(P) H. A. Fink	H.A. Fink Holl "B"	15-14S-14W 22-14S-14W	10	0	Lans	3000	-	1	0	0	0	Yes
9425	--	Hall-Gurney	Aylward Drilling Company	(D) Anschutz	Anschutz	21-14S-14W	150	10	L-KC	3127	20	7	0	0	1	Yes
13157	--	Hall-Gurney	Aylward Drilling Company	(P) Holl "C"	Holl "C"	21-14S-14W	80	60	L-KC	3027	60	4	0	0	0	Yes
15814	--	Hall-Gurney	Carl W. Boxberger	(D) Boxberger B	Boxberger B	14-14S-14W	160	0	L-KC	3000	200	2	0	0	2	Yes
2328	--	Hall-Gurney	Cities Service Oil Company	(W) Carter-Graham Coop. W.F. Graham	Carter Ebel "A", Ebel "B" Strecker "B"	29-14S-13W 28-14S-13W 24-14S-14W 36-14S-14W	76	74	L-KC	2880	23	2	0	0	6	Yes
2030 4738 7524 16582	--	Hall-Gurney	Cities Service Oil Co.	(W) Hall-Gurney L-KC Coop W.F.	Ebel "A", Ebel "B" Strecker "B"	24-14S-14W 36-14S-14W	259	191	L-KC	2880	66	10	2	0	7	Yes
16582	--	Hall-Gurney	Cities Service Oil Company	(D) Weimeister	Weimeister	25-14S-13W	120	0	L-KC	2862	26	2	2	0	0	Yes
5437 8926	--	Hall-Gurney	Clinton Oil Company*	(W) Ben Rein	Ben Rein	25-14S-14W	160	0	L-KC	2950	20	6	0	0	1	Yes
4587 4595 14620	--	Hall-Gurney	Clinton Oil Company	(W) Krug-Olson	Frederick Krug "A", Frederick Krug "B", Jerry Driscoll, A.J. Olson "A" & "C" A.J. Olson "B"	27-14S-14W 28-14S-14W	640	0	L-KC	3000	136	22	3	0	0	Yes
12387	--	Hall-Gurney	Clinton Oil Company*	(W) C.L. Newcomer	C.L. Newcomer	10-14S-14W	160	0	L-KC	3000	60	5	0	0	0	Yes
9985	No	Hall-Gurney	Colorado Oil Company, Inc.	(W) Weimaster - LKC	Weimaster	36-14S-13W	40	40	L-KC	2850	150	1	1	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbl)					Remarks		
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
17573	3	-	0	-	Irreg	0	350	Prod	-	-	T	1974	S Gas	3/1	36	-	367,500	399,000	6,526	--	3,263	3,263		
11631	1	0	0	0	Irreg	400	120	Prod + Arb	3160	5	U	1965	S Gas	-	34	-	43,800	2,346,233	13,695	1,533,713	2,630	50,896		
12345	1	0	0	0	Peri	520	2020	Prod	-	-	U	1966	S Gas	-	40	-	737,300	6,631,371	9,141	675,759	9,141	174,364		
1354	3	0	0	0	Irreg	0	576	Prod	-	-	U	1957	S Gas	1/11.5	41	5	630,302	11,206,402	8,929	1,243,069	8,929	372,645		
17645	1	0	0	0	Irreg	0	749	Prod	-	-	T	1975	Wat	2/49	30	-	251,717	251,717	2,798	145,681	0	0	*Was S & S Pipe and Supply	
4105 15950	1	0	0	0	Irreg	26	1504	Prod	0	0	T	1954	S Gas	21/29	38.9	-	548,993	9,220,854	8,141	1,108,711	8,141	310,277		
4098 10618 7370	1 2	1 -	0 0	0 0	Peri Line	250 0	540 150	Prod + Gorham	- 3300	- -	U T	1954 1969	S Gas Grav	759/ 426 1/6	34 38	- -	196,959 68,700	7,330,748 --	5,489 5,347	268,837 --	5,489 --	230,794 --	--	*Was Sun Oil Co.
9974	1	0	-	-	Irreg	400	350	Prod	-	-	U	1974	Wat	-	36	-	127,750	164,150	1,542	1,792	--	--	*Was Carl Dumler	
14595	1	0	0	0	Line	0	35	Prod	-	-	U	1968	Wat & Gas	1/9	39	-	12,800	120,800	1,337	10,397	0	0		
6968	1	0	0	0	Irreg	800	53	Prod + Dak	356	30	U	1967	S Gas	1/3	41	-	19,119	4,511,503	3,659	72,487	3,659	72,487	*Was The El Dorado Refg.	
9395	1	0	0	0	5-spot	475	45	Prod + Dak	336	25	U	1962	S Gas	1/9	36	-	16,503	1,078,464	905	82,204	905	25,168	*Was The El Dorado Refg.	
9516	2	3	0	0	5-spot	500	49	Prod + Dak	232	50	U	1962	S Gas	1/5	38	-	36,058	3,531,867	2,661	571,701	2,661	187,194	*Was The El Dorado Refg.	
14923	1	0	0	0	Irreg	920	116	Prod + Gorham	3204	4	U	1969	S Gas	1/6	38.3	-	42,463	285,704	5,810	368,633	5,810	29,850	*Was The El Dorado Refg.	
4543	3	0	0	0	Irreg	400	260	Prod	-	-	T	1954	S Gas	-	36	-	284,993	1,858,203	14,686	1,020,344	13,686	859,236		
7167	1	0	0	0	Irreg	200	795	Prod	-	-	T	1959	S Gas	-	39	-	290,288	2,852,834	15,339	252,653	15,339	240,464		
7165	1	0	0	0	Irreg	900	49	Prod	-	-	T	1959	--	-	38	-	17,709	437,716	3,227	106,041	3,227	91,709		
7946	1	0	0	0	Irreg	100	350	Prod	-	-	T	1957	S Gas	-	36	-	127,837	765,738	1,000	50,846	1,000	50,846		
7947	1	0	0	0	Irreg	500	415	Prod + Dak	275	65	T	1960	S Gas	1/1	37	-	151,331	1,304,316	712	70,770	712	37,780		
7950	2	0	0	0	Irreg	525	497	Prod + Dak	275	65	T	1970	S Gas	-	37	-	362,600	2,126,772	10,494	596,567	10,494	507,723		
8293	1	0	0	0	Irreg	1900	150	Prod	-	-	T	1975	S Gas	-	-	-	54,907	77,282	2,059	2,871	2,059	2,871	*Was Gulf Oil Corporation	
9425	2	0	0	0	Irreg	700	102	Prod	-	-	T	1962	S Gas	-	37	-	74,611	2,104,926	5,494	84,776	5,494	63,262		
13157	2	0	0	0	Irreg	1000	115	Prod + Chey	175	90	M	1966	S Gas	1/1	33	-	83,990	1,377,614	13,900	557,653	13,900	347,323		
15814	1	0	0	1	Irreg	420	170	Prod	-	-	U	1970	S Gas	1/5	38	-	62,050	354,500	2,163	384,853	2,163	9,400		
2328	2	1	0	3	Irreg	715	146	Prod + Dak	300	-	M	1950	S Gas	1/1	37	-	131,202	3,231,429	4,286	1,204,998	4,286	499,160		
2030 4738 7524	6	0	0	2	Peri	773	641	Prod	0	0	T	1948	S Gas	9/5	39	-	1,453,211	22,164,030	35,020	3,243,431	35,020	1,489,566		
16582	1	0	0	0	Irreg	0	32	Prod	-	-	F	1972	S Gas	5/3	39.1	-	12,000	42,000	8,538	236,930	0	0		
5437 8926	2	0	0	0	Irreg	520	317	Prod	-	-	U	1957	S Gas	1/6.1	36.4	-	231,504	3,662,213	5,916	1,055,976	5,916	353,842	*Was Pan American	
4587 4595 14620	10	2	0	2	Irreg	603	579	Prod	-	-	U	1953	S Gas	1.25	37.4	-	2,112,400	17,434,641	134,788	6,109,864	107,216	3,915,157		
12387	1	1	0	0	Irreg	850	360	Prod	-	-	U	1966	S Gas	1/1.5	36.4	-	131,387	2,049,527	9,034	709,921	9,034	123,365	*Was Pan American	
9985	1	0	0	0	Irreg	380	516	Prod	-	-	U	1963	Wat	10/33	37	-	153,016	2,524,572	2,189	--	2,189	42,369		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. un- dified?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?		
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.	
RUSSELL COUNTY (cont.)																	
	4592	No	Hall-Gurney	Continental Oil	(W) Hall Lansing WF	Wm Letsch & A.C. Rogg, R.S. Hall	26-14S-13W	275	0	L-KC	2800	20	10	8	-	-	Yes
	9407	--	Hall-Gurney	Continental Oil	(W) Rein Area	R. Lipprand H. Rein & H. Rein 'A'	35-14S-13W 27-14S-13W	160	0	L-KC	2860	13	3	2	-	-	Yes
	14758	--	Hall-Gurney	Continental Oil	(W) Hall Tarkio	R.S. Hall, Wm. Letsch	26-14S-13W	80	0	Tark	2250	9	5	0	-	-	Yes
	9693	--	Hall-Gurney	Dreiling Oil, Inc.	(D) --	Krug	4-14S-14W	160	0	L-KC	-	-	4	-	-	-	Yes
	10265	--	Hall-Gurney	Dreiling Oil, Inc.	(-) H. Boxberger	--	3-14S-14W	160	0	--	-	-	5	-	-	-	Yes
	9415	No	Hall-Gurney	John O. Farmer, Inc.	(P) Rein Waterflood	Rein	27-14S-13W	80	-	Lans	2850	6	4	-	-	-	Yes
	16068	Yes	Hall-Gurney	John O. Farmer, Inc.	(-) Smoky Unit	JOF Kuhnle Tract #1, Sohio Kuhnle Tract #2, Shelburne Major Tract #4, Cities Service Tract #3	4-15S-12W	480	-	L-KC	2990	5	17	2	-	-	Yes
	4032 4499 13980 17491 6101	--	Hall-Gurney	Theodore Gore	(P) J. Boxberger SWD	Gurney A, Gurney B J. Boxberger	23-14S-14W 26-14S-14W	480	-	Tark L-KC	2300 3000	100	10	0	-	0	Yes
	12581	--	Hall-Gurney	Theodore Gore*	(P) Kastrup	Kastrup	15-15S-12W	160	0	L-KC	2930	48	2	0	0	0	Yes
	13036	--	Hall-Gurney	Theodore Gore	(P) Kaufman B	Kaufman B Luerman	22,27-15S-12W 28-15S-12W	320	-	L-KC Tark	2774	300	6	0	-	0	Yes
	16088	--	Hall-Gurney	Theodore Gore	(P) Ruby A	Ruby A	36-14S-13W	80	-	L-KC	2835	90	3	0	-	0	Yes
	16112	--	Hall-Gurney	Theodore Gore	(P) Miller	Miller	15-15S-12W	160	-	L-KC	2865	100	2	0	-	0	Yes
	16112	--	Hall-Gurney	Theodore Gore	(P) Weber	Weber, Luerman	28-15S-12W	200	-	L-KC	3000	150	2	0	-	0	Yes
	8293	No	Hall-Gurney	Gulf Oil Corporation	(W) Fink	Fink	15-14S-14W	160	0	L-KC	3000	-	3	0	0	0	Yes
	12992	--	Hall-Gurney	Gulf Oil Corporation	(W) Abraham Heard	Abraham Heard	20-14S-12W	160	0	L-KC	2850	-	2	0	0	0	No*
	15078	No	Hall-Gurney	J.J. Hall Operating Co., Inc.	(P) Miller	Elizabeth Miller #1,A,B,C,D,E,F, Guy O. Miller C & D Lavon Miller A	30-14S-13W 31-14S-13W	320	0	L-KC	2859	25	18	2	0	0	Yes
	8456	--	Hall-Gurney	Jayhawk Well Service	(D) Cody	Cody	16-14S-14W	160	-	L-KC	2900	4	6	-	-	-	Yes
	9078	--	Hall-Gurney	Jayhawk Well Service	(D) Holl	Holl	21-14S-14W	80	-	L-KC	2900	4	4	-	-	-	Yes
	11860	--	Hall-Gurney	Jayhawk Well Service	(D) Holl B	Holl B	21-14S-14W	80	-	L-KC	2900	4	1	-	-	-	Yes
	17046	--	Hall-Gurney	K & P Oil Co.	(-) Rusch	Rusch	33-14S-14W	160	0	Tark	2351	8	3	0	1	0	Yes
	6727	--	Hall-Gurney	Kaiser-Francis*	(P) Strecker Tarkio	Strecker A, Strecker B	25-14S-14W	45	115	Tark	2257	7	6	1	0	0	Yes
	15052	--	Hall-Gurney	Koch Exploration Co.	(W) Ney Pool Unit	Hilgenberg, Hafeman	32-15S-12W	80	-	L-KC	3020	-	5	1	0	0	Yes
	8345	--	Hall-Gurney	Louis M. Mai Operations	(D) Rudiger-Shaffer	Rudiger-Shaffer	3-15S-13W	80	0	L-KC	2970	6	5	0	0	0	Yes
	9091 11296	--	Hall-Gurney	Louis M. Mai Operations	(W) Campbell-Graham	Campbell Graham	22-14S-13W 21-14S-13W	220	20	Tark	2275	20	8	1	0	1	Yes
	11301 9417 13594	--	Hall-Gurney	Louis M. Mai Operations*	(P) Wm.Letsch	Wm. Letsch	26-14S-13W	160	110	Tark	2280	28	5	0	0	0	Yes
	11111 11509	--	Hall-Gurney	Louis M. Mai Operations*	(W) Bond-Jones	Anna Bond, Jones "A"	22-14S-13W	40	160	Tark	2265	20	5	0	0	0	Yes
	11620	--	Hall-Gurney	Louis M. Mai Operations*	(P) Shaffer "C"	Shaffer "C"	26-14S-13W	80	0	Tark L-KC	2200 2890	8 25	9	1	0	1	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
4592	7	2	-	1	Irreg	1000	215	Water Sd + Granite	40-26	25-40	F	1956	S Gas	-	39.2	-	552,487	8,686,162	25,340	916,647	25,340	847,388		
9407	4	0	-	-	Irreg	500	287	Chey	88	242	U	1972	S Gas	-	38.9	-	419,698	5,464,046	16,950	522,540	9,633	360,495		
14758	2	0	-	-	Irreg	975	173	Water Sd	40	26	F	1969	S Gas	-	37	-	125,761	758,691	7,690	61,937	7,690	44,149		
9693	1	-	-	-	--	0	1300	Prod	-	-	T	1962	--	-	40	-	460,000	5,010,000	7,683	494,231	7,683	494,231		
10265	1	-	-	-	--	0	1396	Prod	-	-	T	1962	S Gas	-	37	-	120,000	3,869,000	6,726	533,471	6,726	533,471		
9415	1	-	-	-	--	600	350	Prod	-	-	-	1962	--	-	37	-	129,276	2,176,313	5,858	--	3,000	--		
16068	6	-	-	-	Irreg	700	2325	Prod + Dak	488	90	U	1971	Grav	-	38	-	941,469	5,298,243	22,082	225,802	4,500	--		
4032 4499 13980 17491 6101	4 1	0 0	- 0	O O	Irreg	860 0	350 645	Prod	- -	- -	T T	1955 1958	Wat S Gas	- -	37 -	- -	511,730 174,000	3,334,750 303,000	18,437 4,087	-- 126,645	9,218 0	464,278 0	0	*Was Cities Service Oil Co.
12581	1	-	-	-	Irreg	750	300	Prod	-	-	T	1967	Wat	-	40	-	109,500	931,971	12,273	--	0	0		
13036	1	0	-	O	Irreg	1030	419	Prod	-	-	T	1966	Wat	-	37	-	152,935	1,698,111	14,261	174,140	9,508	105,968		
16088	1	0	-	O	Irreg	0	112	Prod	-	-	T	1971	Wat	-	38	-	40,880	164,365	760	--	253	2,717		
16112	1	0	-	O	Irreg	0	200	Prod	-	-	T	1971	Wat	-	40	-	73,000	358,909	2,324	--	0	0		
8293	1	0	0	O	5-spot	1400	413	Prod	-	-	U	1960	S Gas	19/185	38.2	-	150,038	3,455,335	4,045	136,091	4,045	136,091		
12992	0	0	0	O	--	-	-	--	-	-	-	--	--	-	-	-	--	--	3,894	--	0	--	*Inj. not started yet	
15078	2	0	0	O	Irreg	1000	390	Prod	-	-	-	1967	Grav	278/ 13,253 3/8	38	-	285,750	1,737,966	42,018	2,892,141*	39,250	250,595	*Since 1931	
8456	1	-	-	-	Irreg	300	200	Prod	-	-	U	1961	Gas Exp	1/9	38.6	-	7,000	360,000	6,000	80,000	4,000	9,000		
9078	1	-	-	-	Irreg	300	100	Prod	-	-	U	1967	Gas Exp	1/9	38.6	-	3,000	36,000	20,000	32,000	3,000	36,000		
11860	1	-	-	-	Irreg	400	300	Prod	-	-	U	1965	Gas Exp	1/9	39.2	-	12,000	9,600	1,800	24,800	900	3,000		
17046	1	0	0	O	Irreg	0	140	Prod	-	-	U	1973	Wat	1/8	36	-	31,087	78,593	3,863	64,327	3,167	10,123		
6727	4	0	0	O	Irreg	820	300	Prod	-	-	T&S	1959	S Gas	1/12.5	38.5	-	109,500	4,044,892	6,000	265,030	6,000	49,870	*Was Sun Ray DX	
15052	2	1	0	O	Irreg	-	341	Cedar Hills	446	60	F	1969	Gas Exp	1/1	39.3	-	248,690	1,485,189	28,238	825,645	18,711	235,019		
8345	1	0	0	O	Irreg	Vac	26	Prod	-	-	T	1960	S Gas	1/5	39	-	9,490	--	3,344	--	2,190	29,749		
9091 11296 11301	4	1	0	O	Irreg	1100	158	Prod + Up Dak	294	35	-	1964	--	1/4	39	-	230,497	2,595,319	8,944	400,871	8,944	157,129		
9417 13594	3	0	0	O	Irreg	700	314	Prod	-	-	T	1962	S Gas	1/6	38	-	344,487	3,068,801	7,618	--	3,809	106,168	*Was Sun Ray DX	
11111 11509	1	0	0	3	Irreg	0	120	Prod	-	-	T	1965	S Gas	-	38	-	43,994	1,488,908	2,499	--	2,499	104,973	*Was CRA	
11620	2	0	0	O	Line	700	205	Prod	-	-	T	1967	S Gas	1/5	36	-	150,025	2,817,090	6,259	--	1,878	37,513	*Was Continental Oil Co.	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. initiated?	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
RUSSELL COUNTY (cont.)																
13313	Yes	Hall-Gurney	Mobil Oil Corporation	(W) Smoky Hill River Unit	Cities Service-Marsh "C" Cities Service-Marsh "B" Farmer-Marsh "B" Farmer-Hupfer, Mobil-Trapp Skelly-Pekarek Cities Service-Steinle Farmer-Steinle	29-14S-11W 30-14S-11W 31-14S-11W 32-14S-11W	520	0	L-KC	B-2860 D-2880	18	18	0	0	7	Yes
15796	--	Hall-Gurney	Louis M. Mai Operations*	(W) Rogg-Rein	Rogg, Rein	27-14S-13W	120	0	Tark	2265	8	3	0	0	0	Yes
8566	No	Hall-Gurney	Carl Motzkus*	(D) --	Major	4-15S-12W	160	0	Lans	2940	8	2	--	--	--	Yes
13536	No	Hall-Gurney	Murfin Drilling Company	(P) Carter Waterflood	Carter	33-14S-13W	20	0	L-KC	2868	48	2	0	0	0	Yes
11738	--	Hall-Gurney	NCRA	(W) Mai	Mai	34-14S-14W	20	0	Lans	2920	8	2	0	0	0	Yes
10610	--	Hall-Gurney	R.P. Nixon Operations	(W) Dumler	Dumler	24-14S-14W	100	0	Tark	2300	10	6	0	0	0	Yes
11459	No	Hall-Gurney	R.P. Nixon Operations	(P) Boxberger	Boxberger	2-14S-14W	20	0	L-KC	3050	25	2	0	0	0	Yes
8022	No	Hall-Gurney	Okmar Oil Co.*	(W) Bond	Bond A, Bond B	23-14S-13W	125	10	Tark	2275	10	4	1	0	0	Yes
15415	--	Hall-Gurney	Okmar Oil Co.	(W) Boxberger A-B-D	Boxberger A-B, Boxberger D	15-14S-14W	40	0	L-KC	2980	10	6	0	0	0	Yes
5033	--	Hall-Gurney	Petroleum Management, Inc.	(W) Boxberger	Boxberger	22-14S-14W	70	70	L-KC	2960	20	2	--	--	--	No*
13201	No	Hall-Gurney	Lee Phillips Oil Company	(W) Letsch	Letsch	34-14S-13W	160	0	Tark L-KC	2240 2810	10 20	9	0	0	1	Yes
8420	No	Hall-Gurney														
8615	No	Hall-Gurney														
9511	No	Hall-Gurney														
13121	No	Hall-Gurney	H. Milton Raymer*	(D) --	Ray Long	20-14S-12W	20	--	Tark	2235	10	1	--	2	--	Yes
11343	No	Hall-Gurney	Ruthven, Inc.	(P) Flegler	Flegler	28-14S-14W	160	80	L-KC	2950	150	1	0	0	0	Yes
8065	--	Hall-Gurney														
1552	No	Hall-Gurney	Shields Oil Producers, Inc.	(W) G.C. Ehrlich	Ehrlich	32-14S-13W	180	--	KC	2800	30	4	0	0	0	Yes
6847	No	Hall-Gurney	Shields Oil Producers, Inc.	(D) Gustason Estate	Gustason Estate, Kastrup	14-15S-12W	160	80	Tor 1m	2840	15	2	0	0	0	Yes
7750	No	Hall-Gurney	Shields Oil Producers, Inc.	(W) Miller Waterflood	Miller "A"	31-14S-13W	160	0	KC	2800	30	6	0	0	0	Yes
9408	No	Hall-Gurney	Shields Oil Producers, Inc.	(W) Rein Area Waterflood	Giese, Rogg "B" Letsch, Rogg "E"	28-14S-13W 27-14S-13W	480	80	KC	2800	25	18	1	0	2	Yes
1088	No	Hall-Gurney	Skelly Oil Company	(P) T.B. Carter Lease	T.B. Carter	33-14S-13W	160	0	L-KC	2885	10	6	0	0	0	Yes
2439	No	Hall-Gurney	Skelly Oil Company	(W) Hall-Gurney	Ben Rein C. Colliver W. Opdycke	25-14S-14W 28-14S-13W 29-14S-13W	890	0	L-KC	2890	18	23	3	0	0	Yes
5195	No	Hall-Gurney														
5781	No	Hall-Gurney	Skelly Oil Company	(W) A. Ehrlich L-KC	A. Ehrlich	25-14S-15W	160	0	L-KC	2944	84	3	0	0	0	Yes
16911	No	Hall-Gurney														
7619	--	Hall-Gurney	Southern States Oil Company	(P) Boxberger	Boxberger	26-14S-14W	160	--	L-KC	2928	79	4	1	0	0	Yes
3059	No	Hall-Gurney	Terra Resources, Inc.	(P) C.E.P.-L-KC	Clyde, Ehrlich Phinney, Phinney "S"	19-14S-13W 30-14S-13W	300	0	L-KC	2950	8	15	0	0	0	Yes
6527	No	Hall-Gurney														
7567	No	Hall-Gurney														
14872	No	Hall-Gurney	Terra Resources, Inc.	(W) Fink	Herbert Fink, Horace Fink	15-14S-14W 16-14S-14W	240	0	L-KC	3020	15	8	0	0	0	Yes
5396	No	Hall-Gurney														
10571	No	Hall-Gurney	Terra Resources, Inc.	(P) Krug	Albert Krug, Harry Krug	9-14S-14W	100	10	L-KC	3000	45	5	0	0	0	Yes
10671	No	Hall-Gurney														
12707	No	Hall-Gurney														
3771	--	Hall-Gurney	Texaco, Inc.	(-) C.W. Shaffer	C.W. Shaffer	18-14S-13W	--	--	Tark	--	--	1	0	0	0	No*
4517	--	Hall-Gurney	Texaco, Inc.	(W) G. Boxberger A&B	G. Boxberger "B", G. Boxberger "A"	22-14S-14W	240	--	Lans	3100	--	4	0	0	1	No*
5073	--	Hall-Gurney														
5858	--	Hall-Gurney	Texaco, Inc.	(P) Keil & Schnoor	D. Keil N. Schnoor	36-14S-14W 31-14S-13W	320	--	L-KC	2875	122	5	0	0	2	Yes
4219	--	Hall-Gurney	Texaco, Inc.	(W) H,L,&S Boxberger	S. Boxberger, L. Boxberger, H. Boxberger	10-14S-14W	480	--	Reagan Lans	3050	--	15	1	0	3	Yes
4220	--	Hall-Gurney														
4504	--	Hall-Gurney														
5445	--	Hall-Gurney														
10948	--	Hall-Gurney														

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
13313	8	0	0	-	Peri	1550	4696	Alluvial Plains	80	20	M	1967	S Gas	-	36.4	9	1,714,038	11,990,978	49,352	1,027,966	49,352	1,027,966	
15796 8566	1 1	0 -	0 -	0 -	Line Irreg	1200 100	115 180	Prod Prod	- -	- -	T U	1970 1967	S Gas Gas & Wat	1/4 7/43	36 37	- -	42,102 65,700	294,576 --	13,921 3,496	-- --	5,568 --	22,572 --	*Was Magnolia Petroleum *Was Amco Production Co.
13536 11738	1 1	0 0	0 0	0 0	Irreg Irreg	Grav 950	45 50	Prod + Tarkio Prod + Dak	2250 420	8	T U	1967 1965	S Gas S Gas	73/27 1/1	37 37.6	- -	16,425 18,654	122,839 518,925	2,145 9,766	-- 67,930	2,145 7,200	18,840 24,791	
10610	3	0	0	0	Irreg	650	110	Prod	-	-	U	1963	S Gas	3/7	38	-	49,500	828,425	11,228	168,223	8,421	161,776	
11459 8022	- 2	- 1	- 0	- 0	Irreg Irreg	625 750	150 90	Prod Prod	- -	- -	T U	1964 1960	S Gas S Gas	3/1 -	34 36	- -	54,000 32,850	541,675 1,964,705	2,243 2,833	6,837 278,449	2,243 2,833	6,837 81,684	*Was R.P. Nixon
15415	2	0	0	0	Peri	575	406	Prod	-	-	U	1970	S Gas	73/870	34	-	296,478	1,566,620	14,266	613,868	7,846	24,326	
5033 13201 8420 8615 9511 13121	1 1 2	- 0 0	- 0 0	- 0 0	Irreg --	- 100- 300	- 304	Prod Prod + River Sd	- 70	- 10	- M	1966 1961	-- S Gas	- 93/7	37 38	- -	27,078 1,109	2,551,198 3,039,010	1,804 66,652	288,279 2,936,827	0 51,600	284,756 597,372	*Shut down part of year
11343 8065	1 1	- 0	1 0	- 0	2-spot Irreg	0 575	3 380	Prod Prod	- -	- -	-- T	-- --	Wat & S Gas S Gas	- 2/3	36 39	- -	1,080 138,700	-- --	3.40 3,108	-- --	-- 2,400	-- --	*Was Herman A. Flader
1552	1	0	0	0	Irreg	800	390	Prod + Dak + Chey	220	20	M	1971	S Gas	-	37	-	141,394	588,183	29,303	78,169	25,000	67,500	
6847 7750	1 3	0 0	0 0	0 0	Irreg Irreg	0 800	200 371	Prod + Arb Prod + Dak + Chey	3300 220	100 20	U M	1957 1964	S Gas S Gas	- -	37 37	- -	72,000 406,286	806,500 2,261,753	5,400 45,819	45,400 177,351	2,000 30,000	48,100 138,500	
9408	9	0	0	0	Irreg	800	257	Prod + Dak + Chey	2800	25	T	1963	S Gas	-	39.3	-	844,559	12,133,923	52,746	960,626	35,000	675,000	
1088	2	0	0	0	Irreg	1350	350	Prod + Dak + Chey	200	-	T	1944	S Gas	-	34	-	255,613	2,234,588	18,117	474,578	18,117	238,660	
2439 5195 5781	15	2	0	0	Irreg	1100	282	Prod + Dak + Chey	200	-	T	1950	S Gas	2421- 3670	39	-	1,543,336	21,602,082	53,821	3,615,161	53,821	2,555,727	
16911	1	0	0	0	Irreg	0	505	Prod	-	-	T	1973	S Gas	358- 669	32	-	184,401	429,803	17,878	457,536	10,000	17,280	
7619 3059 6527 7567 14872 5396	2 5	0 0	0 0	0 0	Irreg Irreg	450 1254	350 259	Prod + Dak Prod + Dak	1520 134	30 30	M T	1960 1959	Grav S Gas	- 39/61	36 37	- -	142,704 461,202	3,433,477 4,568,187	2,728 41,999	161,443 1,416,334	2,728 41,999	161,443 837,796	
10571 10671 12707	2	0	0	0	Irreg	1096	773	Prod	0	0	T	1963	S Gas	3/17	35.9	-	564,170	6,138,097	6,628	188,003	4,056	110,212	
3771 4517 5073 5858	0 0	0 1	0 0	0 1	-- Irreg	0 0	0 43	-- Prod	- -	- -	U U	1959 1953	Wat S Gas	- 2418- 8804	- 37	- -	0 7,933	0 5,034,343	2,032 5,537	16,672 517,692	0 5,537	0 517,692	*No injection since 1969 *No injection since 6-30-75
4219 4220 4504 5445 10948	3	1	0	5	Peri	100	118	Prod	-	-	U	1954	S Gas	73/118	36	-	129,346	8,904,127	20,673	1,932,606	20,673	679,641	

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
RUSSELL COUNTY (cont.)																
10284	--	Hall-Gurney	Texaco, Inc.	(W) Goodheart-Ruby	W.S. Goodheart	25-14S-13W	240	-	Lans	2900	23	10	0	0	1	Yes
10725					E.Z. Ruby	36-14S-13W										
10433	--	Hall-Gurney	Texaco, Inc.	(-) Borell & Vej1	F. Vej1	5-15S-12W	480	-	Lans	2900	10	5	2	0	1	No*
10434					E.A. Borell	32-14S-12W										
11915																
17442	--	Hall-Gurney	Texaco, Inc.	(P) E.P. Gurney	E.P. Gurney	23-14S-14W	160	-	Tark	2340	-	5	1	0	0	Yes
5955	No	Hall-Gurney	Clarence H. Wilhelm*	(D) Shaffer	Ray Shaffer	26-14S-13W	80	-	Tark	2220	6-10	2	0	5	1	Yes
14969	No	Kraft-Prusa	Isern Petroleum Company	(P) Durr	Durr AB	31-15S-12W	160	0	Quartzite Sd	3374	20	5	0	0	0	Yes
8871	--	Nuss	Duke Drilling Co.	(D) Nuss	Nuss	32-15S-14W	0	-	Lans	3120	25	2	0	0	0	Yes
11438	--	Fairport	Harold Krueger	(P) Reich, Keeney & Meckel Unit	Reich, Keeney Meckel A, Meckel B	28-12S-15W 29-12S-15W	85	0	KC 1m	2975	3-6	15	0	0	0	Yes
16992	No	Roosevelt	Shields Oil Producers, Inc.	(D) Morgenstern	Morgenstern	23-15S-15W	40	-	L-KC	3300	10	1	0	0	0	Yes
15953	No	Russell	Okmar Oil Co.	(W) Holland-Killian	Holland, Killian	28-13S-14W	160	0	L-KC	3020	5	2	0	0	0	Yes
15949	--	S & S	Glenn W. Peel Oil Operator	(D) Shaffer Lease	Shaffer	1-13S-15W	160	0	L-KC	2804-2821	45	5	0	0	0	Yes
11977	--	Stricker	American Petrofina Co. of Texas*	(W) Stricker	Stricker, Stricker "B", Stricker "C"	16-15S-14W	200	0	L-KC	3041	-	3	0	0	0	Yes
5472	--	Trapp	Cities Service Oil Company	(W) Eichman "A" Waterflood	Eichman "A", Tittel "A", Krug "G", Krug "F"	12-15S-14W 13-15S-14W	91	75	L-KC	3090	12	4	0	0	11	Yes
13257																
7631	--	Trapp	Cities Service Oil Company	(W) Rogg "D"	Rogg "D"	9-15S-13W	196	36	L-KC	3090	28	3	1	0	1	Yes
7589	Yes	Trapp	Clinton Oil Company*	(W) Northeast Trapp	John Letsch "A", John Letsch "B", John Heffernan	4-15S-13W	520	0	L-KC	3010	55	11	3	0	0	Yes
7590					R. Roesner	9-15S-13W										
7604																
13776	No	Trapp	Colorado Oil Company, Inc.	(W) Maag Lease	Maag	7-15S-13W	30	10	L-KC	3000	8	1	1	0	0	Yes
13777	No	Trapp	Colorado Oil Company, Inc.	(W) Krug Lease	Krug	7-15S-13W	70	0	L-KC	3000	8	5	0	0	0	Yes
7606	--	Trapp	Continental Oil Company	(W) Trapp Lansing	J.W. Meharg	17-15S-13W	160	0	L-KC	2950	21	5	2	-	-	Yes
7553	No	Trapp	Exxon Corporation	(W) North Trapp Waterflood Unit	J. Detrich D. Josephine J. Letsch, L. Sellens	8-15S-13W 7-15S-13W 17-15S-13W	460	-	KC 1m	2986	28	15	0	-	-	Yes
7566	No	Trapp	Hillenburg Oil Company*	(P) Berrick	Berrick	6-15S-13W	40	20	L-KC	2990	20	3	0	0	0	Yes
16047	Yes	Trapp	Icer Addis*	(W) Trapp Unit Waterflood	Trapp Unit	25,26,35-15S-13W	720	-	L-KC	3064	150	9	3	0	0	Yes
7366	--	Trapp	Jayhawk Well Service	(D) Michel B	Michel	1-15S-14W	160	-	KC	2900	4	3	-	-	-	Yes
14141	No	Trapp	Kewanee Oil Co.	(W) Berrick, Piester A&B	Berrick, Piester A, Piester B	24-15S-13W 23-15-13W	80	0	KC	3028	18	3	0	0	0	Yes
15070	No	Trapp	Kewanee Oil Co.	(W) Berrick	Berrick	23,24-15S-16W	0	40	Tark	2301	45	0	1	0	0	Yes
14364	Yes	Trapp	Murfin Drilling Company	(W) Ber-Sel-Es Unit	Ber-Sel-Es Unit Unitized	22,27-15S-13W	80	35	L-KC B-D-E-F-G Zones	3060	36	6	1	0	0	Yes
5183	--	Trapp	NCRA	(W) Flegler "B" Tarkio	Flegler "B"	2,11-15S-14W	10	60	Tark	2298	20	1	0	0	0	Yes
6038	--	Trapp	NCRA	(W) Flegler "C"	Flegler "C"	11-15S-14W	60	40	Lans	3057	7	6	0	0	0	Yes
9131	--	Trapp	NCRA	(W) Flegler "B" Lansing	Flegler "B"	11-15S-14W	30	30	Lans	2966	26	3	0	0	0	Yes
10484	--	Trapp	NCRA	(W) Boxberger "B"	Boxberger "A", Boxberger "B"	10-15S-14W	40	40	Lans	2976	6	4	0	0	0	Yes
7568	No	Trapp	Phillips Petroleum Co.	(W) Roesner Lease	Roesner	9-15S-13W	50	0	L-KC	3100	50	1	0	0	0	Yes
10920	--	Trapp	Ruthven, Inc.	(D) Ben Rein	Ben Rein	8-15S-13W	80	0	L-KC	2950	150	2	0	0	0	Yes
11410	--	Trapp	Shell Oil Company	(W) Mary Kejr A,B,C	Mary Kejr A, Mary Kejr B Mary Kejr C	14-15S-13W 11-15S-13W	400	0	L-KC Tor	2917	115	4	0	0	0	Yes
12252	--	Trapp	Shell Oil Company	(W) N.A. Hoffman A&B, J. Ehrlich A	N.A. Hoffman A N.A. Hoffman B J. Ehrlich A	7-16S-13W 12-16S-13W 18-16S-13W	360	0	Top L-KC	2962	100	8	10	0	-	No*
3537	Yes	Trapp	Shell Oil Company	(D) L. Sellens B & C	L.A. Sellens B, L.A. Sellens C	22-15S-13W	160	0	L-KC	3035	84	5	0	0	0	Yes
11871																
13496																
7570	No	Trapp	Shields Oil Producers, Inc.	(W) Northeast Trapp	Rogg "A"	9-15S-13W	160	80	KC	2800	25	3	0	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)							Remarks	
	Active	In-active	Drilled 1975	Abdl. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		
10284 10725 10433 10434 11915 17442	5 0 0 2	0 0 0	0 5 0	1 5 0	Irreg Irreg Irreg	500 0 350	149 0 255	Prod + "Arbuckle Granite"	-	-	U	1963	S Gas	1944/3621	36	-	272,315	7,679,919	16,420	538,172	16,420	411,802		
5955 14969	1 1	- -	- -	- -	Irreg Irreg	- 0	- 673	Prod	-	-	U	1960	Gas Exp	-	35	-	22,462	--	3,782	--	900 Est	--	*Was Louis M. Mai	
8871	1	0	0	0	Irreg	200	350	Prod + Dak	305	-	U	1961	S Gas	-	35	-	127,750	1,845,350	2,288	120,901	--	--		
11438	3	0	0	0	Line	0	134	Prod	-	-	T	1962	S Gas	4/1	35-39	-	147,554	2,110,074	19,177	640,010	9,588	249,941		
16992	1	0	0	0	Irreg	0	120	Prod	-	-	T	1973	S Gas	-	38	-	43,800	85,800	3,653	8,957	1,500	3,500		
15953	1	0	0	0	Irreg	Vac	154	Prod + Arb	3600	5	U	1971	S Gas	36/154	35	-	56,210	574,109	7,635	886,699	4,109	21,498		
15949	1	0	0	0	Irreg	Grav	16	Prod	-	-	U	1971	Wat	14/65	37.5	-	29,200	130,187	3,148	19,142	3,148	19,142		
11977	1	0	0	0	Irreg	0-Vac	346	Prod	-	-	U	1965	S Gas	1/1	40	-	126,332	812,505	3,814	59,653	3,814	59,653	*Was The El Dorado Refg. Co.	
5472	2	0	0	4	Irreg	640	316	Prod	-	-	T	1957	S Gas	60/85	38	-	141,893	6,483,629	10,765	1,584,737	10,765	558,817		
13257	4	0	0	1	Irreg	531	436	Prod + Dak	400	-	U	1960	S Gas	11/5	37	-	634,364	6,113,533	34,667	1,403,804	34,667	402,540		
7631	9	3	0	0	Irreg	770	274	Prod + Dak	600	180	U	1960	S Gas	1/1.5	38.8	-	900,090	9,649,208	59,300	3,477,501	59,300	1,302,578	*Was Pan American	
7589 7590 7604	1	0	0	0	Irreg	1100	120	Prod + Arb	3316	8	U	1967	Wat	12/53	37	-	52,079	422,532	1,270	--	0	6,853		
13776	2	0	0	0	Irreg	775	284	Prod + Arb	3306	4	U	1967	Wat	21/37	37	-	130,429	987,258	8,210	--	5,882	95,862		
7606	8	12	-	-	Irreg	950	188	Chey + Dak	550	72	U	1961	S Gas	-	38.5	-	548,747	7,012,892	29,577	858,304	29,577	786,093		
7553	11	-	-	-	5-spot	700	300	Dak	240	87	T	1961	S Gas	-	39	6	1,175,405	13,856,126	70,285	3,379,985	70,285	2,146,973		
7566	1	0	0	0	Irreg	31	720	Prod	-	-	T	1960	Wat	1/49	36	-	262,800	--	3,940	--	3,940	--	*Was Terra Resources, Inc.	
16047	4	0	0	0	Irreg	750	1185	Prod	-	-	U	1971	S Gas	-	37	-	432,279	702,965	16,960	32,517+	11,000	15,667+	*Was Willie E. Schultz +Since 1974	
7366	1	-	-	-	Irreg	500	100	Prod	-	-	U	1959	Gas Exp	1/9	38.5	-	3,000	72,000	3,000	19,000	2,000	6,000		
14141	2	0	0	0	Irreg	600	250	Prod	-	-	U	1968	S Gas	27/32	38	-	182,227	1,297,312	4,977	504,796	2,943	35,063		
15070	1	0	0	0	--	600	294	Prod + KC + Arb	3028	18	U	1969	S Gas	5/23	38	-	107,370	511,093	0	36,084	0	0		
14364	3	0	0	0	Peri	467	178	Prod + Dak	250	154	M	1969	S Gas	44.22/55.78	38-39	-	194,519	1,590,325	25,293	--	25,293	141,151		
5183	1	0	0	0	Irreg	875	200	Prod	-	-	U	1956	S Gas	1/.29	38.3	-	72,556	2,616,864	2,686	348,026	2,686	184,053		
6038	2	0	0	0	Irreg	700	400	Prod + Arb	3322	4	T	1958	S Gas	1/3.7	27.7	-	294,472	4,839,903	12,153	301,245	12,153	222,650		
9131	1	0	0	0	Irreg	400	830	Prod + Arb	3177	3	U	1962	S Gas	1/2.5	38.3	-	303,107	4,144,190	5,103	228,318	5,103	142,967		
10484	1	0	0	0	Irreg	350	600	Prod	-	-	U	1963	S Gas	1/.25	36.3	-	217,614	2,402,012	4,426	135,980	4,426	86,420		
7568	1	0	0	0	Irreg	52	668	Prod*	-	-	U	1960	S Gas	1/.5	39	6	243,997	3,262,735	3,253	307,692	3,253	127,516	*Produced water from other leases	
10920	1	0	0	0	Irreg	0	75	Prod	-	-	T	--	S Gas	1/1	38	-	27,375	--	7,309	--	5,400	--		
11410	1	1	0	0	--	-	-	Prod	-	-	U	--	--	-	37	-	0	648,000	4,741	526,595	--	--		
12252	0	3	0	-	--	-	-	Prod	-	-	U	--	S Gas	-	36	-	0	5,600,000	21,000	401,000	--	--	*Temporarily abandoned	
3537 11871 13496 7570	1 4	0 0	0 0	0 0	-- Irreg	- 800	- 182	Prod	-	-	U T	-- 1960	-- S Gas	-	33 37.2	-	60,000	369,000	17,000	152,000	--	--		
																	262,802	4,091,340	27,331	357,874	15,500	315,100		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
RUSSELL COUNTY (concl.)																
5952	--	Trapp	R.H. Siegfried, Inc.	(W) Ross Lease	Ross	11-15S-13W	20	20	Lans	3000	12	2	0	0	0	Yes
7765	Yes	Trapp	Skelly Oil Company	(D) Anderson-Rein Unit	M.E. Anderson	7,8-15S-13W	480	0	L-KC	2900	50	14	3	0	0	Yes
7565	No	Trapp	Sohio Petroleum Company	(W) Anschutz Lease	George Rein, Jr. Anschutz	8-15S-13W 10-15S-13W	100	-	L-KC	3050	18	3	0	0	0	Yes
7607	No	Trapp	Terra Resources, Inc.	(W) North Trapp W.F.S.	Bitter, Holland	16-15S-13W	370	80	L-KC	3000	25	18	0	0	0	Yes
7370	--	Trapp	Roy Vonfeldt*	(W) George Sellens	L. Sellens, Tom Sellens George Sellens	17-15S-13W 20-15S-13W	60	-	KC	-	6	5	0	0	1	Yes
RUSSELL COUNTY TOTALS (Reported) (Includes project in supplemental list.)							24,931	2,946			843	90	16	55		
SALINE COUNTY																
17809	No	Hunter North	Melland Drilling Co., Inc.	(D) N. Hunter	Swisher	8-16S-1W	160	-	Miss	2662	5	5	-	5	-	Yes
10664	--	Lindsborg	Ray Perera	(D) Robinson-Martinson-Johnson	Robinson, Martinson, Johnson	32-15S-3W	160	80	Maq	3400	5	3	3	-	-	No*
11513	No	Pihl	Tomlinson Oil Co., Inc.	(D) Pihl	Krauss "A"	24-15S-2W	400	240	Miss	2750	10	3	1	0	0	Yes
18025	No	Salina	L.B. Jackson Company	(P) Salina	Cline	29-14S-2W	560	-	Maq	3225	6	5	0	0	0	Yes
13808	--	Salina	Art Small & Co.*	(D) Airport-City of Salina	Airport-City of Salina	20-14S-2W	160	0	Maq	3224	20	1	0	0	-	Yes
9817	No	Salina South	Shenandoah Oil Corp.*	(W) Swigart	Swigart	5,6-15S-2W	90	20	Maq	3225	15	3	-	-	-	Yes
14385	--	Smolan	Gear Petroleum Co.	(W) Smolan Field Water-flood Project	Riddle (ABO) Wauhob Bengston Lease, Lofgren Frost Lease, Gustafson Lease	7-15S-2W 5-15S-2W 36-15S-4W 25-15S-4W	800	-	Maq	3400	6	14	2	0	0	Yes
6631	No	Smolan	Ray Perera	(D) Ostenberg	Larson B Ostenberg	30-15S-3W 30-15S-3W	120	0	Maq Dol	3413	5	3	-	-	2	No*
SALINE COUNTY TOTALS (Reported)							2,450	340			37	6	5	2		
SCOTT COUNTY																
4383	Yes	Shallow Water	The Maurice L. Brown Company	(P) Mark "B"	Mark "B"	14-20S-33W	120	0	Miss	4595	80	2	3	0	0	Yes
SEDGWICK COUNTY																
16044	--	Buzzi	American Petrofina Co. of Texas*	(P) Hemme	Hemme	31-25S-1E	100	0	Hunt	3445	5	3	1	0	0	Yes
15022	No	Clearwater	King Oil Company	(P) Senter	Senter	23-29S-2W	20	20	L-KC	2940	10	1	0	0	0	Yes
17666	Yes	O.S.A.	Continental Oil	(W) Gillian Simp. Sn. Un.	Gillian Simp. Sn. Un.	33-26S-1W	920	0	Simp	3735	15	11	1	-	-	Yes
8324	Yes	Gladys	Kewanee Oil Co.	(W) Gladys Unit	Tracts 1-61, Gladys Unit	25,29,30,31, 32,36-28S-1E	1060	550	Miss	3200	10-78	57	9	0	0	--
8325	Yes	Gladys	Kewanee Oil Co.	(W) East Gladys Unit	Blood, Parton, Tucker	29-28S-1E	160	70	Miss	3200	10-40	7	0	0	0	--
15691	--	Goodrich	Jerry Bouse*	(P) Rowley	Rowley	17-25S-1E	160	0	KC	2690	30	1	0	0	0	Yes
13037	--	Goodrich	Cities Service Oil Company	(W) Goodrich Unit	Goodrich Unit - Smith "A"	16-25S-1E	87	0	KC lm	2730	11	9	0	0	0	Yes
16157	No	Kuske West	TGT Petroleum Corporation	(P) Korber Imput System	Korber A, Lewis	14-25S-1E	240	38	Burg	3014	38	4	0	0	0	Yes
15105	--	O.S.A.	Continental Oil	(W) O.S.A.	O.S.A.	10,11,14,15, 22-29S-1W	1520	0	Simp	2884	8	20	6	-	-	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros--Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
5952	2	0	0	0	Irreg	0-Vac	350	Prod + Arb	3286	8	T	1958	--	4/1	41.3	-	127,750	2,328,889	9,337	267,713	9,337	267,713	
7765	9	2	0	0	Irreg	1400	295	Prod + Dak	337	32	T	1961	S Gas	1896/1026	37	-	970,228		40,802	2,516,041	40,802	1,132,692	
7565	3	1	0	0	Irreg	940	251	Prod + Dak	450	55	T	1960	S Gas	1/1.5	40.7	-	275,111	3,030,387	24,553	331,206	24,553	252,950	
7607	13	0	0	0	5-spot	607	216	Prod	-	-	T	1961	S Gas	56/44	37.4	-	1,024,716	13,563,736	76,557	6,915,773	76,557	2,381,429	
7370	2	0	0	0	5-spot	0	200	Prod + Tark	-	-	T	1965	Wat	-	37	-	118,300	--	7,121	--	--	--	*Was Terra Resources
	<u>348</u>	<u>42</u>	<u>1</u>	<u>29</u>													<u>40,307,213</u>	<u>482,979,785</u>	<u>2,314,054</u>	<u>84,068,817</u>	<u>1,665,048</u>	<u>39,099,074</u>	
17809	1	-	1	-	Peri	Vac	500	Prod	-	-	U	1975	Wat	25/475	34	-	90,000	90,000	4,500	4,500	--	--	
10664	1	1	-	-	Irreg	0	150	Prod	-	-	T&S	1964	S Gas	-	-	-	75,000	1,975,000	2,900	33,900	1,500	19,000	*As continuous as re-cycling permits
11513	1	0	0	0	Peri	Vac	212	Prod	-	-	U	1965	Wat + S Gas + Gas	-	35.5	-	77,380	2,211,862	6,495	178,075	6,495	99,985	
18025	1	0	0	0	Irreg	0	50	Prod	-	-	U	1975	Wat + Grav	3/1	-	-	3,750	3,750	5,566	5,566	250	250	
13808	-	-	-	-	Irreg	Vac	100	Prod	-	-	-	1967	--	1/4	29-30	-	--	--	2,572	--	1,000	--	*Was Don McKellar
9817	1	-	-	-	Irreg	350	800	Prod	-	-	U	1962	Wat	3/7	35	-	281,625	3,366,019	7,614	2,516,320	7,614	1,992,503	*Was Solar Oil
14385	5	2	0	0	Irreg	Vac	3218	McPherson	250	0	U	1962	--	-	-	35	1,174,570	--	10,038	--	10,038	--	
6631	1	-	-	-	Irreg	0	50	Prod	-	-	T&S	1962	S Gas	-	35	-	66,000	--	4,650	--	3,200	11,700	*Water re-cycled as prod.
	<u>11</u>	<u>3</u>	<u>1</u>	<u>0</u>													<u>1,768,325</u>	<u>7,646,631</u>	<u>44,335</u>	<u>2,738,361</u>	<u>30,097</u>	<u>2,123,438</u>	
4383	1	-	0	0	Irreg	0	223	Prod	-	-	T	1968	Wat	-	26	-	81,465	774,117	5,091	2,061,299	2,545	17,706	
16044	1	0	0	0	Irreg	400	722	Prod	-	-	U	1971	Wat	1/40	41	-	263,635	1,496,338	2,010	247,076	0	0	*The El Dorado Refining Co.
15022	1	0	0	0	Irreg	0	4	Prod	-	-	U	1969	S Gas	11/100	36	-	1,500	7,000	3,329	66,017	1,650	5,169	
17666	2	0	-	-	Irreg	0	427	Prod	-	-	U	1974	S Gas	-	-	-	311,610	520,178	48,799	119,838	24,567	24,567	
8324	31	12	0	0	Peri	1600	311	Gravel	20	50	F	1961	S Gas	1658/1687	42	-	3,518,493	100,933,660	104,356	8,086,830	104,356	6,559,891	
8325	6	0	0	0	Peri	1600	374	Gravel	20	50	F	1961	S Gas	153/24	42	-	819,222	15,190,463	20,376	1,106,807	20,376	983,096	
15691	1	0	0	0	Line	350	40	Prod	-	-	U	1970	Wat	1/8	35	-	14,600	63,600	1,525	8,525	0	0	*Was Albert A. Bouse
13037	5	0	0	0	Peri	1200	293	Prod + Miss	3000	5	U	1966	S Gas	2/1	33	-	367,800	2,678,884	14,240	690,382	14,240	259,228	
16157	1	0	0	0	Irreg	175	723	Prod	-	-	U	1971	Wat + S Gas	1/50	39	-	263,895	971,272	5,249	54,777	--	17,316	
15105	7	1	-	-	Irreg	1150	361	Stal	2450	100	U	1970	Wat	-	45.5	-	921,428	4,080,269	93,603	861,006	93,603	803,468	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
SEDGWICK COUNTY (concl.)																
2055	--	Robbins	Stelbar Oil Corp.	(W) Robbins	Brookings Nolan	16-28S-1E 21-28S-1E	240	200	Miss	3140	30	3	0	0	0	Yes
4183																
4626																
16303	--	Ulmer South	Crowe Drilling Co., Inc.	(D) Greenup	Miller	33-25S-2E	160	-	Burg	2902	8	2	0	0	1	Yes
12272	--	Valley Center	Bankoff Oil Co.	(W) Bright Inj.	Sam Bright	1-26S-1W	40	120	Lans	2555	-	2	0	0	0	Yes
11419	No	Valley Center	Samson Resources Company*	(W) Valley Center WF	Reed Lease, Corr Lease Wright Lease Shawver Lease	1-26S-1W 12-26S-1W 7-26S-1E	220	0	KC	2500	0	5	0	0	0	Yes
SEDGWICK COUNTY TOTALS (Reported)							4,927	998				125	17	0	1	
SEWARD COUNTY																
16786	--	Evalyn-Condit	Anadarko Production Co.	(W) Condit Unit	Condit Dodd Etzenhouser, Cady McAhren Worthington, M., Worthington Eubanks	7,18-34S-32W 18-34S-32W 19-34S-32W 24-34S-33W 12-34S-33W 13-34S-33W	1030.8	0	Miss Ches	6236	13.3	3	3	0	0	Yes
SEWARD-STEVENS COUNTIES																
13902	Yes	Cutter	Mobil Oil Corporation	(W) Cutter Unit Area (Morrow) Cooperative Waterflood Project	William I. Cutter George B. Strong George B. Strong	1-31S-35W 6,7-31S-34W 12-31S-35W	880	-	Up Morr	5200	15	5	1	0	-	Yes
SHERIDAN COUNTY																
8906	--	Adell	Continental Oil	(W) Adell LKC Un	Adell LKC Un.	1,2,3,11, 12-6S-27W	584	0	L-KC	3500	23	14	21	-	-	--
9881	--	Adell	Petroleum Management, Inc.	(W) Adell L-KC Unit	Adell	7,18-6S-27W 12,13-6S-27W	190	0	L-KC	3530	12	3	2	0	0	Yes
10188	--	Hortonville	Kaiser-Francis Oil Co.*	(D) Hardesty	Hardesty	20-6S-26W	80	40	Lans	3744	94	1	0	0	0	Yes
16164	Yes	Hoxie	John O. Farmer, Inc.	(-) Hoxie Unit	Mosier, Mosier "B" Pratt Decker	36-8S-29W 1-4S-29W 6-9S-28W	400	-	Tor	3856	5	3	0	0	0	Yes
15224	--	Hoxie West	Koch Exploration Co.	(W) Pratt	Pratt	35-8S-29W	40	0	Shaw	3816	14	1	0	0	0	Yes
15349	No	Jerome	Okmar Oil Co.	(W) Jerome W.F.	Jerome	35-8S-27W	100	0	L-KC	3930	5	4	0	0	0	Yes
6322	--	Studley	K.R.M. Petroleum Corporation*	(D) Pratt	Pratt	22,23-8S-26W	640	0	L-KC	3740	20	3	0	0	0	Yes
SHERIDAN COUNTY TOTALS (Reported)							2,034	40				29	23	0	0	
STAFFORD COUNTY																
15826	No	Bayer	Phillips Petroleum Co.	(P) Lincoln "A" Lease	Lincoln "A"	29-21S-14W	10	0	Simp	3750	14	1	0	0	0	Yes
15211	Yes	Brenn	Sterling Drilling Company	(P) Brenn Unit	--	19-23S-13W	320	-	L-KC	3654	8	2	0	0	0	Yes
11941	--	Centerview	White Hawk Oil Company*	(D) Van Lieu Unit	Van Lieu Unit	28-34S-13W	60	-	L-KC	3580	12	2	0	0	0	Yes
9481	No	Chase-Silica	Parrish Oil Company	(D) Spacil Lease	Spacil	4-21S-12W	30	50	Arb	3321	10	2	0	0	0	Yes
13792	--	Crissman	Atlantic Richfield Co.	(W) Welsh Beaver Unit	Beaver, R.J. Welsh George Walls	16-23S-14W 15-23S-14W	480	200	Simp	3950	8	6	0	0	0	Yes
15378	--	Dell East	White Hawk Oil Company*	(P) Reed Unit	White Hawk, Cities Service	8-21S-13W	160	0	L-KC	3450	10	5	0	0	0	Yes
16314	No	Fanshier	Icer Addis	(W) Fanshier	Fanshier	9-21S-13W	160	-	L-KC	3318	5	3	0	0	0	Yes
16704	No	Fanshier	Icer Addis	(W) Harms	Harms	16-21S-13W	120	-	L-KC	3319	5	2	0	0	0	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975			Injection Pattern	Source	Depth, ft.						Thick., ft.	Type	Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods	
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975
2055 4183 4626 16303	3	0	0	0	Irreg	600	150	Prod	-	-	F&T	1954	S Gas	-	43	-	164,000	5,251,000	12,466	--	12,466	1,209,114	
12272 11419	2	0	0	0	Irreg	160	170	Prod	-	-	U	1965	Grav	1/15	35.6	-	62,050	884,683	3,565	49,782	2,105	45,422	
	1	1	0	0	Irreg	0	374	Prod	-	-	U	1966	S Gas	-	33	-	136,366	2,577,679	5,900	3,862,316	5,900	53,191	*Was Kathol Petroleum
	63	14	0	1													6,844,599	134,655,026	315,418	15,153,356	279,263	9,960,462	
16786	2	0	0	0	Irreg	420	1228	Prod + Sh Fr	202	138	M	1973	S Gas	86/50	41.9	2.2	896,187	3,038,452	33,751	112,848	18,590	18,590	
13902	2	2	0	-	Irreg	200	4385	Ogal	250	250	M	1968	S Gas	417/50	40	.66	1,481,054	14,408,175	124,432	981,385	124,432	2,177,385	
8906	9	30	-	-	Peri	350	410	Cedar Hills	1875	50	U	1972	S Gas	-	39	-	1,347,185	23,823,218	75,673	1,929,936	75,673	1,703,195	
9881	1	4	0	0	Irreg	0	79	Prod + Cedar Hills	1900	-	T	1963	S Gas	1/1	38	-	28,809	4,882,079	3,453	312,466	3,453	273,944	
10188	-	-	-	-	--	Grav	25	Prod	-	-	U	1963	--	1/26	34/5	-	9,125	106,392	730	113,142	0	0	*Was NCRA
16164	3	-	-	-	Irreg	0-150	600	Prod + Water Sd	155	20	M	1971	Grav	1/4	39	-	241,713	1,100,033	13,448	102,309	10,000	--	
15224 15349	1	0	0	0	Irreg	500	331	Prod	-	-	U	--	Gas Exp	2/1	38.8	-	120,771	550,303	12,441	74,032	12,441	12,441	
	1	0	0	0	Peri	700	252	Prod + Alluvium	50	-	U	1970	S Gas	15/71	39	-	92,054	274,980	15,724	138,028	14,444	33,330	
6322	1	0	0	0	Irreg	Vac	90	Prod	-	-	U	1958	S Gas	1/9	39	-	27,000	1,991,000	2,100	--	2,100	57,700	*Was Crown Oil Company
	16	34	0	0													1,866,657	32,728,005	123,569	2,669,913	118,111	2,080,610	
15826	1	0	0	0	Irreg	0	9	Prod	-	-	U	1970	Wat S Gas	1/.2	32	-	3,328	10,271	5,474	271,657	0	0	
15211	1	0	0	0	Irreg	1900	250	Sh Gravel	50	17	M	1969	S Gas	-	31	-	82,500	544,250	11,652	69,064	11,652	69,064	
11941 9481 13792	1	0	0	0	Irreg	0	61	Prod	-	-	U	1965	Wat	-	25	-	22,265	157,270	3,200	--	3,200	22,776	*Was Natural Gas & Oil
	1	0	0	0	Irreg	-	251	Prod	-	-	U	1962	Wat	1/9	37	-	91,498	1,022,382	5,447	370,530	2,160	33,738	
	2	0	0	0	Irreg	2450	348	Prod + Ter	60	25	M	1966	S Gas	16/0	33	6	228,119	2,203,013	11,218	201,563	11,218	196,786	
15378	1	0	0	0	Irreg	630	685	Prod	-	-	U	1970	Wat	-	38	-	250,060	1,116,611	12,998	107,602	10,073	58,323	*Was Natural Gas & Oil
16314	1	0	0	0	Irreg	50	155	Prod + Fr Wat	-	-	M	1972	Gas Exp	2/3	32	-	56,390	256,588	8,074	169,778	2,500	33,581	
16704	1	0	0	0	Irreg	50	165	Prod + Fr Wat	-	-	M	1972	Gas Exp	7/13	33	-	60,327	171,569	6,400	148,205	1,200	6,160	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

Kansas Geol. Survey Energy Resource Series 7, 1976

County	Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location		Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been continuous?
							S - T - R		Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled	Abd.	
STAFFORD COUNTY (cont.)																		
	16034	--	Gartung	Robert E. Davis	(P) --	Gartung		4-22S-14W	160	-	Viola + Arb	3822	25	3	0	0	0	Yes
	12284	--	Gates	Atlantic Richfield Co.	(W) Gates Unit	Gates Lease		27-21S-13W	80	30	L-KC	3550	130	5	0	0	0	Yes
	16179	--	Gates	Clinton Oil Company	(W) Chapman	Chapman		32-21S-13W	160	0	L-KC	3500	20	3	0	0	0	Yes
	15785	Yes	Gates	Nadel and Gussman	(W) Fischer Unit	Fischer		25,36-21S-13W	420	0	L-KC	3300	20	27	4	0	0	Yes
	13744	No	Gates	Okmar Oil Co.	(W) Fischer-Weizbrod	Fisher Estate Weizbrod		36-21S-13W 1-22S-13W	50	0	L-KC	3300	5	3	0	0	0	Yes
	16109	No	Gates	Phillips Petroleum Co.	(W) Stafford Lease	Stafford		33-21S-13W	25	0	L-KC	3371	24	5	0	0	0	Yes
	14491	Yes	Glasscock	Petroleum, Inc.	(W) Glasscock L-KC Unit	Harris 'D', Belote, Glasscock 'B' Barstow, Barstow 'B'		32-24S-13W 5-25S-13W	300	0	L-KC	3837	15	5	0	0	0	Yes
	15604	Yes	Green Ridge	Oklahoma Fracturing Services, Inc.	(W) Cadman Unit	Kachelman, Shepherd Lease Cadman Lease Birdsall Lease		19-23S-14W 30-23S-14W 29-23S-14W	340	20	L-KC	3600	10	5	0	0	0	Yes
	17842	No	Grunder	Tomlinson Oil Co., Inc.	(D) Grunder	Wilson "B"		11-25S-15W	60	0	Miss	4222	26	2	1	0	0	Yes
	17790	No	Hickman	H.A. Chapman	(W) Krampe	Krampe		33-21S-14W	80	-	L-KC	3556 3588 3614 3412	14	1	-	-	-	Yes
	10320	--	Hickman	Kaiser-Francis Oil Co.	(-) Gates B Pile	Gates B, Pile		27-21S-14W	240	40	Lans	3412	200	8	1	1	0	Yes
	16263	--	Jordan	Cities Service Oil Company	(W) Jordan	Jordan, Stimatze Neeland "A", Neeland "B"		16-25S-14W 15-25S-14W	108	0	L-KC	3630	35	5	0	0	0	Yes
	1976	--	Kenilworth	Phillips Petroleum Co.	(-) Ochel SWD #3	Ochel		15-22S-13W	30	10	Arb	3820	-	3	1	0	0	Yes
	14970	--	Kipp Northeast	Cities Service Oil Company	(W) Kipp N.E. Waterflood	Kipp "A" Kipp "B" Tanner		23-25S-14W 24-25S-14W 14-25S-14W	40	0	L-KC	3650	21	2	0	0	0	Yes
	1419	--	Kipp	Earl M. Knighton*	(P) Kipp Re-Pressure System	Kipp "A" Kipp "C" Kipp "F"		27-25S-14W 26-25S-14W 22-25S-14W	160	40	L-KC	3836	73	5	0	0	0	Yes
	14623	No	Knoche South	Palomino Petroleum*	(D) Jordan "B"	Jordan "B"		8-24S-12W	80	0	Viola + L-KC	3871	-	1	0	0	0	Yes
	15408	No	Koelsch West	Nadel and Gussman	(W) Koelsch	Koelsch		23-24S-14W	50	0	L-KC	3700	8	2	0	0	0	Yes
	17285	No	Kowalsky South-west	Okmar Oil Co.	(W) Schlochtermeyer	Schlochtermeyer Kasselman A		7-21S-11W 8-21S-11W	160	0	Simp + Arb	3418	29	5	0	0	0	Yes
	11122	Yes	Leesburg	Continental Oil	(W) Leesburg, No.	Leesburg, No.		12-25S-13W	386	0	Lans + Simp	3710 4070	83-13	6	1	-	-	Yes
	11123	Yes	Leesburg	Continental Oil	(W) Leesburg, So.	Leesburg, So.		13-25S-13W	246	0	Lans + Simp	3708 4064	84-12	3	3	-	-	Yes
	14032*	No	McCandless	Atlantic Richfield Co.	(-) McCandless Lease	McCandless Lease		30-25S-13W	-	-	L-KC	3701	280	5	0	0	0	--
	17223	No	McKittrick	Aspen Drilling Co.	(D) Wolf 'A' Lease	Wolf 'A'		28-21S-11W	320	0	Simp	3350	18	4	0	0	0	Yes
	15562	No	Max	Phillips Petroleum Co.*	(D) Siefkes "A"	Siefkes "A"		34-21S-12W	40	0	Arb	3615	20	2	0	0	0	Yes
	8062	--	Merle	Southern States Oil Company	(P) Williams	Williams Kuske		32-23S-13W 31-23S-13W	320	-	KC	3699	10	3	1	0	0	Yes
	15347	Yes	Moody	Nadel and Gussman	(W) Moody	Moody		7,8-25S-14W	150	160	Miss Ch	4200	20	5	-	-	-	Yes
	13909	No	Mt. View	Petroleum, Inc.	(W) Walls "A" Waterflood Project	Walls "A"		29-22S-13W	160	0	L-KC	3450	7	2	0	0	0	Yes
	6117	No	Mueller	Joe Holman	(W) Welch	Welch "A"		18-21S-12W	50	10	Arb	3570	14	2	1	0	0	Yes
	6062	--	Mueller	Kaiser-Francis Oil Co.	(D) Batman B	Batman B		12-21S-13W	90	40	Arb	3570	-	3	0	0	0	Yes
	13180	Yes	Omlor	Wm. D. Witcraft*	(-) Omlor-Bushnell	Omlor		10-24S-12W	160	-	KC	3556	6	2	0	2	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abcl. 1975			Injection Pattern	Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
16034	1	0	0	0	3-spot	0	450	Prod	-	-	T	1971	Wat	8/30	28	-	164,250	774,500	8,886	--	8,886	--		
12284	1	0	0	0	Irreg	Vac	426	Prod + Arb	3660	-	U	1966	S Gas	38/916	38	3.5	177,069	2,158,257	4,107	126,648	4,107	126,648		
16179	1	0	0	0	Irreg	20	696	Prod	-	-	U	1971	S Gas	1/11.9	26.2	-	253,956	700,191	10,644	596,960	10,644	45,125		
15785	3	0	0	0	Peri	0	298	Prod + Sh Fr	60	20	F&T	1970	S Gas	1/1	34.5	-	348,866	1,490,566	35,791	--	14,191	14,191		
13744	1	0	0	0	Peri	Vac	205	Prod + Arb	3670	5	U	1967	--	28/58	34	-	74,825	412,190	6,607	481,835	3,634	14,802		
16109	1	0	0	0	Irreg	0	245	Prod	-	-	U	1971	S Gas	1/4.4	30	-	89,510	367,878	11,276	333,684	1,556	38,568		
14491	2	0	0	0	Line	730	819	Quat	100	50	F	1968	S Gas	52/35	30.1	15	597,732	2,933,621	27,406	242,110	27,406	242,110		
15604	3	0	0	0	Peri	200	110	Alluvium	90	20	F	1970	--	7/3	32	-	113,434	944,204	7,281	71,203	7,281	71,203		
17842	1	1	0	0	Irreg	0	50	Prod	-	-	U	1975	S Gas	3/50	34	-	8,600	8,600	1,016	54,979	0	0		
17790	1	-	-	-	Irreg	Vac	84	Fr Wat Sd	50	50	F	1975	S Gas	3/1	20	-	15,364	15,364	755	755	0	0		
10320	2	0	1	0	Irreg	Vac	600	Prod	-	-	T&S	1963	Gas Exp	43/57	29	-	219,000	842,710	51,000	1,159,928	8,000	24,300		
16263	5	1	0	0	Peri	166	299	Prod + Wat Sd	80	-	M	1956	S Gas	5/7	33	-	538,401	6,165,580	22,068	1,547,120	22,068	470,439		
1976	1	0	1	0	Irreg	0	1428	Prod + Arb	-	-	U	1948	Wat	-	20	-	521,339	11,971,581	1,124	221,918	0	0		
14970	2	0	0	0	Irreg	710	350	Prod + Wat Sd	80	-	M	1969	S Gas	16/25	32	-	227,880	1,589,810	7,182	416,137	7,182	64,563		
1419	1	0	0	0	Peri	Vac	90	Prod	-	-	U	1946	S Gas	-	35	-	32,850	1,157,095	8,554	141,792	8,554	--	*Was Skelly Oil Company	
14623	1	-	0	-	Irreg	0	26	Prod	-	-	U	1968	S Gas	6/70	34	-	9,490	44,165	1,792	95,230	0	0	*Was Terra Resources (CRA)	
15408	1	0	0	0	Irreg	300	90	Prod + Sh Fr	75	35	M	1970	S Gas	1/1	31	-	39,500	158,840	3,025	--	3,025	14,655		
17285	-	-	-	-	Peri	1000	113	Prod	-	-	U	1974	S Gas	1/7	33	-	41,245	59,495	5,299	266,091	304	470		
11122	6	2	-	-	Peri	1600	738	Wat Sd	91	23	F	1964	S Gas	-	33.5	-	1,616,060	7,717,335	29,117	831,636	29,117	710,206		
11123	5	5	-	-	Peri	1450	269	Wat Sd	99	-	F	1964	S Gas	-	33.5	-	491,700	5,104,272	6,104	234,861	6,104	193,374		
14032	0	0	0	0	--	-	-	--	-	-	--	--	--	-	-	-	0	0	9,070	572,100	0	0	*Proj. not started	
17223	1	0	0	0	Irreg	500	15	Prod	-	-	U	1973	S Gas	1/1.5	49.2	3.5	21,900	43,324	13,140	320,881	0	0		
15562	1	0	0	0	Peri	0	10	Prod	-	-	U	1970	S Gas	1/1	38	-	3,705	38,455	4,016	155,832	0	0	*Was Thomas H. Allan	
8062 8551 15347	1 0 0	0 4 0	0 0 0	0 0 0	Irreg Peri Peri	- 0 0	310 0 0	Prod Prod Prod	- - -	- - -	T T T	1965 1970 1970	Grav S Gas & Wat S Gas	- 1/12 63/19	33 35 30.6	- - 14	113,150 0 62,420	1,090,318 1,389,400 342,250	2,431 10,539 11,562	-- -- 127,712	2,431 0 11,562	-- 0 127,712	-- 11,400 127,712	
13909	1	0	0	0	Line	895	171	Prod + Quat	100	50	M	1967	S Gas	1/10	36.3	-	58,400	1,091,450	5,266	94,503	5,266	94,503		
6117	2	1	0	0	Irreg	125	160	Prod	3570	14	T	1958	S Gas	1/10	36.3	-	58,400	1,091,450	5,266	94,503	5,266	94,503		
6062	1	0	0	0	Irreg	Vac	70	Prod	-	-	T&S	1958	Gas Exp	1/3	37	-	26,000	285,070	5,070	--	500	13,300		
13180	1	0	0	0	Irreg	200	90	Prod	-	-	U	1958	Wat	-	-	-	1,116	--	3,996	--	--	--	*Was Sun Oil Co.	

TABLE 1--ENHANCED OIL-RECOVERY PROJECTS, 1975--Continued

County	Is proj. unit- ized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
STAFFORD COUNTY (concl.)																
15248	No	Oscar North	Palomino Petroleum*	(W) Williams	Williams	12-22S-14W	80	0	L-KC	3553	5	3	0	0	0	Yes
5948	No	Oscar South	Petroleum, Inc.	(D) Oscar South	Smith "J"	26-22S-14W	80	0	L-KC	3456	10	1	0	0	0	Yes
6336	--	Oscar West	Cities Service Oil Company	(W) Oscar West Unit	Oscar West Unit	15,16,21, 22-22S-14W	334	112	L-KC	3600	7	9	6	0	1	Yes
6910	No	Pleasant Grove	John S. Martin*	(D) Spangenberg	Spangenberg	26-22S-12W	40	10	KC	3550	10	2	1	5	1	Yes
13372	--	Pundsack	Cities Service Oil Company	(W) Pundsack Unit	Pundsack Unit Schartz "B" Lease	19,29,30-21S-13W 20-21S-13W	107	38	L-KC	3270	27	5	7	0	1	Yes
16232	No	Radium Townsite	H.A. Chapman	(W) Bauer-Strobel	Bauer Strobel	32-21S-14W 33-21S-14W	320	0	L-KC	3569	7	5	-	-	-	Yes
8232	--	Rattlesnake SE	White Hawk Oil Company*	(D) McConnaughay Unit	Harrison	13-24S-24W	60	0	L-KC	3700	10	1	0	0	0	Yes
13751	--	Richardson	C&S Well Service Co.	(P) Aiken	C. Aiken	20-22S-11W	40	2	L-KC	3500	200	1	-	1	-	Yes
16654	--	Richardson	Clinton Oil Company	(W) V Komarek	V. Komarek C.J. Heyen "B"	30-22S-11W 31-22S-11W	480	0	L-KC	3386	28	5	0	0	2	No*
17119	No	Sand Hills	H.A. Chapman	(W) Duggan	Duggan	30-21S-11W	160	0	L-KC	3236 3329	3	1	-	-	-	Yes
15780	--	Saundra	Southern States Oil Company	(P) Christiansen	Christiansen	15-21S-12W	160	-	KC	3361	25	4	1	0	0	Yes
13406	No	Seevers Northwest	Thornton E. Anderson*	(D) Bowker	Bowker	36-24S-14W	60	0	Miss	4030	20	2	0	0	0	Yes
14994	Yes	Seevers Northwest	Petroleum, Inc.	(W) Seevers NW L-KC Unit	Neill, Goodman (Pet. Inc.), Turner 'E', Goodman 'B' Bowker 'I', Bowker 'J', Long 'C', Seevers, Goodman (Wallingford) Bowker 'L', Bowker 'B'	1-25S-14W 6-25S-13W 12-25S-14W	860	0	L-KC	3760	15	11	4	0	0	Yes
8784	--	Shaeffer-Rothgarn	Kaiser-Francis Oil Co.	(P) Wilcutt B	Wilcutt A & B	4-21S-13W	160	0	Lans	3270	200	1	0	0	0	Yes
11894	Yes	Shaeffer-Rothgarn	Petroleum, Inc.	(W) Shaeffer Unit	Tucker, Fanshier "A", Sharp	4-21S-13W	120	0	Congl	3500	7	2	4	0	0	Yes
14211	--	Shaeffer-Rothgarn	Texaco Inc.	(W) C.D. Koopman	C.D. Koopman	4-21S-13W	160	-	Congl	3540	10.6	2	0	0	0	Yes
15937	No	Silver Bell	Woodman-Iannitti Oil Co.*	(W) Silver Bell Pilot Flood	Sorcken-Besthorn	9-22S-13W	160	-	L-KC	3530	4	3	0	0	0	Yes
11775	--	Smallwood	White Hawk Oil Company*	(D) Wetig Unit	Wetig	2-22S-14W	80	0	L-KC	3412	20	3½	0	1	0	Yes
11857	Yes	Smallwood	White Hawk Oil Company*	(W) Smallwood L-KC Unit	Keenan, Strobel, Adams	2-22S-14W 11-22S-14W	80	0	L-KC	3550	6	3	1	0	0	Yes
13889	--	Snider	F.G. Holl	(D) Schafer	Schafer	11-21S-11W	100	0	Congl Cht	3350	25	2	1	0	1	Yes
12286	No	St. John	Atlantic Richfield Co.	(W) McNaughten "B"	McNaughten "B"	27-24S-13W	160	-	Lans	3711	300	2	0	0	0	Yes
12323	No	Strobel	Thornton E. Anderson	(P) Strobel	Strobel	8-22S-14W	160	160	KC	3658	6	1	0	0	0	Yes
STAFFORD COUNTY TOTALS (Reported) (Includes project in supplemental list.)							10,046	922				226	38	10	6	
SUMNER COUNTY																
11093	Yes	Anson Southeast	Phillips Petroleum Co.*	(P) Anson East Unit	Anson East Unit	6,7,18-31S-1W	220	60	Miss	3750	10	8	0	0	0	Yes
13989	Yes	Anson Southeast	Phillips Petroleum Co.*	(P) Anson West Unit	Anson West Unit	6,7-31S-1W 1,12-31S-2W	340	560	Miss	3750	10	7	1	0	0	Yes
12774	No	Ashton Northwest	Lario Oil & Gas Company	(P) Williamson	Lario Williamson	13,14-34S-1E	320	0	Miss Ch	3484	-	2	0	0	0	Yes
13900	Yes	Bates	Phillips Petroleum Co.*	(P) Bates Unit	Bates Unit	31-30S-1W 36-30S-2W	520	120	Miss	3750	10	11	0	0	0	Yes
12381	--	Conway Springs	Texaco Inc.	(P) Conway Springs Unit	M. Lies E.H. Zerner, R. Stoehr, M. Games, J. Orr, R.C. Frantz	5-31S-3W 8-31S-3W	880	-	Simp	4352	15	3	0	0	6	Yes

▶ See Supplemental List on Pages 103-108.

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks		
	Active	In-active	Drilled 1975	Abd. 1975			Injection Pattern	Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods			
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	
15248	1	0	0	0	Irreg	0	536	Sh (surface)	80	0	F	1969	S Gas	4/1	30	-	195,579	729,329	7,111	484,679	3,700	19,300	*Was Shell Oil Company	
5948	1	0	0	0	Irreg	Vac	.5	Prod	-	-	T	1957	S Gas	881/536	32.4	11	180	41,003	1,920	127,934	0	48,753		
6336	9	0	0	0	Peri	660	230	Prod + Fr Wat Sd	60	-	M	1958	S Gas	45/11	33	-	784,989	12,715,510	37,444	2,477,969	37,444	1,659,458		
6910	1	0	-	0	5-spot	Vac	240	Prod	-	-	T	--	S Gas	9/1	32.6	-	87,600	--	2,767	--	2,767	--	*Was Shelly-Miller Drlg.	
13372	7	0	0	0	Peri	500	150	Prod + Sh Sd	35	53	M	1967	S Gas	44/67	30	-	385,705	4,756,330	14,252	1,082,734	14,252	205,340		
16232	3	-	-	-	Peri	Vac	86	Prod + Arb	-	-	T	1973	S Gas	3/1	36	-	93,943	296,584	40,558*	1,031,246†	34,338	38,174	*L-KC (Sec. & Pri. only) †Most prod. from Arb.	
8232	1	0	0	0	Irreg	0	9	Prod	-	-	U	1961	Wat	-	28	-	3,285	35,635	1,197	--	1,197	31,379	*Was Natural Oil & Gas	
13751	1	-	1	-	Line	200	300	Prod	-	-	U	--	Gas Exp	5/1	38	-	112,000	1,862,000	2,910	46,110	1,460	28,060		
16654	0	1	0	0	Irreg	0	0	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	*Temp. shut down	
17119	1	-	-	-	Irreg	Vac	85	Prod + Arb	-	-	T	1973	S Gas	1/3	36	-	31,137	70,059	7,232	200,493	--	--	--	
15780	1	0	0	0	Irreg	-	175	Prod	-	-	T	1971	Grav	-	34	-	63,875	235,829	5,876	28,200	5,876	28,200		
13406	1	0	0	0	Irreg	0	60	Prod	-	-	U	1967	S Gas	8/1	34	-	20,000	263,000	3,102	139,873	700	3,000	*Was Dunne-Gardner	
14994	7	0	0	0	Peri	982	516	Quat	100	50	F	1969	S Gas	137/136	32	12	1,320,012	3,967,347	36,410	310,148	36,410	310,148		
8784	1	0	0	0	Irreg	485	250	Prod	-	-	T&S	1961	Gas Exp	3/2	38	-	91,250	889,665	2,920	216,331	0	0		
11894	1	0	0	0	Line	527	255	Prod + Quat	73	50	M	1965	S Gas	129/1	43.8	3	93,005	233,398	9,047	135,777	9,047	135,777		
14211	2	0	0	0	Irreg	200	277	Prod + Arkansas River Gravel	100	-	M	1969	S Gas & Liquid Exp	680/5	44.5	-	202,558	1,537,500	10,915	103,098	10,915	76,907		
15937	1	0	0	0	4-spot	550	400	Prod	-	-	T	1967	S Gas	3/2	31	-	146,000	1,140,450	3,000	--	2,500	19,400	*Was Petroleum Inc.	
11775	1	0	0	0	Irreg	0	187	Prod + Top	31	65	U	1965	Wat	-	32	-	68,400	336,715	18,012	--	11,167	68,917	*Was Natural Gas & Oil	
11857	3	0	0	0	Peri	850	374	Prod + Fr Wat	70	-	M	1957	S Gas	4.7/1	35	-	409,771	3,738,845	8,263	176,523	8,263	176,523	*Was Sun Oil	
13889	1	-	0	-	Peri	-	25	Prod	-	-	U	1967	S Gas	1/1	48.5	-	9,125	93,125	6,764	86,176	--	--		
12286	2	0	0	0	Irreg	575	459	Prod + Ter	63	23	M	1968	S Gas	30/58	32.2	6	338,014	1,712,172	22,359	95,225	22,359	95,225		
12323	1	0	0	0	Irreg	0	150	Prod	-	-	U	1965	S Gas	1/1	35	-	50,000	310,000	1,464	70,764	0	0		
	108	16	3	1													11,379,859	91,312,346	633,533	16,885,474	436,901	5,766,993		
11093	2	0	0	0	Peri	250	549	Wellington	50	20	F	1964	S Gas	-	41	-	400,980	3,421,994	78,447	1,616,544	68,377	745,416	*Was Beardmore Oil, Inc.	
13989	3	0	0	0	Peri	180	290	Prod + Wellington	50	20	M	1968	S Gas	-	41	-	317,535	3,141,131	40,935	1,106,001	23,935	219,064	*Was Beardmore Oil, Inc.	
12774	1	0	0	0	Irreg	Grav	-	Prod + Lay + Arb	2863	-	U	1966	S Gas	37/149	40	-	--	--	6,902	86,898	1,886	3,196		
13900	2	0	0	0	Peri	260	1101	Prod + Stal	2700	60	U	1967	Gas Exp	-	41	-	803,378	4,965,593	81,398	861,339	52,098	177,019	*Was Beardmore Oil Co.	
12381	2	0	0	3	Peri	Vac	289	Prod	-	-	U	1967	Wat	14786/8225	44	1.13	316,753	4,347,113	8,694	1,170,925	0	0		

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.	
SUMNER COUNTY (concl.)																
14630	--	Fall Creek	Texaco Inc.	(W) Fall Creek K.C. Unit	S. Hirrisiefken, N.J. Peters, I.E. Showalter, F.A. Hudson	3,4-35S-3W 9-35S-3W 4-35S-3W 10-35S-3W	380	-	KC	3700	6.5	5	1	0	1	Yes
17006	--	Guelph	Herndon Drilling Co.	(P) --	Gurley Lease	6-35S-1E	140	-	Simp	3908	1	5	-	-	-	Yes
10738	No	Interchange	Lario Oil & Gas Company	(P) Ashton-Lynch Unit	Lario-Ashton, Lario-Lynch	19-32S-1E 18-32S-1E	480	0	Simp	4050	-	3	0	0	0	Yes
15035	No	Latta	Okmar Oil Co.	(W) Latta Coop	Latta A, Latta B	8-30S-2W 9-30S-2W	60	0	L-KC	3045	5	4	0	0	0	Yes
17986	No	Latta Northwest	Dunne-Gardner Petroleum, Inc.	(D) Daley	Daley	5-30S-2W	80	-	Lans	3170	3	2	0	0	0	No*
14498	Yes	Murphy	Terra Resources, Inc.	(W) Vernon North Unit	Kemp, Callender, Callender "B", McClasky, Waggoner	8-35S-2E 9-35S-2E 17-35S-2E 16-35S-2E	288	0	Miss Dol	3392	10.9	6	0	0	0	Yes
9106	--	O'Hara	Stelbar Oil Corp.	(W) O'Hara	O'Hara	18-32S-1W	160	-	KC	3250	10	4	2	0	0	Yes
9209	--	Padgett	Stelbar Oil Corp.	(W) Norrish-Shawver	Spence, Fee, Norrish, Fee A	26,27-34S-2E 27,34-34S-2E	320	0	Miss Ch	3450	30	5	0	0	0	Yes
14030	--	Padgett	Stelbar Oil Corp	(W) Post	Post	34-34S-2E	80	-	Miss Ch	3450	30	3	0	0	0	Yes
16148	No	Portland	A.L. Abercrombie, Inc.*	(D) Hunt	Hunt	16-34S-1E	80	160	Lay	3026	31	3	1	0	0	Yes
12773	No	Rutter Southwest	Lario Oil & Gas Company	(P) King (D)	Lario-King	29-33S-2E	160	0	Simp	3525	15	1	0	0	0	Yes
11612	No	Seydell	E. Morris Seydell*	(W) Seydell	Seydell "B", Seydell, Nordstrom	17-30S-1E 16-30S-1E 6-30S-1E	80	80	Simp	3800	13	4	0	0	1	Yes
14742	No	Seydell	Shenandoah Oil Corp.*	(W) Stunkel	Stunkel	9-30S-1E	20	0	Simp	3766	7	1	-	-	-	Yes
16485	No	Slick-Carson	J.A. Allison	(W) Conrod	Conrod	24-32S-2E	80	40	Bartl	3124	13	1	0	0	0	No*
11012	--	Trekell	Phillips Petroleum Co.*	(P) Anson South Unit	Anson South Unit	18,19-31S-1W	40	40	Miss	3750	40	2	0	0	0	Yes
15952	No	Voils	Donald C. Slawson	(D) Bell 'B' & Kraft 'B'	Bell 'B' Kraft 'B'	16-30S-1W 17-30S-1W	320	0	Miss	3500	20	2	0	0	0	Yes
3396	Yes	Wellington	Terra Resources, Inc.	(W) Wellington Unit	Boam, Manahan, Curtis, Kamas, Markley, Hennigh, Ludwig, Riddell, Miller, Gaskill, Neel, Frankum "A", Frankum, Murphy, Peasel, Barlow, Erker, Barlow "B", Barlow "A" Rothrock, Rothrock "A", Deturk, Deturk "A" Nelson, Carr, Moore, White, McKee, Stone, McDowell Cole Caples	20-31S-1W 28-31S-1W 29-31S-1W 32-31S-1W 33-31S-1W 4-32S-1W 5-32S-1W 6-32S-1W 7-32S-1W 8-32S-1W 9-32S-1W	2240	0	Miss Dol	3650	20	64	0	0	0	Yes
5718	No	Wellington Northeast	Aladdin Petroleum Corp.	(P) Miller	--	23-31S-1W	40	40	Miss	3640	18	2	0	0	0	Yes
SUMNER COUNTY TOTALS (Reported)							7,328	1,100				148	5	0	8	
TREGO COUNTY																
16437	Yes	Garner West	Benjamin Tepper	(P) Brown	Brown, Shearer, Connors	24-11S-25W 13-11S-25W 23-11S-25W	120	0	KC	3711	22	2	0	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav. deg.	Oil visc. cp. @ 60° F	Production and injection statistics (bbls)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
14630	2	4	0	0	Peri	200	66	Prod + Stal	3225	90	M	1969	S Gas	559/2572	36	3.6	48,353	2,024,546	6,219	138,915	6,219	112,484	
17006	-	-	-	-	Irreg	0	-	Prod	-	-	U	1973	Wat	1/12	45	-	600,000	1,491,950	29,921	2,516,864	10,472	20,627	
10738	1	0	0	0	Irreg	Grav	376	Prod	-	-	U	1964	Wat	3524/630	43	-	137,350	457,783	55,744	761,727	6,021	6,021	
15035	-	-	-	-	--	175	440	--	-	-	U	1969	S Gas	3/32	37	-	160,600	846,669	10,180	535,783	4,393	9,113	
17986	1	0	0	0	Irreg	0	50	Prod	-	-	U	1975	S Gas & Wat	9/11	36	-	4,500	4,500	1,090	156,467	0	--	*Did not start until Oct. 1975
14498	5	0	0	0	Peri	Vac	304	Prod + Stal	2293	138	T	1961	--	.26/1	41.1	-	553,940	6,354,656	19,051	649,523	19,051	278,974	
9106	2	1	0	0	Peri	150	60	Prod	-	-	T	1961	S Gas	-	35	-	43,800	1,493,604	8,059	--	8,059	248,692	
9209	1	1	0	0	Line	300	450	Prod	-	-	U	1960	Wat & S Gas	-	39	-	164,250	848,750	19,026	--	19,026	130,686	
14030																							
10688	1	0	0	0	Irreg	300	240	Prod + Stal	2350	150	U	1965	Wat	-	40	-	87,600	666,086	8,671	--	6,503	42,350	
16148	1	0	0	0	Irreg	150	260	Prod	-	-	U	1971	S Gas	-	39	-	95,357	476,785	4,354	613,636	3,000	12,500	*Was J & L Oil Co.
12773	1	1	0	0	Peri	150	395	Arb	3544	-	U	1964	S Gas	31/0	38	-	144,203	144,203	8,483	128,735	936	16,228	
11612	2	1	0	0	Irreg	460	825	Prod + Fr Wat Sd	26	-	M	1963	S Gas & Wat	100/0	40	-	300,785	1,904,008	2,957	516,301	2,957	126,326	*Was Sam P. Wallingford, Inc.
14742	1	-	-	-	Irreg	0-Vac	200	Prod	-	-	T	1969	S Gas	1/2	-	-	73,000	339,200	31,333	218,233	--	--	*Was Solar Oil
16485	1	0	0	0	Irreg	Vac	60	Surface	10	100	F	1972	S Gas	100/0	42	-	24,000	120,000	2,334	95,365	2,334	16,687	*Inject periodically
11012	1	1	0	0	Peri	400	516	Prod	-	-	U	1964	S Gas	-	41	-	188,357	3,176,097	6,152	335,385	6,152	94,619	*Was Beardmore Oil, Inc.
15952	1	0	0	0	Irreg	150	55	Prod + Stal	2600	90	U	1971	S Gas	2/1	46	1.5 Est	20,075	184,713	7,187	155,461	4,750	35,709	
3396	38	8	0	0	Irreg	189	423	Prod + Stal	2650	100	T&U	1953	S Gas	98/1	42.4	-	4,778,615	112,493,011	171,096	9,249,139	171,096	8,634,399	
5718	2	-	0	-	Irreg	150	-	Prod + Miss	3640	18	T	1957	S Gas	-	-	-	45,730	2,243,301	2,238	364,929	--	--	
	71	17	0	3													9,309,161	151,145,693	610,471	21,719,371	417,265	10,930,110	
16437	1	0	0	0	Line	Vac	500	Prod	-	-	U	1972	Wat & S Gas	3/1	24	-	178,000	473,000	10,500	79,357	0	0	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. un- tized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
						S - T - R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
TREGO COUNTY (concl.)																
13935	--	Groff	Earl M. Knighton*	(W) Holtzinger	Holtzinger	35-14S-21W	80	0	Cher	3795	16	2	1	0	0	Yes
17618	No	Groff	John O. Farmer, Inc.	(-) Wannamaker Holtsinger	Holtsinger "B", Wannamaker "A" & "B"	35-14S-21W 34-14S-21W	200	-	Penn	3830	6	8	-	-	-	Yes
17377	No	Holland	Donald C. Slawson	(P) Holland 'B'	Holland 'B'	23-13S-22W	320	0	L-KC	3600	10	2	0	0	0	Yes
13976	No	Kutina West	Shields Oil Producers, Inc.	(W) Dickman-Philip Water- flood	Dickman	24-15S-22W	80	0	Cher	4200	20	1	0	0	0	Yes
15870	--	Madden	Raymond Oil Company, Inc.	(W) Madden	Madden	17-14S-21W	40	-	Cher	3971	11	0	-	-	2	*
8278	No	Newcomer	A.L. Abercrombie, Inc.	(D) Rasek "A"	Rasek "A"	12-12S-23W	60	-	L-KC	3700	35	2	1	0	0	Yes
10092	--	Newcomer	Petroleum Management, Inc.	(W) Newcomer Coop-Hixson, LKC	Hixson LKC Unit Newcomer A, Newcomer B, Morgan C	2, 11-12S-23W 12-12S-23W	1280	0	L-KC	3660	12	7	3	0	0	Yes
16356	--	Newcomer	Texaco	(W) Newcomer Units	Sarah Losee, F. Rinker	1-12S-23W	480	-	L-KC	3650	3.3	5	0	0	0	Yes
17636	--	Nicholson	Cities Service Oil Company	(W) Nicholson Field L-KC W.F.	Huck "A"	25-11S-21W	80	0	L-KC	3580	12	2	0	0	0	Yes
14633	No	Ogallah	Colorado Oil Company, Inc.	(W) Schoenthaler Lease	Schoenthaler	26-12S-22W	30	10	L-KC	3580	82	3	0	0	0	Yes
14666	--	Ogallah	Texaco Inc.	(P) Ogallah Unit	G. Bittel, J.F. Steckline, E.A. Scott, A. Schoenthaler, V.G. Powers, C. Scott	27-12S-22W 26-12S-22W	1690	-	Arb	3950	24	30	18	0	17	No*
14667					Christian Church, Powers, Kellogg-Wynn	25-12S-22W										
14948					Kellogg-Wynn, C. Scott P. Hendrickson, U.S. Government Anderson "C" Benson, E.M. Monroe Monroe	36-12S-22W 35-12S-22W 34-12S-22W 36-12S-22W 31-12S-22W										
17401	--	Rideway	Texaco Inc.	(P) E. King	E. King Schoenthaler	27-12S-21W 26-12S-21W	320	-	L-Arb	3712- 3893	-	4	0	0	0	Yes
17094	--	Trico	Cities Service Oil Company	(W) Spaulding "B" W.F.	Spaulding "B"	1-11S-21W	160	0	L-KC	3366	8	3	1	0	0	Yes
6045	No	Wakeeney	Okmar Oil Co.*	(W) Kraus-Lemke	Kraus, Lemke	15-11S-23W	120	0	L-KC	3500	5	2	0	0	0	Yes
14181	No	Wakeeney East	Okmar Oil Co.	(W) Mong	Mong	24-11S-24W	50	0	L-KC	3539	5	2	0	0	0	Yes
14887	--	Walz	Continental Oil	(W) Walz Lans.-KC	J.J. O'Connor, J.J. O'Connor A	13-11S-21W	100	0	L-KC	3400	17	5	0	-	-	Yes
TREGO COUNTY TOTALS (Reported)							5,210	10				80	24	0	19	
WABAUNSEE COUNTY																
13504	--	Ashburn	Mack Oil Co.*	(P) Ashburn Droll Unit	Ashburn, Droll	29-14S-10E	40	0	Viola	3250	15	2	-	4	2	Yes
13124	No	Mill Creek	Frank Small Oil Company*	(P) Thowe Lease	Carl Thowe	2, 3-13S-10E	150	-	Viola 1m	2930	3-4	2	0	0	0	Yes
WABAUNSEE COUNTY TOTALS (Reported)							190	0				4	0	4	2	
WILSON COUNTY																
5729	Yes	Altoona	Cache Oil Corp.	(P) Post-Watson	Post-Watson	34-28S-16E	160	-	Bart1	900	20	5	-	0	0	No*
8983	--	Altoona*	Overland Energy, Inc.	(W) Short	Short	31-28S-17E	160	-	Squir	790	20	14	9	9	0	--
7516	No	Altoona	Nicholas Sage*	(W) Arthur Mullen	Arthur Mullen	21-29S-16E	40	0	Bart1	780	12	3	4	0	2	Yes
10348	--	Benedict	Lawrence C. Lamb*	(-) --	L. Roberts	12-28S-15E	120	120	--	950	16	6	6	0	-	Not
10473*	No	Benedict	Layton Oil Company	(-) Employers Reinsurance	Employers Reinsurance	9-28S-15E	-	-	Bart1	980	6	-	-	-	-	--

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)						Remarks
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	
13935	1	1	0	O	Peri	1200	200	Prod + Fresh	16	-	U	1967	Wat	1/9	39.4	-	66,760	--	2,674	--	2,674	--	*Was Sun Oil Company
17618	-	-	-	-	Irreg	300	300	Prod + Cedar Hills	1200	100	U	1974	Grav	-	40	-	158,083	200,390	32,818	6,818	15,000	30,000	
17377	1	0	0	O	Irreg	0	70	Prod	-	-	U	1974	S Gas	3/1	31	6.5 Est	7,418	25,247	11,869	65,288	0	0	
13976	1	0	0	O	Irreg	1800	275	Prod + Cedar Hills	1100	250	T	1968	Grav	-	38	-	100,485	545,510	3,810	124,253	1,500	122,900	
15870	-	-	-	-	--	-	-	Prod + Arb	4000	-	-	1970	S Gas	1/0	37	-	0	171,385	492	27,407	492	27,407	*Plugged in June 1975
8278	1	1	0	O	Irreg	0	31	Prod	-	-	U	1960	S Gas	5/29	39	6	11,474	823,589	2,894	199,472	2,894	98,939	
10092	3	2	0	O	Irreg	325	151	Prod	-	-	U	1960	--	-	36	-	110,044	3,858,321	11,619	568,489	5,678	417,056	
16356	4	0	0	O	Irreg	450	275	Prod + Cedar Hills	1380	220	M	1972	S Gas	58/12512	38.4	3.2	401,415	1,543,942	18,521	70,130	11,197	31,926	
17636	1	0	0	O	Irreg	0	98	Prod + Dak	815	43	M	1974	S Gas	1/3	-	-	46,591	50,096	3,016	159,732	3,016	3,417	
14633	1	0	0	O	Irreg	Vac	184	Prod + Arb	3972	24	U	1969	Wat	52/17	39	-	49,851	457,180	11,173	--	11,173	66,444	
14666	0	0	0	O	--	0	0	--	-	-	-	-	Wat	143/44	37	2.6	0	0	122,866	2,657,510	0	0	*No inj, active waterdrive
14667																							
14948																							
17401	1	0	0	O	Irreg	Vac	432	Prod	-	-	U	1974	Wat & S Gas	11/375	-	-	157,593	190,321	7,735	9,017	0	0	
17094	1	0	0	O	Irreg	940	179	Prod	-	-	U	1974	S Gas	16/21	-	-	81,607	140,396	17,887	554,703	17,887	25,200	
6045	1	0	-	O	Irreg	150	275	Prod	-	-	U	1958	S Gas	-	40	-	100,375	--	976	620,108	976	--	*Was S & G Oil Co.
14181	1	0	0	O	Irreg	350	612	Prod	-	-	U	1968	S Gas	3/1	36	-	223,380	1,599,318	767	57,698	767	3,670	
14887	2	0	-	-	Line	310	488	Prod	-	-	U	1969	S Gas	-	33.6	-	356,347	2,029,908	18,639	124,245	11,996	46,180	
	20	4	0	0													2,049,423	12,108,603	278,256	5,324,227	85,250	873,139	
13504	1	-	-	-	Peri	0	819	Prod	-	-	U	1967	Wat	1/49	21	-	298,935	1,695,635†	3,688	234,852	3,688	17,241+	*Was Wm. Gruenerwald †Mack Oil Cum. figures
13124	1	0	0	O	Irreg	180	1050	Prod	-	-	U	1966	Wat	-	23.5	-	383,250	--	4,349	--	0	--	*Was Skelly Oil Company
	2	0	0	0													682,185	1,695,635	8,037	234,852	3,688	17,241	
5729	1	0	0	O	--	400	10	--	-	-	U	--	--	-	32	-	--	--	--	--	--	--	*Shut down some in winter
8983	5	-	2	-	Irreg	600	300	Prod + Oswego	353	75	T	--	S Gas	-	29	-	109,500	--	3,684	--	3,684	--	*Was Jones & Campbell
7516	2	-	0	-	Irreg	400	25	Prod + Oswego	640	8	U	1964	S Gas	19/1	36	-	18,000	216,000	875	23,869	875	13,869	*Was Crest Oil Company
10348	1	8	0	-	4-spot	0	10	Prod	-	-	--	--	--	31	-	-	--	--	1,344	--	--	--	*Was C.F. Jones †Dumping
10473	-	-	-	-	--	-	-	--	-	-	--	--	--	-	-	-	--	--	--	--	--	--	*Operated by stripper methods

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
						S-T-R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
WILSON COUNTY (concl.)																
11290*	No	Benedict	Layton Oil Company	(-) Manderscheid & Pierpoint	Pierpoint Manderscheid	9-28S-15W 4-28S-15W	-	-	--	-	-	-	-	-	-	-
9507	No	Buffalo-Villas	Estoril-Producing Corporation*	(W) --	Larson, Nelson Sutterfield Butler, Union Central (Miley)	13-27S-16E	40	0	Bartl	985	10-20	5	-	3	-	No*
8283	No	Fredonia	R.R. Abderhalden*	(W) Van Camp	Hamilton, Mikesell & Van Camp	27,28,34,35-29S-15E	150	0	Bartl	1160	40	24	1	0	0	Yes
9971	No	Fredonia	King Resources Co.	(-) --	--	27,34-28S-14E	0	-	New Albany	280	15	0	49	-	-	--
9937	--	Neodesha	Albian W. Bailey	(W) Unit #1	Greer, Irvine-Wilson, Mann, Holmberg, Bowman, Fee #2	20-30S-16E	350	0	Neod	800	15	70	0	0	0	--
					Fee #2, Irvine-Wilson, Clegg	21-30S-16E										
					C.W. Long, J.W. Sutherland, R.M. Jones, Theo Johnson, Skiles-Rankin, Keys Heirs, Wolfe (East), Fee #2	28-30S-16E										
					Ellis, Mong-Kimball, Mong-Skiles, City Sewage, Hutchins, Wolfe (West), Skiles-Rankin, Borceaux, Skiles-Sweeney, Belle Keys, Kimball, Rogers, Cook-Kimball	29-30S-16E										
					Hutchins, Cramer, C.W. Long, Wolfe (West)	32-30S-16E										
					Cramer, C.W. Long, Wolfe (East), Holland, Scott	33-30S-16E										
9559	--	Neodesha	Albian W. Bailey	(-) Graham	Franklin P. Graham	7-30S-16E	90	-	Neod	950	20	0	6	0	0	No*
12549	--	Neodesha	Albian W. Bailey	(-) Barnes	Barnes	21-30S-16E	12	0	Neod	750	12	3	0	0	0	No*
10231	--	Neodesha	Albian W. Bailey	(-) Kimball-Dunn	Kimball-Dunn, Wilhelm	19-30S-16E	90	0	Neod	850	15	5	1	0	0	No*
10232	--	Neodesha	Albian W. Bailey	(-) Kimball-Dunn	Kimball-Dunn, Wilhelm	19-30S-16E	90	0	Neod	850	15	5	1	0	0	No*
11508	No	Neodesha	George J. Hempten*	(P) Thompson	Thompson	12-30S-15E	120	0	Bartl	1020	16	8	4	0	0	Yes
7521	No	Neodesha	Nicholas Sage	(W) Susie Phillips	Susie Phillips	26-30S-16E	60	30	Bartl	780	20	8	4	-	-	Yes
5749	--	Buffalo-Vilas	Marland No. 1	(-) Wiggans Unit & Vilas Leases	Larson, Hulteen, Hubler, Eklund, Wiggans Uhren, Fail	8-28S-17E 9-28S-17E 17-28S-17E 16-28S-17E	1650	-	Bartl	990	15	-	-	0	-	Yes
11377	--	Buffalo-Vilas	Marland No. 1	(-) Wiggans Unit & Vilas Leases	Freidline, Reese, Randles	20-28S-17E										
WILSON COUNTY TOTALS (Reported)							3,042	150				151	84	12	2	
WOODSON COUNTY																
6177	No	Winterscheid	John L. Haas	(-) Colt	Colt	35-23S-13E	560	0	Miss lm	1600	10	5	2	-	-	Yes
6103	--	Big Sandy	Mack C. Colt, Inc.*	(W) Big Sandy	Allen	14-26S-14E	30	0	Bartl	1200-	20-	39	0	0	0	Yes
					Cobble, Pendley	22-26S-14E				1300	50					
					Schafer, Scott, Louk, West	23-26S-14E										
5587*	No	Big Sandy	L.M. McCormick	(-) --	Wallace Lease	21-25S-15E	160	-	Miss lm	1480	6	2	2	0	0	--
14889	--	Durand	Dunigan Operating Co.	(W) Earl Davidson	Earl Davidson	6-25S-16E	18	0	Squir	965	10	4	0	0	0	Yes
15067	--	Durand	N&B Enterprises	(P) Durand Flood	Marvin Chambers	7-25S-16E	320	-	Squir	990	6-12	6	1	0	0	Yes
8422	No	Wissman	John L. Haas	(P) Switzer	Switzer	3-24S-15E	160	80	Miss lm	1500	10	-	2	0	-	Yes
13220	--	Neosho Falls-LeRoy	Leedy-Beaman	(P) Leedy-Beaman	Leedy, Entz, Street	24,25-23S-16E	40	0	Squir	924	12	13	2	2	-	Yes
9075	No	Owl Creek	Floyd Dotson	(W) Moon-Pribbernow	Bennett A, Bennett B, Orth, Williams	28-25S-17E	1750	0	Squir	800	10	98	0	0	0	Yes
					Moon	27-25S-17E										
					Pribbernow, Tebben,	20-25S-17E										
					Reno	21-25S-17E										

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells				Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Water Injection		Production and injection statistics (bbls)		Oil recovered by enhanced methods		Remarks			
	Active	In-active	Drilled 1975	Abd. 1975				Source	Depth, ft.	Thick., ft.						Type	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975	1975	Cum. 12-31-1975
11290	-	-	-	-	--	-	-	--	-	-	-	--	--	--	--	--	--	--	--	--	--	*Produced by stripper methods			
9507	-	-	-	-	5-spot	500	20	Prod + Salt Sd	1100	-	T	1962	S Gas	-	30	0	20,000	1,460,000	1,898	74,800	1,898	74,800	*Was Walter Walne		
8283	11	4	0	0	Irreg	500	160	Prod + Oswego	350	50	T	1961	S Gas	-	25	-	642,400	7,500,155	14,004	261,327	14,004	261,327	*Mechanical problems *Was Sun Oil Co.		
9971	-	-	-	-	--	-	-	--	-	-	--	--	-	-	-	0	--	0	--	0	--	--			
9937	69	0	0	0	5-spot	700	18	Prod + Fall River	-	-	F	1961	S Gas	97/3 7/3	38	4	475,864	10,677,672	14,033	459,815	14,033	459,815			
9559	-	11	-	-	--	0	0	--	-	-	--	--	-	38	4	0	1,339,311	0	--	--	35,086	*Temporarily stopped			
12549	-	4	0	-	5-spot	0	0	Sh Well†	40	-	-	1964	--	-	38	4	0	240,000	95	--	0	4,240	*Temporarily shut down		
10231	-	7	0	0	5-spot	0	0	Sh Well in River Gravel	40	-	-	1963	--	-	38	4	0	564,425	812	--	0	24,901	*Temporarily shut down		
11508	3	0	0	0	Line	450	35	Prod + Oswego	700	20	U	1973	Grav	3/2	38	5	37,800	84,600	930	3,271	600	2,600	*Was Jeanbro Oil Co.		
7521	5	1	0	0	5-spot	200	10	Prod + Salt Sd	900	50	U	1962	S Gas	19/1	38	-	18,000	773,525	500	91,267	500	41,267			
5749	20	145	0	--	Irreg	300	80	Prod	-	-	M	--	S Gas	-	28	-	584,000	--	20,194	--	20,194	--			
11377																									
	117	180	2	0													1,905,564	22,855,688	58,369	914,349	55,788	917,905			
6177	1	-	0	-	5-spot	150	203	--	-	-	T	--	--	3/5	38	-	73,000	--	--	--	--	--	--		
6103	5	0	0	0	5-spot	0	61	Prod + Cher	1100	30-50	T	1957	Grav	3/1	21	-	111,287	1,669,990	19,617	--	19,617	525,776	*Was Woodson Pipe Line and Producing Co.		
5587	1	-	0	-	--	-	-	Prod	-	-	M&S	1940	Wat	1/9	31	-	--	--	2,200	--	--	--	--	*Disposal only	
14889	1	0	0	0	5-spot	500	24	Prod + KC	500	0	T	1969	S Gas	1/19	22	243	8,877	90,846	2,147	16,513	2,147	16,513			
15067	1	-	0	0	5-spot	600	25	Prod	-	-	U	1970	Grav	1/0	24	0	--	--	3,090	--	--	--	--		
8422	1	0	0	0	5-spot	250	200	Prod	-	-	T	--	--	-	29	-	72,000	--	--	--	--	--	--		
13220	1	0	0	0	Irreg	30	-	Prod + KC	105	20	U	1967	Grav	4/1	26	-	1,500	24,900	5,600	21,235	3,800	15,500			
9075	36	0	0	0	Irreg	600	20	Prod + KC 1m	400	50	U	--	Wat	-	27	-	259,200	3,605	15,054	268,561	15,054	268,561			

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been continuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In-active	Drilled		Abd.
WOODSON COUNTY (cont.)																
15417	No	Owl Creek	Tec Drilling Co. Inc.	(W) Owl Creek	Fred Coffield Kenneth Stockebrand Tom Smith Marie Yohon	16-25S-16E 17-25S-16E 20-25S-16E 21-25S-16E	190	0	Up Squir Lo Squir	864 911	17 12	18	0	0	0*	Yes
3345* 8990 727 10584 10634	No	Perry-Halligan	Layton Oil Company	(-) Rose Flood	--	16, 17, 18, 19, 20, 21, 29, 31-26S-17E	--	-	Squir	-	-	-	-	-	-	--
	No	Quincy	Bird & Hanley	(W) Batesville	Mills, Eades Klick Tipton Lee, J.W. Tipton, Enloe A.W. Tipton Nordmeyer, Akins Corcery	24-25S-13E 20-25S-14E 21-25S-14E 28-25S-14E 29-25S-14E 19-25S-14E 29-25S-14E	2080	0	Bart1	1500	30	33	21	3	0	Yes
10770	--	Quincy	Marion Myers*	(W) Marion Myers	Corcery	29-25S-14E	160	0	Bart1	1800	20	5	0	0	0	Yes
11604	Yes	Silver City	Loren Steinforth-Royce Saubers*	(W) Silver City Water Flood Unit B	Adams Hill "A", Hill "B", Hill "C"	20-26S-15E 29-26S-15E	55	0	Bart1	1400	20	4	0	0	0	Yes
12198	Yes	Silver City	Loren Steinforth-Royce Saubers*	(W) Silver City Water Flood Unit A	Lauber, Lauber A, Lauber B Steinforth	19-26S-15E 18-26S-15E	100	0	Bart1	1400	20	7	0	0	2	Yes
17126	No	Vernon	L.C. Bodemann, Jr.*	(W) John F. Wingrave	John F. Wingrave	16, 17-24S-16E	480	0	Squir	1015	20	9	2	0	0	Yes
10663 10670	--	Vernon	Kanalta Resources Ltd*	(W) Sturlong	Kiske-Long-Sturdivan	34-23S-16E	320	20	Squir	1020	14	15	4	-	-	Yes
12385	No	Vernon	Long-Tye Oil Co.	(W) Glades-Fuller	Robison, Glades, Fuller, Sturdivan	29-23S-16E 33-23S-16E	540	-	Squir	1039	15	24	1	1	0	Yes
6887	--	Vernon	James E. Russell Petroleum, Inc.	(W) Aljo Flood	Alexander Butler, Riley, Alexander	22-24S-16E 35-23S-16E	116	0	Squir	1000	21.6	30	17	0	0	Yes
12706	--	Vernon	James E. Russell Petroleum, Inc.	(W) South Vernon	Mathias Strahm, D.W. Long A.I. Link Wilson-Dunne	11-24S-16E 12-24S-16E 1-24S-16E	15	0	Squir	1000	20	22	0	0	0	Yes
1055 3892	-- --	Winterscheid Winterscheid	French & Winterscheid, Inc. French & Winterscheid, Inc.	(P) Estes (P) Winterscheid	Estes Winterscheid	7-24S-14E 6-24S-14E	40 60	20 20	Miss lm Miss lm	1700 1700	6 5	5 6	0 1	0 0	0 0	Yes Yes
3893 5645	-- --	Winterscheid Winterscheid	French & Winterscheid, Inc. French & Winterscheid, Inc.	(P) Smith Jobe (P) Emma (Old) Otto	Smith Jobe E. Otto	7-24S-14E 21-23S-14E	40 20	20 0	Miss lm Miss lm	1700 1700	6 4	5 2	0 0	0 0	0 0	Yes Yes
6021 6088	-- --	Winterscheid Winterscheid	French & Winterscheid, Inc. French & Winterscheid, Inc.	(P) Kimble (P) W. Jones	Kimble W. Jones	18-24S-14E 30-23S-14E	60 70	10 10	Doug Miss lm	1700 1700	6 6	3 4	0 0	0 0	0 0	Yes Yes
7103	No	Winterscheid	Atlantic Richfield Co.	(W) Winterscheid Water- flood	W.P. Headley "A", "B", "C", J.W. Maclaskey "A" Henry G. Collins	29, 30-23S-14E 30-23S-14E	560	-	Miss Ch	1700	20	25	13	0	0	Yes
7949	No	Winterscheid	Barnett Oil, Inc.	(D) Bahr	Bahr	23-23S-13E	160	-	Arb	2200	5	3	-	-	-	No*
17607	No	Winterscheid	Barnett Oil, Inc.	(D) Bahr	Bahr	23-23S-13E	160	-	Arb	2200	5	3	-	-	-	No*
416	--	Winterscheid	French Oil Company	(P) Dewey	Dewey	32-23S-14E	100	0	Miss lm	1600	6	7	0	0	0	Yes
1056 3902 5646 5662 6222 7898	-- -- -- -- -- --	Winterscheid Winterscheid Winterscheid Winterscheid Winterscheid Winterscheid	French Oil Company French Oil Company French Oil Company French Oil Company French Oil Company French Oil Company	(P) Maclaskey (P) W.P. Headley (P) South Peek (P) Headley 541 (P) Quartet (P) Arnold	Maclaskey Headley Peek Headley Quartet Arnold	31-23S-14E 29, 23S-14E 20-23S-14E 29-23S-14E 21-23S-14E 35-23S-14E	40 90 100 70 40 40	0 0 0 0 0 0	Miss lm Miss lm Miss lm Miss lm Miss lm Miss lm	1700 1700 1700 1700 1700 1700	4 6 6 6 6 5	4 11 8 6 2 4	0 0 0 0 1 0	0 0 0 0 0 0	0 0 0 0 0 0	Yes Yes Yes Yes Yes Yes
8459	--	Winterscheid	French Oil Company	(P) Floyd Jones	Floyd Jones	24-23S-13E	50	0	Miss lm	1700	3	5	0	0	0	Yes
12149	--	Winterscheid	French Oil Company	(P) Rhea	Rhea	24-24S-13E	120	0	Miss lm	1650	6	6	0	0	0	Yes
12189	--	Winterscheid	French Oil Company	(P) Knox	Knox	24-24S-13E	40	0	Miss lm	1600	4	4	0	0	0	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data					Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil vis., cp. @ 60° F	Water Injection		Production and injection statistics (bbls)		Oil recovered by enhanced methods		Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type	1975						Cum. 12-31-1975	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
15417	4	0	2	0	5-spot	0 200	24 37	KC	350	300	T	1975	S Gas	100/1	24	80	14,440	14,440	6,863	162,877	189	17,097+	*Converted to input		
3345 8990 727 10584 10634	-	-	-	-	---	-	-	---	-	-	---	---	---	-	-	-	--	--	--	--	--	--	--	*Operated by stripper production methods	
10770	2	0	0	0	Line	300	300	Prod	-	-	U	1972	Wat	7/200	40	-	88,000	--	4,800	--	1,800	--	--	*Was H.J. Uhl	
11604	4	4	0	0	Line	190	25	Prod	-	-	U	1967	Wat	1/2	28	21	12,000	189,450	1,433	23,712	1,433	23,712	*Was Pauley Petroleum		
12198	4	0	0	0	Line	200	15	Prod	-	-	U	1965	Wat	2/1	29	21	8,000	669,069	1,270	25,653	1,270	25,653	*Was Pauley Petroleum		
17126	2	1	0	0	Irreg	420	52	Prod + KC	-	60	U	1973	S Gas	2/1	26	-	27,468	66,552	2,600	64,411	2,600	6,553	*Was J.F. Williams & Paul J. Gibbs		
10663 10670 12385	9	4	-	-	Irreg	300	15	Prod + KC	420	-	T	1965	S Gas	1/1	24	-	--	--	5,799	119,407	5,799	119,407	*Was Trico Oil Co.		
6887	34	17	0	0	Irreg	Grav	25	Prod + KC lm	565	35	U	1966	Grav	9/1	24	-	54,000	--	5,876	--	100	--	--		
12706	4	2	0	0	Irreg	560	30	KC lm	500	40	T	1966	S Gas	-	26	70	43,915	420,065	6,428	108,124	6,428	62,367			
1055 3892	1	0	0	0	Irreg	125	150	Prod	-	-	T	1950	Wat	9/11	36	-	58,000	566,000	3,000	--	1,500	70,119			
3893 5645	1	0	0	0	Irreg	90	110	Prod	-	-	T	--	Wat	49/51	36	-	28,500	878,000	1,645	--	1,234	66,562			
6021 6088	1	0	0	0	Irreg	25	50	Prod	-	-	T	--	Wat	1/1	36	-	14,000	347,000	459	--	459	18,865			
6021 6088	1	0	0	0	Irreg	150	200	Prod	-	-	T	--	Wat	9/11	35	-	20,000	120,000	1,872	--	936	6,235			
6088	1	0	0	0	Irreg	80	100	Prod	-	-	T	--	Wat	2/3	37	-	32,500	990,000	2,043	--	1,012	47,871			
7103	13	7	0	0	5-spot	480	242	Prod + Doug	700	30	U	1960	S Gas Wat	41/190	39	3.1	1,111,181	16,727,014	30,813	831,628	30,813	747,639			
7949	0	1	0	-	Irreg	Vac	400	Prod	-	-	U	1960	S Gas	1/4	34.5	-	136,000	1,708,260	14,119	331,493	2,000	77,150	*Mechanical failure		
17607	1	-	-	-	Irreg	Vac	400	Prod	-	-	U	1975	S Gas	1/10	34	-	10,000	10,000	0	331,493	0	0	*New proj. inj. well		
416	1	0	0	0	Irreg	75	100	Prod	-	-	T	1956	Wat	11/9	37	-	24,000	292,000	14,572	--	3,643	77,339			
1056 3902	1	0	0	0	Irreg	Vac	100	--	-	-	T	1960	Wat	9/11	36	-	10,000	140,000	2,293	--	573	17,379			
5646	-	-	-	-	Irreg	75	200	Prod	-	-	T	1955	Wat	1/1	37	-	35,000	1,080,000	12,103	--	4,236	66,766			
5662	1	0	0	0	Irreg	75	125	Prod	-	-	T	1956	Wat	51/49	37	-	30,000	960,000	11,222	--	3,366	98,974			
6222	1	0	0	0	Irreg	80	200	Prod	-	-	T	1955	Wat	1/1	37	-	12,000	356,000	5,307	--	2,122	43,765			
7898	1	0	0	0	Irreg	75	50	Prod	-	-	T	1955	Wat	3/2	36	-	4,000	32,000	1,362	--	544	27,592			
8459	1	0	0	0	Irreg	60	50	Prod	-	-	T	1960	Wat	9/11	36	-	15,000	370,000	1,701	--	510	17,029			
12149	1	0	0	0	Irreg	100	180	Prod	-	-	T	--	Wat	1/1	36	-	38,000	1,104,000	3,508	--	701	17,936			
12189	1	0	0	0	Irreg	100	125	Prod	-	-	T	1963	Wat	11/9	33	-	18,000	224,000	2,610	--	391	24,889			
12189	1	0	0	0	Irreg	70	75	Prod	-	-	T	1965	Wat	12/13	33	-	8,000	74,000	3,091	--	773	21,373			

TABLE 1-ENHANCED OIL-RECOVERY PROJECTS, 1975-Continued

County	Is Proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone			Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	Abd.	
WOODSON COUNTY (concl.)																
16395	--	Winterscheid	French & Winterscheid, Inc.	(P) E. Otto (B) (Throg- morton)	Otto B Lease, Throgmorton	21-23S-14E	-	-	Miss 1m	1685	5	9	0	0	0	Yes
16396	--	Winterscheid	French & Winterscheid, Inc.	(P) Eby (Figge)	Figge	28-23S-14E	640	0	Miss 1m	1685	7	16	0	0	0	Yes
6251	No	Winterscheid	John L. Haas	(-) Funk	Funk	22-23S-14E	160	0	Miss 1m	1600	10	3	1	0	-	No*
6251	No	Winterscheid	John L. Haas	(P) Haas Unit	Haas Unit	22-23S-14E	640	0	Miss 1m	1600	10	10	3	1	-	Yes
13109	No	Winterscheid	Houston-Oklahoma Oil Co.	(W) Kimbell-Rhea	Kimbell	18-14S-14E	40	0	Miss	1675	10	10	0	0	0	Yes
13162					Rhea	13-14S-14E										
1054	No	Winterscheid	Kewanee Oil Co.*	(W) Maclaskey	Maclaskey	29-23S-14E	140	20	Miss	1670	15	12	1	0	0	Yes
12212																
14365	--	Winterscheid	Arnold E. Kraft	(W) Figgee	Figgee	34-23S-14E	80	0	Miss 1m	1650	20	5	0	0	0	Yes
11700	--	Winterscheid	Arnold E. Kraft	(W) Rich A & Owens	Rick A & Owens	24-23S-14E	50	0	Miss 1m	1600	20	4	0	0	1	Yes
13070	--	Winterscheid	Arnold E. Kraft	(W) Weide	Weide	6-24S-15E	50	0	Miss 1m	1550	20	3	1	0	0	Yes
13047	--	Winterscheid	Arnold E. Kraft	(W) Weide	Weide	31-23S-15E	100	0	Miss 1m	1550	14	3	2	0	0	Yes
6143	--	Winterscheid	Tesoro Petroleum Corp.	(W) Emery Project	Ehrhardt, Ryser	33-23S-14E	500	-	Miss 1m	1680	20	24	4	0	0	Yes
14365					Ryser, Westlake, Figge	34-23S-14E										
10251	--	Winterscheid	Union Oil Co. of California	(W) W.P. Headley Lease	W.P. Headley	32,33-23S-14E	520	0	Miss dolomite	1700	20	17	3	0	0	Yes
4218	--	Winterscheid	Wells Oil Co., Inc.	(-) --	H.D. Stevenson	5-24S-14E	54	-	Miss	1695	6	6	4	0	0	Yes
1474	No	Yates Center	Bird & Hanley	(W) Yates Center	Aetna, Aetna "A" Degree of Honor Krueger	27-25S-15E 28-25S-15E 22-25S-15E	400	0	Miss	1500	5	5	1	0	1	Yes
11592	--	Yates Center	Tesoro Petroleum Corp.	(W) Lauber	Lauber, Degler Harder	21-25S-15E 22-25S-15E	280	-	Miss 1m	1480	15	14	2	-	-	Yes
WOODSON COUNTY TOTALS (Reported)							12,608	200				588	91	7	4	
SUPPLEMENTAL LIST OF QUESTIONNAIRES RECEIVED AFTER CUT OFF DATE																
ALLEN COUNTY																
11015	--	Bronson-Xenia	Geo. A. Hoffman - Oil	(W) Elsmore Project	Sisson, Ludlum	22-25S-21E	160	-	Bartl	700	12	7	-	-	-	Yes
8152	--	Elsmore Shoestring	Geo. A. Hoffman - Oil	(W) Elsmore Pool	David Roy Perry, etux, James F. Pavlicek	34-25S-21E	120	-	Bartl	720	16	12	-	-	-	--
13321*	--	Neosho Falls-Leroy	Lorraine Cleaver	(-) --	Holtz-Mentzer	26-23S-17E	380	-	Miss	1200	-	2	0	0	0	--
11361	--	Savonburg	Geo. A. Hoffman	(W) Savonburg	Joseph Lowe, etux (Nelson), Donald R. Nelson, etux, Guy Shirley, etux	28-26S-21E 21,29-26S-21E 29-25S-21E	640	-	Bartl	690	13	17	-	1	-	Yes
ANDERSON COUNTY																
3098	No	Bush City Shoestring	Ladd Petroleum Corp.	(W) East and West OKO	C. Melcher, S.P. Johnson, Willson & Melcher, Hunley & Pugsley, Ware, Doering, Herman & Weiss	7-21S-20E 8-21S-20E 16-21S-20E 15-21S-20E	424	0	Squir Sd	800	30	130	4	6	6	Yes

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)				Remarks		
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.			Oil recovered by enhanced methods	
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975		1975	Cum. 12-31-1975
16395	1	0	0	0	Irreg	0	20	Prod	-	-	T	1960	Wat	3/2	36	-	2,000	8,000	1,193	--	477	7,760	
16396	-	-	-	-	Irreg	50	15	Prod	-	-	-	--	--	3/2	36	-	5,000	20,000	16,049	--	6,420	18,598	
6251	1	-	0	-	5-spot	350	10	--	-	-	T	--	--	3/1	40	-	3,650	--	--	--	--	--	*Not enough water
6251	1	-	-	-	5-spot	250	100	Prod	-	-	T	--	--	3/1	40	-	36,500	--	--	--	--	--	
13109	2	0	0	0	Irreg	100	100	--	-	-	U	1966	Wat	1/3	34.9	-	71,400	679,400	5,475	37,996	1,825	82,425	
13162	2	0	0	0	Irreg	500	281	Prod	-	-	U	1944	S Gas	8/5	39	-	205,133	2,777,231	14,347	907,090	14,347	211,086	*Was Barbara Oil Co.
1054	2	0	0	0	Irreg	500	281	Prod	-	-	U	1944	S Gas	8/5	39	-	205,133	2,777,231	14,347	907,090	14,347	211,086	
12212	1	1	0	0	Peri 5-spot	250	1100	Prod	-	-	T	1968	Wat	1/3	38	-	401,500	1,277,500	4,745	--	1,095	--	
14365	1	1	0	0	Peri 5-spot	250	1100	Prod	-	-	T	1968	Wat	1/3	38	-	401,500	1,277,500	4,745	--	1,095	--	
11700	1	0	0	0	--	150	60	Prod	-	-	U	1965	Wat	3/17	38	-	21,900	47,400	1,095	--	400	--	
13070	1	0	0	0	4-spot Peri	100	55	Prod	-	-	U	1967	Wat	1/4	36	-	20,075	56,575	1,725	--	530	--	
13047	1	2	0	0	Peri 5-spot	250	270	Prod	-	-	T&S	1965	Wat	1/4	39	-	98,550	317,550	2,555	--	1,210	--	
6143	11	2	0	0	Peri 5-spot	1000	685	Prod + Arb	1850	311	U	1961	S Gas	1/1	35	-	2,749,062	16,450,354	20,292	383,539	--	--	
14365	11	2	0	0	Peri 5-spot	1000	685	Prod + Arb	1850	311	U	1961	S Gas	1/1	35	-	2,749,062	16,450,354	20,292	383,539	--	--	
10251	8	2	0	0	5 spot	950	167	Prod + Arb	2011	439	T	1963	Grav	17/63	38.5	-	486,832	9,516,473	22,213	340,027	22,213	340,027	
4218	1	0	0	0	--	0	-	Prod	-	-	U	1954	Gas Exp Grav	1/10	35	35	22,000	--	1,825	--	300	--	
1474	2	0	0	0	Irreg	450	426	Prod	-	-	T	1946	Gas Exp	50/1	32	-	310,737	2,078,374	8,068	322,195	8,068	322,195	
11592	8	2	0	0	Irreg	800	596	Prod + Arb	2030	500	T	1968	S Gas	1/4	38	-	1,741,201	12,435,162	14,808	746,690	--	--	
	200	81	2	0													9,151,213	110,080,854	385,838	10,837,890	247,666	9,222,295	
11015	3	-	-	-	Irreg	70	200	Prod + Lake	-	-	M	1973	S Gas	-	30	-	69,785	150,250	3,118	10,977	--	--	
8152	5	-	-	-	Irreg	600	300	Prod + Arb	1800	16	T	--	S Gas	-	30	-	--	--	261	--	--	--	
13321	-	-	-	-	--	-	-	-	-	-	--	--	-	32	-	-	0	--	788	--	0	--	*No flood
11361	-	-	-	-	Irreg	600	400	Prod + Arb	1600	16	T	--	S Gas	-	30	-	131,210	12,732,332	4,757	744,526	--	--	
3098	104	19	0	1	5-spot	800	13	Prod + Arb + Miss Lm	1625-1450	-	T	1951	S Gas	-	36	-	486,471	18,940,323	47,158	--	47,158	1,792,191	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
						S-T-R	Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
SUPPLEMENTAL LIST (Concl.)																
BARTON COUNTY																
15252	Yes	Ames	Clinton Oil Company	(W) Ames Unit	Feist, Feist "A", Henry L & Margaret Feist, Zink, Allen, Isern, Musenberg, Feist "B", Feist "C", Robl	26-18S-11W 34-18S-11W 35-18S-11W	800	0	L-KC	3150	30	8	0	0	0	Yes
15841	--	Boyd	Clinton Oil Company	(W) C. Frieb	C. Frieb	4-18S-14W	80	0	L-KC	3230	20	6	1	0	0	Yes
17199	No	Fort Zarah	Ladd Petroleum Corp.	(W) Harris "A" Lease	Harris "A" Lease	30-19S-12W	80	0	L-KC	3128	70	2	1	0	0	Yes
9812	--	Hammer	Ladd Petroleum Corp.	(-) Hammer Water Flood	Hammer "B", Johannung Birzer	35-19S-12W 36-19S-12W	160	20	L-KC	3100	220	10	0	0	0	Yes
16524	--	Knop	Clinton Oil Company	(W) Knop Field Waterflood	Knop, Fox-Rusco "B", Wess	9-19S-12W	470	0	L-KC	3130	20	5	0	0	0	Yes
16593	--	Roesler West	Clinton Oil Company	(W) Kaiser	Kaiser	15-18S-11W	160	0	L-KC	3025	225	5	0	0	0	Yes
BUTLER COUNTY																
16335	--	Paulson	I.O. Miller Inc.*	(D) Hinz	Hinz Lease	13-23S-3E	160	-	Miss	2464	28	9	-	1	-	Yes†
3509	--	Smock-Sluss	Burton Oil	(D) Falkenberg	---	25,26-26S-5E	80	-	Bartl	2700	-	4	0	0	0	Yes
3509	--	Smock-Sluss	Burton Oil	(D) Sluss	---	25,26-26S-5E	120	-	Bartl	2700	-	2	0	0	0	Yes
COFFEY COUNTY																
17283	--	Thomsen	Lorraine Cleaver	(-) ---	Bowman	10-21S-14E	160	-	Simp	1938	-	2	-	4	-	--
COWLEY COUNTY																
12927	Yes	Smith	Brunson-Spines	(W) Smith Waterflood Project	Mowder Unit, Huggins, Hann, Hann "B" Holtje, Hann "B"	10-31S-3E 15-31S-3E	120	0	Bartl	3000	16	7	2	0	0	Yes
ELLSWORTH COUNTY																
14991	No	Wilson Creek	L.G. Stephenson & Co., Inc.* (P)	Borell B-2	Borell B, B-2, C, A-1, A-2 E. Soukup, H. Kratky	20-14S-10W 19	640	0	Lans	2820	20	30	0	0	0	Yes
16442	--	Wilson Creek	L.G. Stephenson & Co., Inc. (P)	A1, Soukup & K. Vopat	A. Soukup, Baker A, Baker, K. Vopat	16-14S-10W	320	0	Lans	2800	20	16	0	0	0	Yes
16708																
16499	No	Wilson Creek	L.G. Stephenson & Co., Inc. (-)	Pekarek	Pekarek	20-14S-10W	120	0	Lans	2820	20	5	0	0	0	Yes
16265	--	Wilson Creek	L.G. Stephenson & Co., Inc. (P)	---	Vopat D	21-14S-10W	160	0	Lans	2820	20	11	0	0	0	Yes
GREENWOOD COUNTY																
9922	--	Virgil	Brunson-Spines	(W) Johnson	Johnson	23-24S-12E	450	0	Miss	1700	15	14	6	0	0	Yes
HARVEY-MCPHERSON COUNTIES																
6889	--	Harmac	Brunson-Spines	(-) Harmac Unit	Harmac Unit Kaufman & Stucky Unit	35-21S-3W 36-21S-3W	590	300	Hunt	3550	8	4	0	0	0	No*
10729	--	Hollow-Nikkel	Brunson-Spines	(W) Hollow-Nikkel Water-flood Proj.	Hollow-Nikkel Unit Schroeder Unit	1,2-22S-3W 33-21S-3W 4-22S-3W 32-21S-3W	960	320	Hunt	3500	20	8	4	0	0	No*
MORTON COUNTY																
17623	Yes	Berryman-Richfield	Ladd Petroleum Corp.	(-) Berryman-Richfield	---	26,27,34,35-32S-41W 2,3,4,8,9,10,16, 17-33S-41W	4480	0	Upper Morrow	4925	20	24	0	0	0	No

Saile and Oros—Enhanced Oil-Recovery Operations in Kansas, 1975

Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data				Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls)					Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.	Type						Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
15252	3	0	0	0	Irreg	1464	188	Arbuckle	3300	20	U	1971	S Gas	1/8	31.8	-	205,289	936,688	17,932	691,306	17,932	99,465	
15841	1	0	0	0	Irreg	0	510	Prod	-	-	U	1971	S Gas	1/2.3	38.6	-	186,235	535,639	15,529	969,416	15,529	52,382	
17199	1	0	0	0	Irreg	Vac	239	Prod	-	-	T	1974	S Gas	1/32	43	-	87,360	121,588	4,030	163,465	0	0	
9812	5	1	0	0	Irreg	396	158	Fresh	50	0	F	1963	--	58/549	38	-	287,509	3,835,881	13,654	318,026	13,654	301,446	
16524	2	1	0	1	Irreg	720	238	Dakota	95	155	U	1971	S Gas	1/3	39.6	-	173,937	814,071	5,912	609,123	5,912	105,371	
16593	3	0	1	0	Irreg	1150	339	Dakota	35	168	U	1972	S Gas	1/1.2	42.3	-	370,906	893,157	15,458	339,955	15,458	117,619	
16335	1	-	-	-	--	Grav	340	Prod + Miss Lm	-	-	-	1971	--	-	-	-	90,000	290,000	8,758	232,040	4,000	24,000	*Was I.O. Miller Estate +Well #3 converted to input
3509	4	0	0	0	Irreg	40	250	Prod	-	-	U	1950	Wat	1/49	36	-	365,000	--	9,950	599,000	--	--	
3509	1	0	0	0	Irreg	40	200	Prod	-	-	U	--	Wat	1/49	36	-	140,000	--	4,350	--	--	--	
17283	-	-	-	-	--	-	-	--	-	-	-	--	--	-	26	-	0	--	5,397	--	0	--	
12927	4	0	0	0	Irreg	1350	425	Prod + Stal-naker	2150	100	U	1966	S Gas	9/60	37	-	620,560	5,451,423	17,712	477,572	17,712	477,572	
14991	4	0	0	0	Peri	188	273	Prod	-	-	U	1969	S Gas	83/17	38	-	399,124	1,995,595	44,367	1,030,112	0	0	*Was Will P. Ash
16442	3	0	0	0	Peri	400	110	Prod	-	-	U	1972	S Gas	83/17	39	-	121,251	381,948	57,458	556,030	0	0	
16708	1	0	0	0	Peri	500	465	Prod	-	-	U	1972	--	83/17	39	-	169,848	497,912	29,400	282,729	0	0	
16499	2	0	0	0	Peri	450	85	Prod	-	-	U	1972	S Gas	83/17	39	-	61,927	470,960	31,723	550,085	0	0	
16265	2	0	0	0	Peri	450	85	Prod	-	-	U	1972	S Gas	83/17	39	-	61,927	470,960	31,723	550,085	0	0	
9922	16	1	0	0	5-spot	800	46	Prod + Arb	2100	-	U	1962	S Gas	38/70	38	-	268,488	16,045,059	11,187	340,388	-	-	
6889	0	2	0	-	Peri	0	0	Prod	-	-	U	1959	Wat & S Gas	2/5	40	-	0	6,200,639	3,259	569,427	3,259	569,427	*Temporarily shut down
10729	0	2	0	0	Peri	0	0	Equus Beds	25	140	F	1963	S Gas & Grav	7/10	40	-	0	16,012,265	12,002	898,503	12,002	898,503	*Temporarily shut down
17623	0	0	0	0	Irreg	0	0	Fresh	-	-	-	--	--	-	-	-	0	0	0	0	0	0	

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S-T-R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?	
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled		Abd.
SUPPLEMENTAL LIST (Concl.)																
PHILLIPS COUNTY																
8011	--	Dayton	Sierra Petroleum Co., Inc.	(W) Dayton Unit	Schluntz, Kaiser, R.L. Dusin, C.G. Eltiste, E.C. Garber	25-2S-19W 26-2S-19W 35-2S-19W 36-2S-19W	640	0	KC	3200	23	7	0	0	0	Yes
15214	Yes	Fredricksburg	Ladd Petroleum Corp.	(W) Seyler (Lansing- Kansas City)	Imm, Seyler "C", Seyler "A", Seyler "B"	9-1S-18W	-	-	Lans	3050	450	3	1	0	0	Yes
6746	--	Huffstutter	Ladd Petroleum Corp.	(W) North Huffstutter Unit	---	16,17,20,21,28, 29-1S-18W	3240	-	L-KC	3400	254	30	0	0	0	Yes
RUSSELL COUNTY																
8707 *	--	Trapp	Cities Service Oil Company	(W) Maag L-KC Cooperative	Maag	7-15S-13W	15	0	L-KC	3020	21	1	0	0	0	Yes
15539	--	Wilson Creek	L.G. Stephenson & Co., Inc.*	(P) Sebesta, Stoppel	E. Sebesta, R. Stoppel	24-14S-11W	320	0	Lans	2820	20	11	0	0	0	Yes
16282	--	Wilson Creek	L.G. Stephenson & Co., Inc.	(P) Sebesta A, Small A	Small A, Sebesta A	23-14S-11W 24-14S-11W	-	-	Tark	2100	4	2	0	0	0	Yes
17785	--	Wilson Creek	L.G. Stephenson & Co., Inc.	(P) Sebesta A, Small A	Small A, Sebesta A	23-14S-11W 24-14S-11W	-	-	Tark	2100	4	2	0	0	0	Yes
17954	--	West	L.G. Stephenson & Co., Inc.	(P) Sebesta A, Small A	Small A, Sebesta A	23-14S-11W 24-14S-11W	-	-	Tark	2100	4	2	0	0	0	Yes
STAFFORD COUNTY																
12237	No	Centerview	Ladd Petroleum Corporation	(-) E. Toland & O. Toland Repressuring Project	E. Toland, O. Toland	28-24S-13W	120	0	L-KC	3590	20	3	0	0	0	Yes
13617	No	Seevers North- west	Ladd Petroleum Corporation	(-) Sanders	Sanders	1-25S-14W	160	0	L-KC	3664	21	3	0	0	0	Yes
4338	--	Zenith-Peace Creek	Santa Fe Pipe & Supply, Inc.*	(D) Mc Comb S.W.D.	Mc Comb Richardson	21,22-24S-11W 22-24S-11W	-	-	Viola	3800	-	-	-	-	-	Yes†

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Project no.	Injection Wells					Well-head press. psi	Water inj. bbl./well/day	Injected-water data			Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav. deg.	Oil visc. cp. @ 60° F	Production and injection statistics (bbl)						Remarks	
	Active	In-active	Drilled 1975	Abd. 1975	Injection Pattern			Source	Depth, ft.	Thick., ft.						Type	Water Injection		Total Oil recovered from project Pri. & sec.		Oil recovered by enhanced methods		
																	1975	Cum. 12-31-1975	1975	Cum. 12-31-1975	1975		Cum. 12-31-1975
8011	6	0	0	O	Line	860	114	Prod + Chey	1060	-	T	1960	S Gas	-	36	6	251,529	3,701,285	24,328	544,138	24,328	544,138	
15214	1	0	0	O	Irreg	600	172	Dakota	1055	75	T	1969	--	3.5/1	35	-	76,772	309,303	7,407	159,798	7,407	69,229	
6746	20	4	0	O	Irreg	460	85	Prod + Dak	1055	75	T	1956	S Gas	-	36	-	617,045	10,798,422	75,357	3,389,563	75,357	1,189,563	
8707	0	0	0	O	Irreg	0	0	Prod + Dak	490	-	T	1961	S Gas	5/4	37	-	8,942	293,496	1,663	142,416	1,663	62,083	*Cancelled 6-16-75
15539	2	0	0	O	Peri	950	166	Prod	-	-	U	1970	S Gas	83/17	39	-	121,276	704,862	24,304	401,701	0	0	*Was Will P. Ash
16282	2	0	0	O	--	275	40	Prod	-	-	U	1973	S Gas	23/2	39	-	29,521	201,102	1,963	20,021	0	0	
17785																							
17954																							
12237	3	0	0	O	Irreg	Vac	103	Fresh	30	-	M	1966	--	17/20	26	25	11,255	938,896	5,176	287,970	5,176	79,158	
13617	2	1	0	O	Irreg	Vac	244	Prod	-	-	U	1967	--	50/19	29	25	178,027	1,030,479	5,509	351,990	5,509	45,277	
4338	0	0	0	1	Irreg	--	1200	Prod	-	-	T	--	Wat	-	38	-	21,900	--	738	--	--	--	*Was Hershberger Explor. †McComb lease abandoned Dec. 75

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1975—Continued

County	Is proj. uni- tized?	Field	Operator	Type and project name	Lease name	Location S - T - R	Acres in project		Oil producing zone		Oil producing wells (1975)				Has inj. been con- tinuous?
							Prod.	Abd.	Name	Depth, ft.	Thick., ft.	Active	In- active	Drilled	
REPORTS OF PROJECTS ABANDONED															
COWLEY COUNTY															
10162	No	David	Merlin Hickman	(P) Fleming Lease	Fleming	25-30S-4E									
--	--	Rauckman	Jenkins and Sons Pro.	(-) --	Higgenbottom	18-34S-3E									
15917	--	Rauckman	Jenkins and Sons Pro.	(-) Rauckman	Hanson	18-34S-3E									
EDWARDS COUNTY															
5006	--	Enlow	Messman-Rinehart Corpor- ation	(-) Enlow	Enlow	9-24S-16E									
ELK COUNTY															
15412	--	Longton	H.G. Forbes	(W) Clevenger	Clevenger	34-29S-12E 3-30S-12E									
ELLIS COUNTY															
14169	--	Bemis	Sohio Petroleum Company	(-) Bemis "B"	Bemis "B"	15-11S-17W									
14170	--	Bemis	Sohio Petroleum Company	(-) Bemis "A"	Bemis "A"	16-11S-17W									
GRAHAM COUNTY															
14679	--	Casey Jones	Don E. Pratt	(-) Casey Jones Flood Unit	--	--									
PHILLIPS COUNTY															
15704	--	Mont-Sol	Phillips Oil Operating Co.	(-) --	Meyer	7-4S-18W									
PRATT COUNTY															
14900	--	Chance	W.L. Kirkman, Inc.	(-) Williams	Williams	29-26S-13W									
RICE COUNTY															
13843	--	Chase-Silica	Fell & Wolfe Oil Co.	(D) Sledd	Sledd	34-19S-9W									
RUSSELL COUNTY															
17122	No	Fairport	Shields Oil Producers, Inc.	(W) Holland Waterflood	Holland	17-12S-15W									
10485	No	Hall-Gurney	John O. Farmer, Inc.	(-) Kaps	Kaps	32-14S-12W									
SALINE COUNTY															
16311	--	Salina East	Tom Brown Construction, Inc.	(-) --	Graham	8,9-14S-2W									
9740	--	Salina East	Tom Brown Construction, Inc.	(-) --	Muir	13-15S-3W									
STAFFORD COUNTY															
12796	--	McCandless	Richard Dun	(-) Goodman	R.W. Goodman	30-25S-13W									
15587	No	Zenith-peace Creek	Fell & Wolfe Oil Co.	(D) Volker	Volker	36-23S-11W									
TREGO COUNTY															
10154	--	Groff	John O. Farmer, Inc.	(-) Holtsinger	Holtsinger	25-14S-21W									
WABAUNSEE COUNTY															
14051	--	Davis Ranch	Exxon Corporation	(-) G.H. Davis 'A'	--	33-13S-10E									
WOODSON COUNTY															
15500	--	Owl Creek	N&B Enterprises	(-) --	F. Toedman #3	8-25S-16E									

TABLE 2.--COUNTY SUMMARY OF ENHANCED RECOVERY PROJECTS IN KANSAS--1975.

COUNTY	TOTAL OIL FROM PROJECT AREA bbl.	OIL RE-COVERED BY ENHANCED METHODS bbl.	WATER INJECTED bbl.	CURRENT PRODUCING ACRES	ACTIVE PRODUCING WELLS	ACTIVE INJECTION WELLS	WELLS DRILLED		NUMBER OF PROJECTS
							OIL	INJ.	
ALLEN	248,162	201,959	3,205,849	6,884	608	461	44	21	38
ALLEN-ANDERSON	7,234	7,234	68,818	150	28	12	0	0	1
ALLEN-BOURBON	1,091	0	0	0	11	0	0	0	1
ALLEN-NEOSHO	8,063	8,063	279,975	765	67	30	0	0	2
ANDERSON	167,022	132,248	2,657,518	3,367	755	583	41	14	21
BARBER	221,779	167,884	5,211,203	4,403	72	35	4	1	15
BARTON	567,257	397,504	8,166,319	10,217	283	107	11	4	82
BARTON-RICE	33,309	33,309	602,403	370	8	8	0	0	1
BARTON-RUSSELL	50,575	25,715	851,561	400	16	8	0	0	1
BARTON-STAFFORD	16,417	12,919	255,757	170	9	3	0	0	2
BOURBON	41,581	35,131	410,919	975	75	63	8	0	6
BUTLER	1,154,575	748,142	50,486,854	16,828	663	296	9	5	100
BUTLER-COWLEY	17,185	1,849	25,550	1,600	16	2	0	0	2
BUTLER-MARION	1,400	800	14,400	81	2	2	0	0	1
CHASE	14,273	0	113,568	50	4	2	1	0	1
CHASE-GREENWOOD	12,272	4,500	146,000	250	13	2	0	0	1
CHASE-LYON	10,400	3,000	50,000	80	11	2	0	0	1
CHAUTAUQUA	297,363	230,075	2,093,273	16,556	629	136	31	6	47
CHAUTAUQUA-ELK	8,206	0	147,700	127	20	19	0	0	1
CLARK	5,428	5,428	74,018	1,280	3	2	0	0	1
COFFEY	33,379	11,888	277,007	935	64	16	5	0	13
COFFEY-WOODSON	62,956	62,956	423,980	220	25	8	0	0	2
COMANCHE	16,797	10,000	70,000	480	2	2	0	0	1
COWLEY	739,951	493,365	11,525,806	16,779	359	122	107	8	63
COWLEY-ELK	659	0	600	0	7	2	1	0	1
COWLEY-GREENWOOD	4,713	4,713	109,500	20	3	1	1	0	1
CRAWFORD	18,092	11,301	470,126	750	131	117	2	1	7
DECATUR	328,094	253,894	3,156,928	5,857	73	32	0	0	13
DICKINSON	6,834	0	36,500	320	9	1	0	0	1
DOUGLAS	3,281	1,400	0	127	17	1	2	0	2
DOUGLAS-FRANKLIN	19,741	19,741	416,100	157	23	20	0	0	1
EDWARDS	2,075	2,075	4,875	100	1	1	0	0	1
ELK	59,093	9,412	1,363,192	1,720	40	30	19	15	9
ELLIS	697,779	388,481	11,797,177	8,291	258	82	9	2	65
ELLIS-ROOKS	71,557	71,557	1,698,016	352	21	10	0	0	1
ELLIS-RUSSELL	33,088	33,088	592,755	450	11	3	0	0	1
ELLSWORTH	211,288	19,219	1,195,475	2,006	84	15	1	0	8
FINNEY	204,026	24,492	562,864	2,080	29	4	0	0	3
FINNEY-HASKELL	629,624	0	836,436	0	63	7	0	0	1
FRANKLIN	47,170	17,988	386,049	1,324	151	83	12	1	13
GOVE	54,229	3,400	100,716	1,400	13	6	0	0	7
GRAHAM	826,230	633,085	11,289,497	18,417	257	114	13	0	48
GRAHAM-SHERIDAN	40,448	40,448	197,100	130	4	1	0	0	1
GRAHAM-TREGO	9,376	9,376	451,217	290	7	3	0	0	1
GREENWOOD	580,725	387,564	12,664,278	18,972	663	225	8	5	100
HARPER	54,595	0	313,342	400	14	2	0	0	2
HARVEY	214,065	122,697	8,503,328	4,032	110	30	2	0	5
HARVEY-MCPHERSON	15,261	15,261	0	1,550	12	0	0	0	2
HASKELL	8,791	0	13,715	640	3	1	0	0	1
HODGEMAN	210,102	57,966	2,779,817	3,120	47	15	0	0	12
JACKSON	9,332	0	300,000	400	7	1	0	0	1
JOHNSON	10,000	3,345	47,335	45	19	6	1	0	3
KEARNY	22,087	0	6,768	0	2	1	1	0	1
KINGMAN	275,701	74,428	1,973,656	2,520	30	16	0	0	6
KINGMAN-PRATT	19,264	19,264	942,971	800	12	7	0	0	1
KINGMAN-SEDGWICK	10,075	0	0	0	11	0	0	0	1
LABETTE	4,666	2,922	47,450	145	25	5	15	0	4
LABETTE-MONTGOMERY	1,800	0	13,500	240	20	10	0	0	2
LANE	74,099	0	66,809	120	8	2	3	1	2
L INN	17,078	6,275	826,520	2,934	215	171	7	1	7
L INN-MIAMI	2,872	2,872	29,000	40	4	10	0	0	1
LYON	83,630	0	46,220	350	9	3	0	0	2
MCPHERSON	233,056	158,763	9,920,227	8,030	155	45	20	1	39
MCPHERSON-MARION	15,332	14,132	495,715	800	8	7	0	0	1
MARION	5,393	0	351,392	880	11	2	0	0	3
MEADE	89,925	89,925	998,895	3,480	10	10	0	0	2
MIAMI	38,846	7,639	1,010,725	1,603	190	118	19	7	9
MONTGOMERY	146,547	57,404	1,213,946	3,877	335	168	54	59	29
MORRIS	943	0	255,500	40	1	1	0	0	1
MORTON	1,338,624	1,334,576	9,918,406	17,900	98	29	1	0	7
NEOSHO	104,345	75,999	2,177,656	5,311	593	217	15	6	20
NESS	203,153	48,635	2,292,979	1,780	37	13	16	3	13
NORTON	10,343	2,400	41,160	120	4	1	0	0	1
PAWNEE	123,392	40,108	1,172,347	1,292	28	12	3	1	11
PHILLIPS	431,270	385,551	4,111,215	9,805	153	80	1	0	21
POTTAWATOMIE	11,300	0	328,000	160	2	1	1	0	1
PRATT	170,796	147,307	6,432,609	5,374	70	39	4	0	18
RAWLINS	344,530	114,482	3,799,659	6,380	72	34	4	1	8
RENO	247,956	121,877	7,670,991	2,510	62	20	0	0	12
RENO-RICE	5,569	4,863	7,372	400	8	1	0	0	1
RENO-STAFFORD	31,693	31,693	3,944,514	1,000	8	8	0	0	2
RICE	720,310	468,013	9,461,970	12,641	259	96	46	6	42
ROOKS	849,688	669,375	16,129,980	13,735	362	147	0	1	61
RUSH	24,933	21,107	160,623	550	8	3	0	0	2
RUSSELL	2,314,054	1,665,048	40,307,213	24,931	843	348	16	1	151
SALINE	44,335	30,097	1,768,325	2,450	37	11	5	1	8
SCOTT	5,091	2,545	81,465	120	2	1	0	0	1
SEDGWICK	315,418	279,263	6,844,599	4,927	125	63	0	0	13
SEWARD	33,751	18,590	896,187	1,030	3	2	0	0	1
SEWARD-STEVENS	124,432	124,432	1,481,054	880	5	2	0	0	1
SHERIDAN	123,569	118,111	1,866,657	2,034	29	16	0	0	6
STAFFORD	633,533	436,901	11,379,859	10,046	226	108	10	3	62
SUMNER	610,471	417,265	9,309,161	7,328	148	71	0	0	23
TREGO	278,256	85,250	2,049,423	5,210	80	20	0	0	17
WABAUNSEE	8,037	3,688	682,185	190	4	2	4	0	2
WILSON	58,369	55,788	1,905,564	3,042	151	117	12	2	16
WOODSON	385,838	247,666	9,151,213	12,608	588	200	7	2	53
TOTALS	18,701,313*	12,108,726*	320,017,096	335,530	10,871	4,972	592	179	1,400

*Some operators reported total oil produced from projects, but did not indicate how much of the production should be attributed to enhanced recovery methods.

State and Cross-Enhanced Oil Recovery Operations in Kansas, 1975

TABLE 3.--SELECTED PETROLEUM INDUSTRY REFERENCES.

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- 10: Oil and Gas Resources of Western Kansas, W. A. Ver Wiebe (1938)
- 13: Western Kansas Oil and Gas Developments During 1938, W. A. Ver Wiebe (1939)

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- 6: Part 1: General Geology of Oil and Gas, R. C. Moore, et al. (1920-1927)
- 7: Geology of the Eldorado Oil and Gas Field, A. E. Fath (1921)
- 11: Geologic Investigations of Western Kansas, N. W. Bass (1926)
- 23: Origin of the Shoestring Sands of Greenwood and Butler Counties, N. W. Bass (1936)
- 28: Exploration for Oil and Gas in Western Kansas During 1939, W. A. Ver Wiebe (1940)
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M-3A: Oil and Gas Fields in Kansas--1975, M. O. Oros, Scale--1:250,000 (1 in. = 8 mi.)

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ANNUAL SECONDARY RECOVERY AND REPRESSURING QUESTIONNAIRE (1975)

Please return to: Kansas Geological Survey, 1930 Ave. A - West Campus
Lawrence, KS 66044

(Records will be permanently filed with Conservation Division, State
Corporation Commission of Kansas, 3830 S. Meridian, Wichita, KS 67217)

FIELD NAME: _____; OPERATOR NAME: _____

PREVIOUS OWNER, IF PROPERTY WAS PURCHASED: _____

TYPE OF PROJECT (Please check one):
 Controlled Waterflood (W) Dump Flood (D) Air Injection (A)
 Pressure Maintenance (P) Steam Flood (S) Fire Flood (F)

PROJECT OR UNIT NAME: _____ KCC NUMBER: _____

IS PROJECT UNITIZED? _____

LEASE NAME AND LEGAL DESCRIPTION: S. T. R., County

CURRENT ACREAGE IN PROJECT: _____; DEPLETED ACREAGE: _____

OIL PRODUCING ZONE:
 Name: _____ Depth to top: _____ ft.; Thickness: _____ ft.

OIL PRODUCING WELLS (in 1975):
 Avg. number producing: _____; Inactive: _____;
 Number drilled: _____; Abandoned: _____.

INJECTION WELL DATA (for 1975):
 Has injection been continuous? Yes ___; No ___. If not, explain _____

Avg. number now injecting: _____; Inactive: _____;
 Number drilled: _____; Abandoned: _____.
 Pattern of injection wells (Please check one -- See pattern below):
 4-spot 5-spot 7-spot Line drive (Line)
 Peripheral or perimeter (Peri) Irregular or random (Irreg)



Key: ● -oil well; ○ - water input

Avg. well-head inj. pressure, _____ psi; water inj., _____ bbls;
 or air or gas injected, _____ MCF, per well, per day. (Over)

CO-11F-1976

SOURCE OF INJECTED WATER:
 Produced water: Yes No Part

Water source other than produced water:
 Formation, zone, or source: _____
 Depth to top: _____ ft.; Thickness: _____ ft.

TYPE OF INJECTED WATER (Please check one):
 Fresh (F) Mixture of fresh water and brine (M)
 Treated brine (T) Untreated brine (U)
 Special additive (Surfactant (S), Polymer (P), Micellar Solution (MS), etc. Indicate type of additive.)

DATE OF FIRST INJECTION, Month: _____ Year: _____.

GIVE PRINCIPAL OIL PRODUCTION MECHANISM Before SECONDARY RECOVERY OR
 REPRESSURING EFFORT (Please check one):
 Water drive (Wat) Gas expansion (or gas cap) drive (Gas Exp)
 Solution gas drive (S Gas) Gravity drainage (Grav)
 Other, or combination of above (please list): _____

GIVE OIL-WATER RATIO PRIOR TO START OF FLOOD: Oil _____; Water _____

OIL GRAVITY: _____ API°; OIL VISCOSITY, cp @ 60°F.: _____

PRODUCTION AND INJECTION DATA - 1975

(Enter a zero if no oil was produced, and if no water or gas was
 injected. Estimate production and injection data if records are
 incomplete.)

	1975	Cumulative
Fluid injected or dumped into producing zone (bbls):	_____	_____
Gas or air injected into producing zone (MCF):	_____	_____
Oil production from project area (bbls):	_____	_____
Amount attributed to enhanced recovery methods (bbls):	_____	_____

Name, title, and address of person completing this questionnaire:

Name: _____; Title: _____

Company: _____

Street, RFD, or Box No.: _____

City: _____; State: _____ Zip: _____

Date: _____

Fig. 3--Questionnaire mailed to operators of enhanced oil recovery projects, requesting data on 1975 operations.