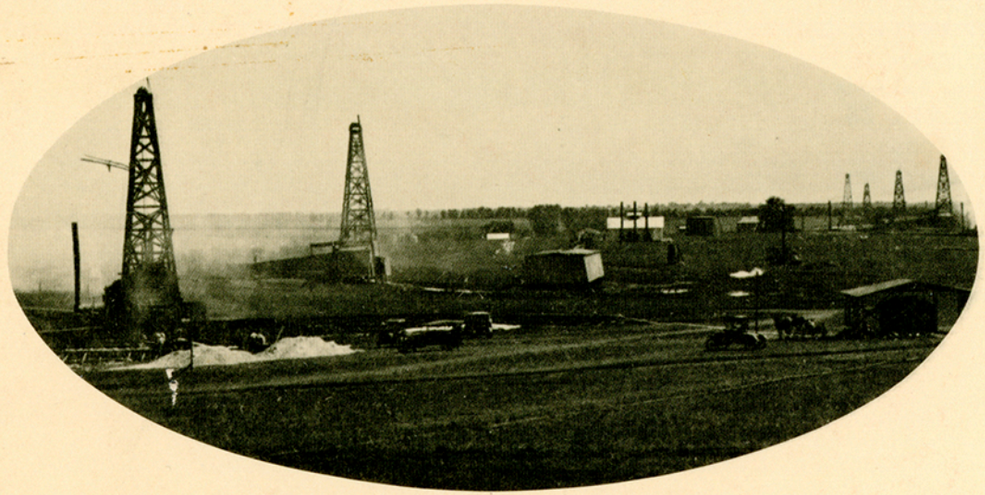
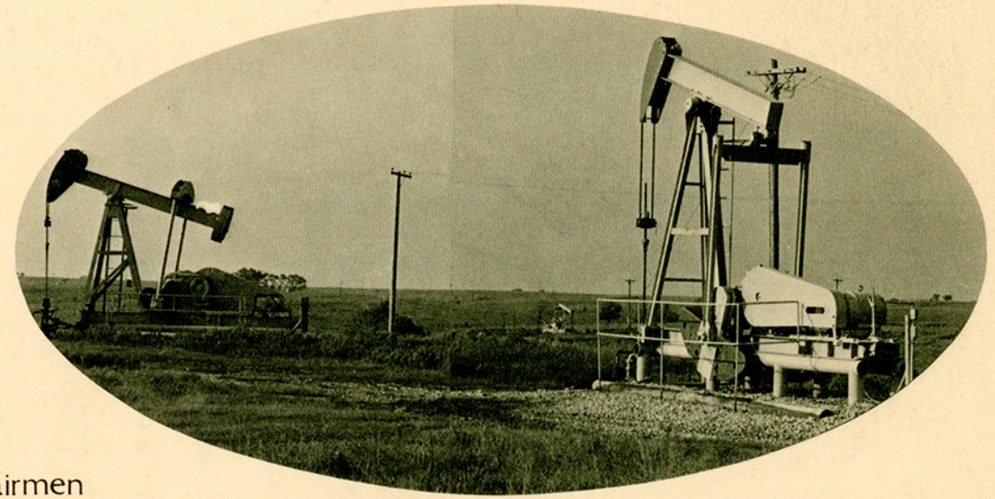
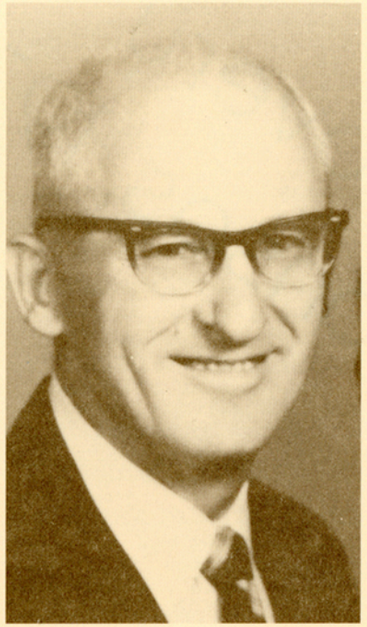


Enhanced Oil-Recovery Operations in Kansas, 1976



ENERGY RESOURCES SERIES 9

By Margaret Oros, Donna Saile,
Ruth Sherman, and Cynthia Woods
For The Kansas Enhanced Oil Recovery Committee, M. O. Oros and M. C. Colt, Co-Chairmen



When Carl Pate took his well deserved retirement last year, his many friends both in and out of the oil industry were happy for him and for his wife, Dema; at the same time these same friends are missing a most valued and trustworthy confidant and helper. In his over thirty-five years with Oilfield Research Laboratories, uncounted numbers of us depended not only on Carl's ability but on the honesty and integrity which were so characteristic of him.

Therefore, in recognition of Carl Pate's many years of devoted service to our industry and to his friends, his fellow members of the Kansas Enhanced Oil Recovery Committee dedicate their annual report for 1976 to him.

COVER DESIGN:

El Dorado Field scenes - Butler County - 1917 and 1977.

This venerable field has produced more than 280 million barrels of crude oil and large amounts of natural gas since its discovery more than sixty years ago. It still yields a million barrels of oil a year.

COVER DRAFTING: Renate Hensiek

ENHANCED OIL-RECOVERY OPERATIONS IN KANSAS, 1976

Margaret O. Oros, Donna K. Saile,
Ruth Sherman, and Cynthia Woods

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Margaret O. Oros, Donna K. Saile, Ruth Sherman, and Cynthia Woods

KANSAS GEOLOGICAL SURVEY
ENERGY RESOURCE SERIES 9
ENHANCED OIL-RECOVERY IN KANSAS, 1976

ABSTRACT

Data for 1,454 enhanced oil-recovery projects are listed in this report, and a map shows their geographic distribution in 69 Kansas counties. Included are 678 projects identified as waterfloods, 371 pressure maintenance operations, 261 dump floods, 3 firefloods (thermal), 1 miscible fluid project, and 140 that were not identified as to type.

Total crude oil production in Kansas during 1976 was 58,714,198 barrels. Of this, 19,161,004 barrels (32%) were recovered from project areas. The records show that 17 barrels of water were injected for every barrel of oil produced (319,529,347 bbl water to 19,061,004 bbl oil). There were 5,041 water injection wells and 11,522 oil wells in operation during the year in the project areas. A graph shows oil and natural gas production from the late 1800's to 1976, and gives the years of oil and gas discoveries in Kansas' structural provinces. Also shown is the approximate quantity of oil produced by enhanced recovery methods each year.

Table 1 of the report lists fields, pay zones and their depths, and sources of water. Injection patterns are indicated, and companies also furnished information on daily and yearly water injection. Annual and cumulative oil production figures are given.

Stratigraphic positions of oil-producing zones and subsurface water sources are shown on a rock-classification chart.

Tertiary oil-recovery research continues at the University of Kansas, which is aided by advice received from people working in the industry.

INTRODUCTION

The title "Enhanced Oil Recovery" is now used for all production methods initiated 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 wellbore. It then is 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 has been that about one-third of the oil originally in place will be recovered by use of primary production methods (flowing and pumping). Another one-third can usually be produced by injecting water in one or more holes to displace and move the residual oil to another well (waterflooding). Quite often, however, much more than one-third of the oil remains in the rocks after production by primary and secondary recovery methods has been completed. For many years now, additional methods have been used, or tried experimentally, in attempts to wring out more of the oil. These tertiary methods include, among others, the use of steam, fire (thermal), various special gases (including CO_2), wetting agents and detergents, solvents, and miscible agents. Studies of core samples enable operators to identify factors that may affect recovery rates, such as the types of clay minerals that are present, 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 current research programs are 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 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 wellbore.

1976 PROJECT DATA

In the past four years, the number of projects for which information was received for the enhanced oil-recovery reports has varied; 1,402 in 1973, 1,358 in 1974, 1,400 in 1975, and the present high of 1,454 in 1976 (Table 1). We received data on projects located in 69 counties (Figure 1); a number cross county boundaries and are listed as multiple-county projects in the report. A summary of county data is presented in Table 2.

In Table 1 we list oil pay zones and sources of water, and indicate bed thicknesses and their average depth below the surface. 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 part 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.

The various recovery methods used in Kansas fields are indicated in this report. In Table 1 they are classified as 678 waterfloods, 371 pressure maintenance, 261 dump floods, 3 fireflood or thermal, 1 miscible flood, and 140 that were not identified.

About 17 barrels of water or brine were injected for every barrel of oil recovered by enhanced recovery methods in 1976 (19,061,004 barrels of oil to 319,529,347 barrels of water). Several of the operators also stated that minor amounts of gas were injected in their fields. An average of 11,522 oil wells and 5,041 injection wells were operating on the 364,666 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.

This report covers only projects that were in operation during 1976. The cumulative statics in Table 1 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, and some, received too late for inclusion in county groups, were placed in a "Supplemental list of Projects" group.

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 an estimated 15.1 million barrels (12.2%) of that oil (Goebel, *et al.*, 1957). The 1976 total of 58,714,198 barrels of oil is less than half the production in 1956. The companies that sumbitted information to us reported that 11,939,142 barrels of oil were produced by enhanced oil recovery methods, and 19,061,004 barrels in all were produced on the project acres. It is felt by the authors that a number of the operators were confused by the term "enhanced" as it was used on the questionnaires, and that the higher total (19,061,004) more accurately represents oil produced by secondary and tertiary methods in Kansas during 1976. This is one-third of the oil produced in Kansas during the year.

Figure 3 is a graph of crude oil and natural gas production(that also shows the estimated amount of oil that has been produced by secondary and tertiary methods) since the beginning of production prior to 1900. The figure also includes dates of discovery of oil and gas production in the State's structural provinces, and two national and international rulings that affected the industry.

In our report, official identification numbers for the projects are given in the first column of Table 1. Through 1976, The Corporation Commission numbered them sequentially, with higher numbered projects the latest to be started. The Commission, in early 1977, began using a new system, which now will identify the type of project and the date that it was initiated. The number CR10775, for instance will tell us that this is a repressuring permit issued by the Corporation Commission (CR), in October (10), 1977 (77), and that it was the fifth permit of this type processed that month (5). Other letters will be used to identify other types of projects -- D for Disposal wells, etc.

CURRENT RESEARCH

Members of the Department of Chemical and Petroleum Engineering, the Department of Geology, and the Kansas Geological Survey, at The University of Kansas, are involved in a program of research and development of new oil-recovery processes. The Tertiary Oil Recovery Project (TORP) is viewed as a cooperative activity with the Kansas oil industry. To this end, a Tertiary Oil Recovery Advisory Board, consisting of representatives of the principal Kansas oil-producing organizations, has been established. Recovery processes are being designed for use on Kansas reservoirs, and, if successful, the new technology should lead to increased crude oil recovery in the state.

Tertiary oil recovery processes, used after oil has been produced from fields by conventional waterflooding or dry gas injection (secondary recovery), involve the injection of specific chemicals or heat into a reservoir to recover oil that would otherwise be left behind. The program began on July 1, 1974, and is funded by the State of Kansas. At present, in the project at KU, two teaching staff members, three full-time research associates, and ten graduate students are involved in the research.

Project work, at the University, has been divided into five related activities:

1. Assessment of the Resource

   Industry and Kansas Geological Survey well data have been compiled to estimate the amount of oil resources which will remain in present Kansas oil fields after primary and secondary recovery are complete. The purpose is to obtain a "target" for tertiary oil recovery processes. Oil resource information has been grouped by major geologic formation in the tabulation.

2. Establishment of a Tertiary Oil-Recovery Laboratory

   Investigation of new oil-recovery technologies requires laboratory experimentation and testing. A laboratory for this work has been established and is still under development. The initial oil-recovery process being examined in the laboratory is micellar flooding. In micellar flooding, detergent-type chemicals (micellar solutions) are used to "wash" oil from the rock pores, either by mixing with the crude oil or by sufficiently lowering the interfacial tension tc increase oil-recovery efficiency.

Research projects have been initiated to investigate micellar fluid displacement mechanisms, polymer displacement, and micellar solution behavior and formulation. Projects to study the analytical techniques which must be used in conjunction with the displacement experiments are also underway. These involve the use of liquid chromatography to determine surfactant compositions in the micellar solutions, and the use of a spinning-drop interfacial-tension device to measure tensions between the reservoir crude oil and injected micellar solutions.

3. Development of Computer Models

Digital computer models are useful in both laboratory and field applications of the various oil-recovery proposals. Computer models are being written which describe the physical behavior of the micellar process as well as the economics of the method.

4. Dissemination of Technical Information

Information on the various new recovery methods is being distributed to oil producers in Kansas and the Mid-Continent area. This is being done through conferences, publications, and seminars. The initial conference was held in Wichita in October, 1975. The publication series was initiated during the winter of 1976. A second conference was held in Wichita in April, 1977. A Proceedings volume will be published and distributed during the summer of 1977.

5. Liason with Field Projects in Kansas

Local project members interact with company personnel operating selected field projects. Cities Service Oil Company and the Energy Research and Development Administration (ERDA) are jointly conducting the only micellar flood test in the state. Project members maintain contact with their staff to learn the progress of their work in Butler County's El Dorado field.

Kansas Geological Survey research work has included the drilling of test holes in southeastern Kansas to obtain data on oil-bearing sands. A coming publication will show the results of the study of these records, and of the logs of other holes that have been drilled in the area.

HISTORICAL REVIEW

The roots of enhanced oil recovery operations date back to the late 1800's. 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, by York State Oil Company, in the Seeley pool of Greenwood County (Taliaferro and Eakin, 1955). Water was injected on that date into the Bartlesville sand at a depth of 1,940 feet. Two other projects started in late 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 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 1935 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.

P. Grandone (U. S. Bureau Mines, R. I. 3761 *[1944]* gathered statistics on waterflood operations in Kansas for the years 1935 through 1942. The three projects operating in 1935 had 8 oil wells, which produced 3,726 barrels of oil, and 15 input wells that injected 130,181 barrels of water into the producing zones. By 1942 there were 49 projects in operation. His data are complete for only 10 months of 1942, but oil production in that period was one and a quarter million barrels.

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.

The Committee was reorganized on May 28, 1963, at the Kansas Corporation Commission's Conservation Division offices in Wichita, Kansas. At that time Mack C. Colt and E. D. Goebel were elected Co-Chairmen. The questionnaire on secondary recovery operations in Kansas was prepared in accordance with the rules and regulations of the Kansas Corporation Commission, by a pilot committee, with help from a representative of the Interstate Oil Compact Commission. It was then submitted to the entire committee for approval.

Although its format has changed, the present questionnaire (page 106) is very much like the original one prepared in 1963. No questions have been deleted, and only one additional request is made -- for oil viscosity.

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 come 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 Corpora-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. These and other pertinent reports are listed in "Selected Petroleum Industry References, on page vii. The reports give companies an over-view 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 4) are filed in the Conservation Division offices after completion of tabulation.

ACKNOWLEDGMENTS

We wish to thank the individuals and companies operating the secondary and tertiary projects for their assistance. This report could not have been prepared without their help. 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, Yates Center, KS. Geological Survey members of the Committee are Douglas L. Beene, Robert L. Dilts, and William J. Ebanks, Jr.

Frank Broadfoot and Dee Brunner, of the Conservation Division, Kansas Corporation Commission, Wichita, were called on all through the year. They helped us in many ways. We also appreciate Dr. G. Paul Willhite's contribution on the status of tertiary oil recovery research at The University of Kansas.

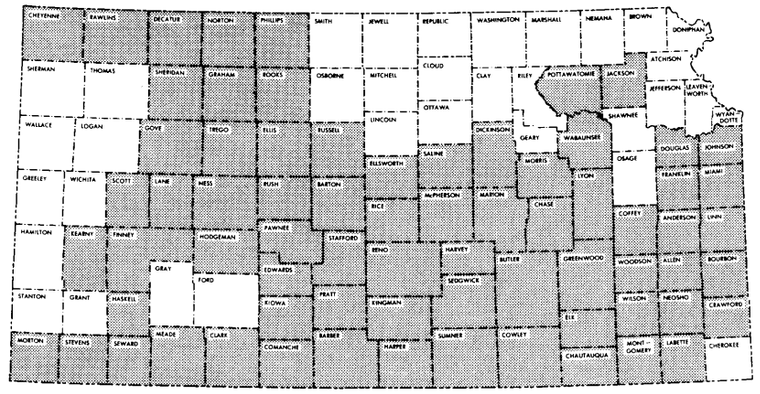


Fig 1--Map of Kansas showing counties with enhanced recovery projects.

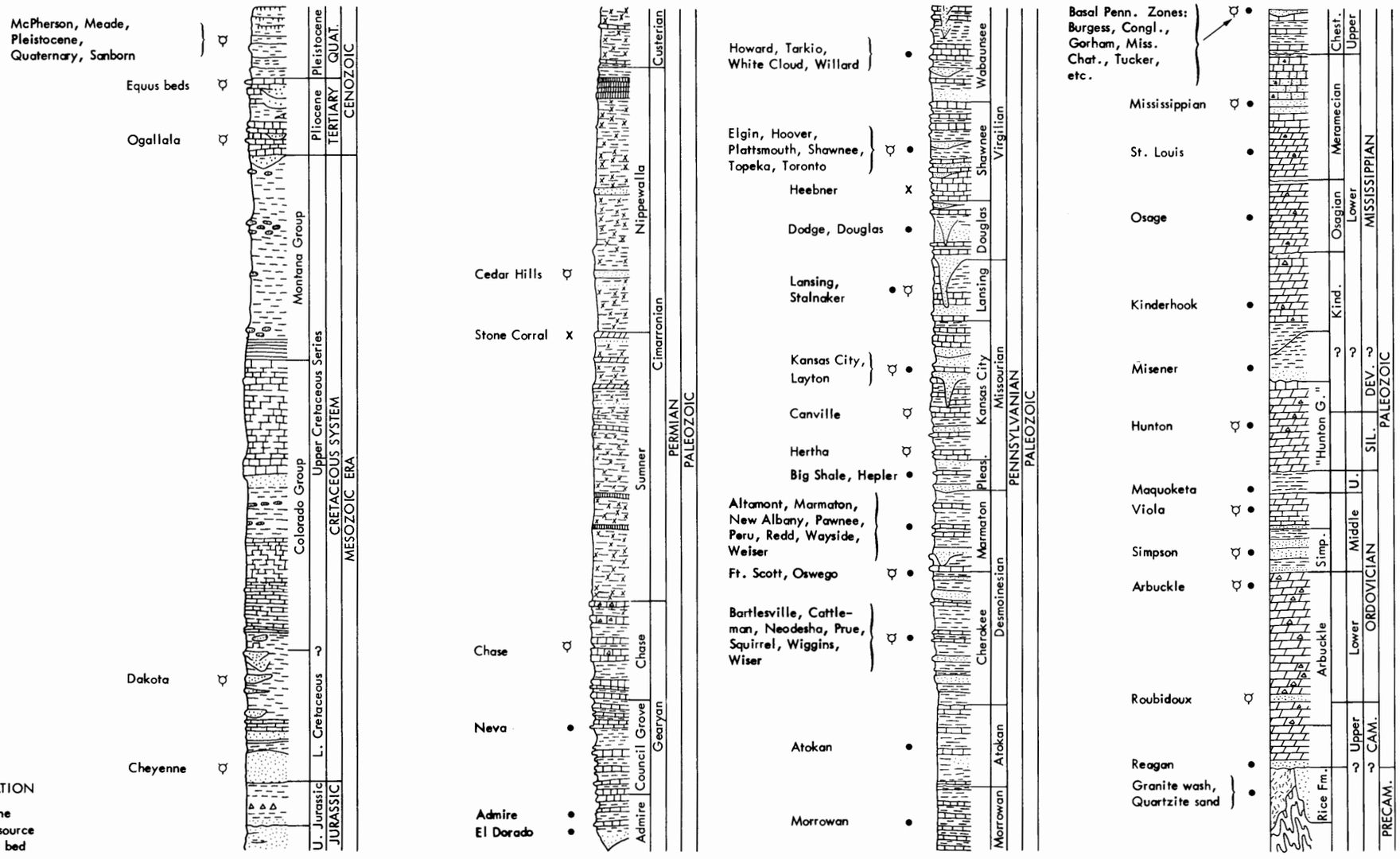


Fig. 2--Classification of rocks in Kansas (Oros, 1971, modified from Jewett et al, 1968). Stratigraphic positions of oil producing zones, water sources, and marker beds are indicated.

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.

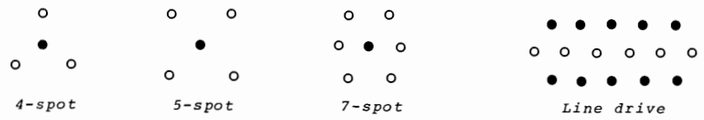
In addition to the indicated water source beds, a number of the projects depend on fresh water from streams, lakes, and municipal water supplies.

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 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

TYPE OF MATERIAL INJECTED

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

Special additives:

MS = Micellar solution
P = Polymer
S = Surfactant

AVERAGE WELL-HEAD INJECTION PRESSURE

Pounds per square inch, as indicated, and:

Grav = Gravity
Vac = Vacuum

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 Cld	= White Cloud

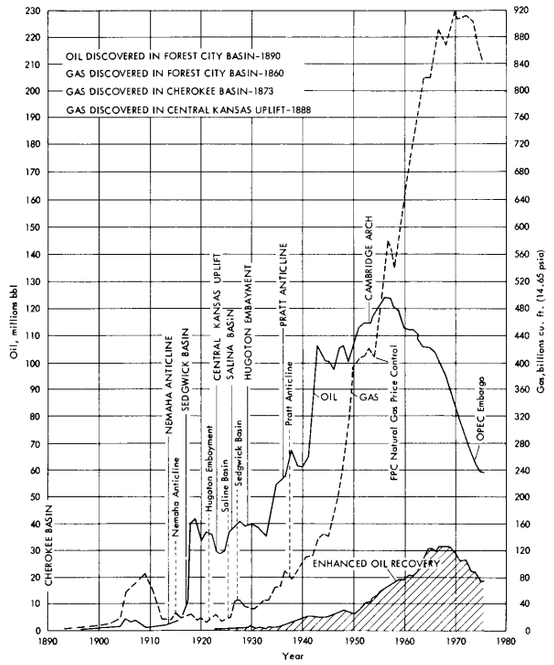


Fig. 3--Annual oil and gas production in Kansas from before 1900 to 1976, and year of discovery of oil and gas in different structural provinces. Estimated amount of crude oil produced each year by enhanced recovery methods (secondary and tertiary) is also shown.

ANNUAL SECONDARY RECOVERY AND REPRESSURING QUESTIONNAIRE (1976)

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, 245 North Water, Wichita, KS 67202)

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

_____ ___,___,___,_____

_____ ___,___,___,_____

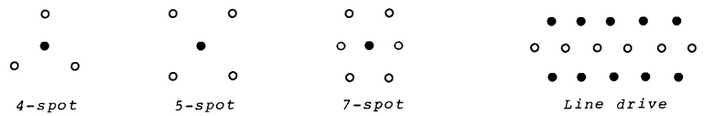
_____ ___,___,___,_____

CURRENT ACREAGE IN PROJECT:_____; DEPLETED ACREAGE:_____

OIL PRODUCING ZONE:
Name:_____Depth to top:_____ft.; Thickness:_____ft.

OIL PRODUCING WELLS (in 1976):
Avg. number producing:_____; Inactive:_____;
Number drilled:_____; Abandoned:_____.

INJECTION WELL DATA (for 1976):
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; o - 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 - 1976

(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.)

	1976	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. 4--Questionnaire mailed to operators of enhanced oil-recovery projects, requesting data on 1976 operations. (The term "Enhanced oil-recovery," as used here, includes all methods of recovery except primary.)

SELECTED PETROLEUM INDUSTRY REFERENCES

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7: Geology of the Eldorado Oil and Gas Field, A. E. Fath (1921)
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28: Exploration for Oil and Gas in Western Kansas During 1939, W. A. Ver Wiebe (1940)
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57: Exploration for Oil and Gas in Eastern Kansas, J. M. Jewett and G. E. Abernathy (1945)
62: Exploration for Oil and Gas in Western Kansas During 1945, W. A. Ver Wiebe (1946)
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75: Oil and Gas Developments in Kansas During 1947, W. A. Ver Wiebe, et al. (1948)
77: Oil and Gas in Eastern Kansas, Developments 1944 to 1948, J. M. Jewett (1949)
78: Oil and Gas Developments in Kansas During 1948, W. A. Ver Wiebe, et al. (1949)
87: Oil and Gas Developments in Kansas During 1949, W. A. Ver Wiebe, et al. (1950)
92: Oil and Gas Developments in Kansas During 1950, W. A. Ver Wiebe, et al. (1951)
97: Oil and Gas Developments in Kansas During 1951, W. A. Ver Wiebe, et al. (1952)
103: Oil and Gas Developments in Kansas During 1952, W. A. Ver Wiebe, et al. (1953)
104: Oil and Gas in Eastern Kansas, J. M. Jewett (1954)
107: Oil and Gas Developments in Kansas During 1953, W. A. Ver Wiebe, et al. (1954)
112: Oil and Gas Developments in Kansas During 1954, W. A. Ver Wiebe, et al. (1955)
122: Oil and Gas Developments in Kansas During 1955, E. D. Goebel, et al. (1956)
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172: Oil and Gas Developments in Kansas During 1963, P. L. Hilpman, et al. (1964)
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16: Summary of Secondary Recovery and Pressure Maintenance Projects in Kansas During 1963, E. D. Goebel and M. C. Colt, (1964)
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Future Prospects for Kansas: Oil and Gas Exploration and Production, W. J. Ebanks, Jr., 1974

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2: Kansas Mineral Industry Report, 1973
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1: Secondary Recovery and Pressure Maintenance Operations in Kansas, 1972, R. L. Dilts for the Kansas Secondary Recovery and Pressure Maintenance Committee (1973)
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3: Enhanced Oil-Recovery Operations in Kansas, 1973, M. O. Oros and D. K. Saile
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7: Enhanced Oil-Recovery Operations in Kansas, 1976, M. O. Oros and D. K. Saile
8: 1975 Oil and Gas Production in Kansas, D. L. Beene (1977)

MAPS

M-6: Oil and Gas Pipelines and Industries in Kansas--1974, M. O. Oros, Scale--1:250,000 (1 in. = 8 mi.)
M-3A: Oil and Gas Fields in Kansas--1975, M. O. Oros, Scale--1:250,000 (1 in. = 8 mi.)
M-7: Precambrian Structure of Kansas, V.Cole (1976)

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Stratigraphy and structure of Middle and Upper Ordovician rocks in the Sedgwick Basin and adjacent areas, south-central Kansas: U.S. Geol. Survey Prof. Paper 702, W. L. Adkison (1972)
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Burkett Unit and York-DeMalorie C (Kans.): Interstate Oil Compact Comm., The Oil and Gas Compact Bull., Vol. XIV, no. 1, D. B. Taliaferro, and J. L. Eakin (June, 1955)
Secondary and tertiary oil recovery processes: Interstate Oil Compact Comm., IOCC Research Comm. and Oil Recovery Subcommittee (Sept. 1974)
Oil and gas developments in North Mid-Continent for the years 1971 through 1976, see Am. Assoc. Pet. Geol. Bull.'s, Vol. 56, no. 7, and Vol's 57, 58, 59, and 60, no. 8, M. O. Oros, et al.
Sub-surface aspects in Kansas water-flooding: World Oil, J. M. Jewett, Dec. 1948
U.S. Bureau of Mines references for Kansas' fields include:
IC no's 7750, 7831, 7873, 7969, 8178, and 8238, and RI no's 3688, 3761, 4600, 4991, and 5317
Some important aspects of water flooding in Illinois: Ill. Geol. Surv. C 180, P. A. Witherspoon (1952)

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ALLEN COUNTY																
3091	--	Bronson-Xenia	Mack C. Colt, Inc.	(W) KBC-KBN	North Holeman, Stewart-Holeman, Lamb, Isenhart-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 34-24S-21E	310	140	Bartl	750	20	75	49	3	1	Yes
9440	--	Bronson-Xenia	Mack C. Colt, Inc.	(W) C-W	Harris, J.F. J.W. Bartlett, Bartlett, McLaughlin, L.M. Bacon	33-24S-21E 4-25S-21E 8-25S-21E 9-25S-21E	30	20	Bartl	800	20	6	0	0	0	No*
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	21	0	3	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	(P) Dorwin Jackson	Stewart	22-23S-21E	240	--	Bartl	715	10	13	0	4	2	Yes
▶17800	Yes	Elsmore Shoestring	Don Daniels	(D) Don Daniels Oil Base	Larson	15-26S-21E	160	--	Bartl	678	20	5	-	-	-	Yes
17350	No	Elsmore Shoestring	Rainbow Oil, Inc.	(W) East Elsmore	Marvin Sander, Carrol Daniels, Don R. Nelson	16-26S-21E 21-26S-21E	83	0	Bartl	700	12	32	0	10	0	Yes
17691	No	Elsmore West	Inexco Oil Company	(W) Elsmore	Ericson, Cook	13-26S-20E 24-26S-20E	80	--	Bartl	710	12	8	-	0	-	Yes
17819	No	Elsmore West	Rainbow Oil, Inc.	(W) West Elsmore	Alfred Krone, Deane Swanson, Gerald E. Johnson	8-26S-20E 9-26S-20E 16-26S-20E	100	0	Bartl	720	19	29	0	7	0	Yes
▶11183	--	Humboldt-Chanute	Bucane Oil and Research Co.	(W) M.F.A.	Hayworth, Yount, Bracher	36-26S-18E	160	0	Bartl	825	8	2	10	0	0	No
8647	No	Humboldt-Chanute	Layton Oil Company	(W) Project 503	Project 503	1,12,13-26S-18E 6,7-26S-19E	60	0	Bartl	820	0	25	46	0	0	Yes
▶1858	--	Humboldt-Chanute	Texaco Inc.	(W) Henrichs Block	Henrichs Block	22,23,26, 27-26S-18E	464	--	Bartl	725	0-40	33	0	0	0	Yes
3617 5717 6370	--	Humboldt-Chanute	Roy Willis	(-) Heavy Oil	Hoepker, C., Krouse, Dennis, McKaska*	25-26S-18E 36-26S-18E	4	--	Bartl	825	15	4	3	0	2	No†
10579	--	Humboldt-Chanute	Roy Willis	(-) Townsend	Townsend	31-26S-19E	20	--	Bartl	830	10	4	-	0	-	No*
16718	--	Humboldt-Chanute	Kenneth J. Wimsett	(W) C. Johnson	Stadler, C. Johnson	13-26S-19E 18-26S-20E	240	55%	Bartl	725	10	26	0	7	0	Yes
8717	No	Iola	Carmel Energy, Inc.*	(†) Clinkenbeard Lse.	Clinkenbeard Lse.	3-24S-18E	5	0	Bartl	870	40	3	11	4	3	No#
13992	Yes	Iola	Fabco Oil Co., Inc.	(W) Miller, Ling, Teats & Dolecek Lses.	Miller, Teats, Dolecek	36-24S-17E 31-24S-18E	520	80	Squir	801	12	8	0	4	0	Yes
9017 9089	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*
3246	No	Iola	Royal Oil & Gas Corp.	(D) Charlotte Hobbs	Charlotte Hobbs	9-24S-18E	160	--	Bartl	950+	100	12	6	25	7	Yes
6633	--	Iola	The Star Producers Inc.	(-) Lorance	Lorance	21-24S-18E	--	--	Squir	668	9	8	3	0	0	Yes
7469	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) Scott-Sallee	Otis Sallee, H. E. Scott	14-25S-19E	320	0	Bartl	808	35	11	16	1	0	Yes
14322	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	7	1	1	0	Yes
14357	Yes	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) H.P. Morrison Unit	H. P. Morrison Unit	22-25S-19E	320	0	Bartl	861	35	11	1	1	0	Yes
14897	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) D.L. Jarred & A.H. Setter "B"	D.L. Jarred, A.H. Setter "B"	21-25S-19E 22-25S-19E	320	0	Bartl	800	25	6	1	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	1	0	0	Yes
10334	No	Moran	M.E. Boyer Oil Company	(W) LaHarpe Unit #2	Knox, Wade, Coltrane, Jones, Wolfe, Foust	23-25S-19E 24-25S-19E	95	0	Squir	860	10	64	0	2	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	Bartl	800	15	6	2	0	0	Yes

▶See Supplemental List on Pages 101-102.

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Injected-water data: Depth, ft.	Injected-water data: Thick., ft.	Injected-water data: Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
3091	64	48	0	0	Line	450	61	Prod + Miss lime	980	--	T	1951	Grav	1/0	30	--	1,414,375	33,607,167	30,080	3,040,350	30,080	3,040,350	
9440	3	12	0	0	5-spot	0	0	Prod + Miss lime	940	--	T	1962	Grav	1/0	26	--	0	998,536	194	--	194	75,096	*Shut down for repair
15815	11	0	0	0	Line	250	43	Sh lime above Big Shale	350	35	T	1971	Grav	1/0	32	--	171,219	665,817	22,522	85,197	22,522	85,197	
6851	6	-	-	-	Irreg	550	20	Prod + Miss	850	115	U	1972	Grav	3/1	25	--	43,000	215,000	1,405	8,739	--	--	
13975	6	0	2	-	Line	450	25	Prod + Miss	985	12	M	1968	Grav	--	25	24	54,750	--	3,532	--	--	--	
17800	1	5	0	-	Irreg	50	15	---	--	--	U	--	Wat	--	32	4/10	200	--	1,200	--	--	--	
17350	17	0	7	0	5-spot	650	70	Prod + Miss lime*	864	436	T†	1974	Grav	4/1	30	--	254,514	428,866	16,907	42,527	--	--	*Open casing @ 916 ft. †@ S
17691	5	-	3	-	5-spot	250	4200	Prod	--	--	U	1976	S Gas	No Prod.	36	--	48,000	--	14,000	--	14,000	--	
17819	16	0	9	0	5-spot	350	60	Prod + Miss lime*	903	496	T	1975	S Gas	--	30	--	377,696	403,221	15,712	18,732	--	--	*Open casing @ 937 ft.
11183	0	10	0	0	Irreg	300	20	Prod	--	--	U	1965	Grav	1/0	32	--	7,270	83,270	727	6,060	300	6,360	*Part-time operation
8647	27	34	0	0	5-spot	310	42	Prod + Miss lime	1,061	--	T	1970	S Gas	1/5	32	--	378,809	2,018,191	21,596	140,641	21,596	140,641	
1858	6	0	0	0	5-spot	700	18	Prod + Arb	1,500	--	M	1974	S Gas	--	29.1	--	38,457	120,847	4,338	9,581	4,338	9,581	
3617 5717 6370	-	-	-	-	Irreg	400	5	Prod + Oswego lime	450	30	U	1953	Grav	1/0	31	--	5,000	700,000	626	188,166	--	--	*Shut down winter months
10579	4	-	0	4	Irreg	250	5	Prod + Os lm	--	30	U	1963	Grav	1/2	32	--	--	--	160	--	160	28,548	*Shut down winter mos.
16718	12	0	1	0	Irreg	500	20	Prod + KC	200	15	M	1972	Grav	1/1	32	--	3,000	23,600	14,332	56,432	7,166	--	
8717	0	11	4	3	Irreg	700	125 + 500MCF	Deer Creek**	--	--	F	1975	Wat dr + Gas Exp	1/10	19.3	1006	0 0	1,000 4,000MCF	2,606	4,000	2,400	3,700	*Was Layton, †Thermal, #Prod. only in 1976 **Generated in steam boiler
13992	1	-	1	-	Irreg	600	48	Prod + Sh Sand	137	360	U	1968	Grav	9/1	28	--	16,000	120,400	1,460	10,980	360	3,520	
9017 9089	0	5	0	0	---	--	--	---	--	--	-	1963	S Gas	--	21	700	0	1,145,300 + 4,188,850MCF	3,204	118,817	0	0	*Shut down while evaluating other recovery methods.
3246	1	1	2	0	Line	225	125	Prod + Bartl	950	100	M	1954	Wat	--	19.8	--	45,000	529,000	6,395	400,346	0	--	
6633	2	1	-	-	5-spot	--	3	River Gravel	20	6	-	1962	Grav	1/0	33	--	1,647	--	1,756	--	425	--	
7469	1	16	0	0	Irreg	100	5	Prod	--	--	U	1968	S Gas	99/1	19.7	--	1,831	78,989	2,590	124,178	0	0	*Was Tenneco Oil Co.
14322	3	1	0	0	Irreg	358	49	Prod + KC	170	--	M	1968	S Gas	99/1	20.2	--	53,663	397,362	10,143	121,363	10,143	79,114	*Was Tenneco Oil Co.
14357	6	1	0	0	Irreg	472	53	Prod + KC	170	30	M	1968	S Gas	99/1	23.6	100	118,633	1,030,539	10,104	157,333	10,104	90,570	*Was Tenneco Oil Co.
14897	3	0	0	0	Irreg	623	57	Prod + KC	170	30	M	1969	S Gas	99/1	23.3	--	51,739	555,230	12,200	73,979	12,200	40,083	*Was Tenneco Oil Co.
16534	2	1	0	0	Irreg	490	49	Prod + KC	170	30	M	1972	S Gas	99/1	22.6	--	35,544	193,955	902	15,099	902	3,399	*Was Tenneco Oil Co.
10334	41	0	0	0	5-spot	500	14.6	Prod + Miss	1,010	65	T	1963	Grav	98/2	24.6	--	218,683	--	36,020	--	36,020	--	
9952	6	1	0	0	5-spot	600	57	Prod + Miss lime	960	--	T	1953	Grav	1/0	22	--	124,268	1,367,762	2,817	83,975	2,817	83,975	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ALLEN COUNTY (concl.)																
18507	No	Moran	Ensminger Oil Co.*	(W) Iola Fireflood Unit	McFadden, Johnson, Switzer, Stewart, Brown	1,12-25S-19E 6-25S-20E 7-25S-20E 5,7-25S-20E 8-25S-20E	1,100	--	Bartl	820	0-50	31	-	1	-	Yes
14856	Yes	Moran	Inexco Oil Co.	(W) Moran	Sager, Hawkins, Talbott, Apt, Winslow, Seber, Weatherbie, Krieger	33-24S-20E 34-24S-20E 35-24S-20E	960	--	Bartl	810	10	160	-	5	-	Yes
11082	--	Savonberg	Walter Duncan	(W) Walquist	Walquist	32-26S-21E	100	0	Bartl	670	30	3	6	0	0	Yes
▶ ALLEN COUNTY TOTALS (Reported)(Includes projects in supplemental list.)							8366	482				669	241	79	15	
ALLEN-BOURBON COUNTIES																
37-01-02	--	Davis-Bronson	Mack C.Colt, Inc.	(-) McIntyre-Travis	Henninger C, Donovan, Depoy, Henninger A, Marshall, Gillaspie, Henninger B, Haynes, Honneus (Purdom), Honneus (Stewart)† Lowe	34-23S-21E 2-24S-21E 3-24S-21E 10-24S-21E 11-24S-21E 15-24S-21E	0	0	Bartl	700	30	14	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	--	Bartl	730	0-40	65	2	0	0	Yes
4444	--	Humboldt-Chanute	Roy Willis	(-) Seefeldt	Seefeldt	34-26S-18E 3-27S-18E	20	--	Bartl	760	30	-	-	-	-	No*
ALLEN-NEOSHO COUNTIES TOTALS (Reported)							765	0				65	2	0	0	
ANDERSON COUNTY																
18135	--	Bush City Shoestring	Glenn Caldwell	(P) C-K Oil Co.	Kirk	8,9,16, 17-21S-20E	120	80	Squir	800	40	11	0	0	0	Yes
3151	Yes	Bush City Shoestring	Glacier Petroleum Co.	(W) Reed Group	Reed Group	4,5-21S-21E	--	--	Squir	620	20-30	150	-	-	-	Yes
3177	Yes	Bush City Shoestring	Glacier Petroleum Co.	(W) Connelly & Loreaux	C & L Unit	4,5-21S-21E	--	--	Squir	620	20-30	125	-	-	-	Yes
852 1111	--	Bush City Shoestring	Kewanee Oil Co.	(W) Dengo W.F.	Brownrigg, Jackson, Bandy, Daniel, McCrabb, Litle, Oko, Woods, Cleveland, Kretchmer, Victor	4-20S-21E 28-20S-21E 33-20S-21E	364	17	Squir	614	5	123	6	0	0	Yes
5985	--	Bush City Shoestring	Kewanee Oil Co.	(W) Dengo W.F.	Bandy, Victor, Daniel	32-20S-21E 33-20S-21E 4-21S-21E	0	30	Bartl	740	11	0	3	0	0	No*
3098	No	Bush City Shoestring	Ladd Petroleum Corp.	(-) East and West OKO	C. Melcher, S.P. Johnson, Willson & Melcher, Ware, Doering, Herman & Weiss, Hunley & Pugsley	7-21S-20E 8-21S-20E 15-21S-20E 16-21S-20E	424	0	Squir	800	30	128	4	1	3*	Yes
6421	No	Colony-Welda	Brecheisen Oil Co.	(W) Summers-Cameron	Summers-Cameron	34,35-21S-19E	70	0	Squir	820	20-30	20	1	0	0	Yes
6436	No	Colony-Welda	Brecheisen Oil Co.	(W) R.W. Brecheisen-Rocky Roost	R.W. Brecheisen-Rocky Roost	35-21S-19E	22	5	Squir	820	20	9	2	0	0	Yes
9179	No	Colony-Welda	Brecheisen Oil Co.	(W) Buchanan-Settle	Buchanan-Settle	2-22S-19E	25	5	Squir	820	20	5	1	0	0	Yes
11406	No	Colony-Welda	Brecheisen Oil Co.	(W) Melville-Kellstadt	Kellstadt	34-21S-19E	70	0	Squir	830	20	22	0	4	0	Yes
11406*	No	Colony-Welda	Brecheisen Oil Co.	(W) Kattenhorn	Faith Kattenhorn	27,35-21S-19E	50	10	Squir	825	24	15	0	3	0	Yes
5363	Yes	Colony-Welda	James E. Russell Petr.	(W) Unit No. 3	Unit No. 3	2,3-22S-19E	146	0	Squir	800	19	40	0	13	0	No*
11165	Yes	Colony-Welda	James E. Russell Petr.	(W) Unit No. 1	Unit No. 1	21,22,27,28, 33-22S-19E	320	0	Squir	800	15	2	88	0	0	No*
11165*	Yes	Colony-Welda	James E. Russell Petr.	(W) Unit No. 2	Unit No. 2	28,29,32, 33-22S-19E	116	0	Squir	800	16	6	17	0	0	No†
10781	No	Colony-Welda	James E. Russell Petr.	(W) Martin and Strain Lses.	Martin, Strain	4-22S-19E 9-22S-19E	120	0	Squir	800	14	17	5	0	0	Yes

▶See Supplemental List on Pages 101-102.

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks.
18507	5	-	-	-	5-spot	400	50	Prod	--	--	U	1976	Grav	1/90	18-20	--	5,200	5,200	450	450	0	0	*Was Sun Oil Co.
14856	120	-	5	-	5-spot	280	11,000	Prod	--	--	M*	--	Other	No prod.	20	--	125,000	--	70,000	--	70,000	--	*Polymer additive in one lease only
11082	7	1	0	0	Line	630	39	Prod + Miss	950	68	F	1964	S Gas	--	32.5	--	92,972	1,924,031	2,279	133,848	2,279	--	
	397	156	34	7													4,008,698	59,678,493	320,809	5,606,164	251,690	3,690,134	
37-01-02	0	0	0	0	Line	--	--	Prod + Miss lime	960	--	T	1952	Grav	1/0	28.5	--	0	8,326,899	1,350	--	0	457,409	*Temp. shut down, †Was C-4430
4919	17	13	0	0	5-spot	700	48	Prod + Arb	1,500	--	M	1974	S Gas	--	32.5	--	298,042	637,172	7,331	16,656	7,331	16,656	*Was Ross Keas Oil Inc.
4444	0	1	-	1	Irreg	--	--	Prod + Oswego lime	525	20	U	1955	Grav	1/0	32	--	0	152,500	--	--	0	29,366	*Inactive
	17	14	0	1													298,042	789,672	7,331	16,656	7,331	46,022	
18135	1	-	0	0	---	--2,920 8MCF		---	--	--	U	1975	S Gas	--	36	6.5	2,920	3,220	16,060	33,381	--	--	
3151	150	-	-	-	Irreg	580	1,495	Prod	--	--	U	--	Wat	--	29	--	485,875	--	--	--	--	--	
3177	100	-	-	-	Irreg	650	1,210	Prod	--	--	U	--	Wat	--	36	--	381,150	--	--	--	--	--	
852 1111	114	6	0	2	5-spot	775	9	Prod + Arb + Miss	907-1,451	--	T	1944	S Gas	--	36	6.3@ 75°	368,875	10,865,049	19,462	2,169,138	19,462	1,529,097	
5985	0	0	0	0	Irreg	0	0	Prod + --	1,451	--	T+ M	1958	S Gas	--	38	--	0	86,882	0	--	0	0	*Inactive
3098	108	17	2	7	---	800	14	Prod + Arb + Miss limes	1,625 1,450	--	T	1951	S Gas	--	36	--	654,440	19,594,763	42,328	--	42,328	1,834,519	*Converted to inj. wells.
6421	15	0	1	0	Irreg	700	20	Prod + KC*	400	4	-	1958	S Gas	49/1	35	--	99,000	763,900	8,114	43,429	8,114	43,429	*400' Shale
6436	2	0	0	0	Irreg	700	20	Prod + KC*	400	4	M	1958	S Gas	49/1	34	--	54,000	282,250	2,057	6,541	2,057	6,541	*400' Shale
9179	7	2	0	0	Irreg	600	20	Prod + KC	400	4	M	1962	S Gas	49/1	35	--	42,000	430,670	1,145	7,306	1,145	7,306	
11406	14	0	2	0	Irreg	600	25	Prod + KC*	400	4	T†	1965	S Gas	9/1	35	--	165,000	344,420	12,764	34,151	12,764	34,151	*Oswego †M + Special additive
11406	11	0	0	0	Irreg	700	25	Prod + KC†	400	5	T	1959	S Gas	9/1	34	--	120,000	529,750	6,770	23,877	6,770	23,877	*Formerly 6699, †Oswego
5363	17	23	1	0	5-spot	360	8	Prod + Miss	1,200	--	T	1957	S Gas	--	36	7.5	48,390	2,349,506	18,032	226,259	18,032	119,571	*Converted to inj. wells.
11165	0	41	0	0	5-spot	0	0	Prod + Miss	1,200	--	T	1948	S Gas	--	33.1	13	0	6,458,240	492	1,321,331	492	580,281	*Under Redevelopment
11165*	0	17	0	0	5-spot	0	0	Prod + Miss	1,200	--	-	1955	S Gas	1/0	33	13	0	2,502,786	1,532	319,925	1,532	192,786	*Formerly C-4389, †Under Redevelopment
10781	17	2	0	0	5-spot	555	35	Prod + Oswego lime	700	60	T	1964	S Gas	--	36	7.5	190,919	1,693,479	12,339	258,818	12,339	164,603	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location $-T-R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ANDERSON COUNTY (concl.)																
4401	--	Colony West and Iola	Mack C. Colt, Inc.	(W) West Colony Project	Bowlus, Schulte, Davenport, Alexander, W.W. Baker, R. Baker, Victory Life, Harris, Kivett, Haldeman, Ed Kelly, County Farm, Blohm	3-23S-18E 8-23S-18E 9-23S-18E 15-23S-18E 16-23S-18E 34-23S-18E	150	105	Squir	850	15	29	36	0	0	Yes
8945	No	Colony West	James E. Russell Petr.	(W) West Colony	Brecheisen, Lacy, Kelley, Wolfe, McGhee, West	5-23S-18E 6-23S-18E 31-22S-18E 36-22S-17E	214	0	Squir	850	18	41	24	0	0	Yes
10327	No	Colony West	James E. Russell Petr.	(W) Charles M. Hill*	Charles M. Hill	25-22S-17E	16	0	Squir	885	15	4	1	0	0	No
7361	--	Garnett Shoestring	Glenn Caldwell	(P) Caldwell	Caldwell	32-20S-20E	30	--	Squir	660	20	6	7	0	0	Yes
12120	--	Garnett West	H & G Pulling Co.	(D) Anderson Kansas	Macklin, White, Hermeck	25-20S-19E 26-20S-19E	80	0	Peru	610	10	4	1	0	0	Yes
16816	No	Kincaid	Richard Engineering Co.*	(W) Kincaid Unit	Miller "A", Miller "B", Lockwood, Cooper-Richart-Frost, McCaslin-Van Buskirk, Gaddis	29-22S-21E 32-22S-21E 4-23S-21E	1,240	0	Bartl	750	30	44	-	6	0	No†
581	--	Selma	Mack C. Colt, Inc.	(*) Selma	Steele, Cochran, Monroe	4-22S-21E 9-22S-21E	0	0	Bartl	850	18	3	0	3	0	No†
13952	No	Selma	James E. Russell Petr.	(W) Vernon Croan Lse.	Vernon Croan	21-21S-21E	22	12	Bartl	650	12	0	5	0	0	No*
		ANDERSON COUNTY TOTALS (Reported)					3599	264				804	201	30	3	
BARBER COUNTY																
13209	No	Amber Mills	Reed Oil Co.	(W) House & Lawrenz	Ella Lawrenz, Emma House	16-30S-12W 15,16-30S-12W	210	0	Viola	4,500	8	3	0	0	0	Yes
5362	--	Bloom	American Petrofina Co. of Texas*	(D) Bloom	Bloom	23-32S-12W	20	20	Miss	4,321	17	1	0	0	0	Yes
6939	--	Highway	Aylward Drlg. Co.	(P) Gilbert	Stone	23-32S-11W	80	10	Snyder*	3,586	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	4,963	31	4	1	-	-	Yes
15010	--	Medicine Lodge-Boggs	Skelly Oil Co.	(W) Boggs "C" Lse.	Boggs "C"	17-33S-12W	160	0	Simp	4,794	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	4,480	15	12	0	0	0	Yes
16556	Yes	Medicine Lodge North	Robert R. Price*	(W) Kirkbride et al	Kirkbride et al	20-32S-12W	252	0	Miss	4,388	15	1	0	0	0	Yes
15203	--	Moffett West	Tenneco Oil Co.	(P) L.M. Lee "A" & "B"	L.M. Lee "A" & "B"	8,9-30S-15W	40	0	Viola	4,646	30	1	2	0	0	Yes
15630	--	Rhodes	Bowers Drlg. Co., Inc.	(D) Gilmore-Chapin	Gilmore-Chapin, Groendycke, Fitzgerald	19-33S-11W 30-33S-11W	480	200	Miss	4,480	12	3	0	4	1	Yes
10102	No	Rhodes	Gulf Oil Corp.	(W) W. A. Newkirk	W. A. Newkirk	17-33S-11W	160	0	Miss lm	4,450	--	7	1	0	0	Yes
9123 10266	Yes	Rhodes	Kewanee Oil Co.*	(W) Rhodes Unit	Page A, Page C, Newkirk, Page B, Page D	15-33S-11W 16-33S-11W 21-33S-11W 22-33S-11W	1,200	800	Miss	4,550	20	20	7	1	0	Yes
17372	--	Rhodes	Kewanee Oil Co.	(W) Forester A	Forester A	28-33S-11W	120	0	Miss	4,433	20	1	0	0	0	No
16259	No	Salt Fork	Braden-Deem, Inc.	(P) Davis Ranch	Davis Ranch	11,12-35S-15W	320	0	Miss	4,970	30	4	0	0	0	Yes
15863	--	Skinner	Robert F. White	(D) Skinner "B"	Skinner "B"	17-31S-17W	40	--	Viola	4,400	30	1	0	0	0	Yes
		BARBER COUNTY TOTALS (Reported)					3632	1030				66	15	5	1	
BARTON COUNTY																
15252	--	Ames	Energy Reserves Group, Inc.*	(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	3,150	30	8	0	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
4401	12	47	0	0	Line	650	20	Prod + Miss lime	1,260	--	T	1955	Grav	1/0	32	--	88,650	7,182,723	6,114	--	6,114	1,326,753	
8945	23	65	0	0	Line	563	29	Prod + Salt Sand	1,100	35	T	1961	S Gas	--	30	22	239,828	6,468,292	10,260	679,670	10,260	504,959	
10327	0	5	0	0	5-spot	0	0	Prod + Hertha	500	--	T†	1963	S Gas	--	27	38	0	87,600	99	2,610	0	2,511	*Was W.M.Dary.†+Surfactant.
7361	5	0	0	0	---	0	4	Prod	--	--	U	1959	S Gas	--	35	--	7,300	728,625	940	75,840	940	--	
12120	2	0	0	0	---	600	3,500	---	0	--	U	1963	---	--	32	--	650	--	--	--	--	--	
16816	28	0	0	0	Line#	300	800	Prod + Miss	947	±150	T	1972	S Gas	--	27	27	3,200MCF 100,000	100,000	21,698	35,258	--	--	*Was Texas Cons. Oil Corp. †Inj. facilities just completed, #+Irreg
581	0	0	0	0	Line	--	--	Prod + Miss	1,100	--	M	1952	Grav	1/0	26	--	0	985,000	0	--	0	263,780	*Studying tertiary rec. †Inactive, but retesting for tertiary.
13952	0	5	0	0	---	0	0	Prod + Surface	--	--	F	1968	S Gas	--	32	8	0	334,200	0	9,934	0	9,934	*Process of being sold.
	626	230	6	9													3,048,997	61,791,355	180,206	5,247,468	142,349	6,644,098	
13209	1	0	0	0	Irreg	200	800	Prod	--	--	T	1967	Wat	9/1	37	--	292,000	2,879,850	2,982	133,044	2,982	133,044	
5362	1	0	0	0	Irreg	315	32	Prod	--	--	U	1957	S Gas	1/2	33	--	11,736	221,176	8,252	147,463	0	0	*Was El Dorado Refg. Co.
6939	1	0	0	0	Irreg	Grav	50	Prod	--	--	U	--	Gas Exp + Wat	4/1	26	--	18,250	440,449	2,642	112,563	2,642	76,178	*(Douglas)
17369	3	0	-	-	Irreg	0	493	Prod	--	--	U	1975	S Gas	--	26	--	544,009	5,967,593	23,000	1,712,397	--	--	
15010	4	0	0	0	Irreg	0	308	Prod	--	--	U	1969	S Gas	73/352	26.2	--	449,822	1,951,758	17,909	2,899,754	17,909	94,520	
14776	3	0	0	0	Peri	1,900	250	Prod + KC	4,000	--	T	1969	S Gas	--	30	--	218,000	2,499,000	14,385	652,957	14,385	72,031	*Was Barbara Oil Co.
16556	1	0	0	0	Peri	1,800	300	Prod + KC	4,000	--	T	1972	S Gas	9/7	30	--	105,000	340,500	482	4,085	482	812	*Was Barbara Oil Co.
15203	1	0	0	0	Irreg	5	28	Prod	--	--	-	1968	Grav	83/17	34.6	--	10,220	112,775	2,834	91,486	0	0	
15630	1	0	1*	0	Irreg	Grav	100	---	--	--	-	1971	Grav	2/3	34	--	36,000	236,000	9,671	165,907	3,000	11,500	*Well converted.
10102	2	0	0	0	Irreg	1,200	153	Prod	--	--	U	1963	S Gas	59/38	25.4	--	116,370	9,275,076	8,161	348,913	8,161	348,913	
9123 10266	14	7	0	0	Peri	1,900	512	Prod + Medicine Lodge River	14	16	M	1962	Gas Exp	1/13.3	27	4.7†	2,616,748	67,324,526	140,984	5,617,349	140,984	2,017,185	*Was Barbara Oil Co. †@ Reservoir Press & Temp.
17372	1	0	0	0	Irreg	0	10	Prod	--	--	U	1974	---	0/50*	0	--	3,740	20,440	0	0	0	0	*Was gas well + water.
16259	1	0	0	0	Irreg	125	100	Prod	--	--	U	1971	S Gas	7/6	26	--	36,500	147,750	7,129	215,604	1,200	3,200	
15863	1	0	0	0	Irreg	0	40	Prod	--	--	U	1971	S Gas	1/2	40	--	15,000	90,000	5,200	528,000	0	0	
	35	7	1	0													4,473,395	91,506,893	243,631	12,629,522	191,745	2,757,383	
15252	3	0	0	0	Irreg	1,525	219	Arbuckle	3,300	20	U	1971	S Gas	1/8	31.8	--	239,431	1,176,119	16,463	707,769	16,463	115,928	*Was Clinton Oil Co.

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1976—*Continued*

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): In-active	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
BARTON COUNTY (cont.)																
17142	No	Ames	Kaiser Francis	(P) Drews	Drews A, Drews B	15-18S-11W	60	0	Lans	3,036	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	2,925	155	6	0	0	0	Yes
11512	--	Bailey	NCRA	(W) Bailey L-KC Unit	Bailey, Bock, Robl	30-18S-11W	50	0	Lans	3,278	16	5	0	0	1*	Yes
16938	No	Beaver	Colorado Oil Co., Inc.	(W) Kramer Lse.	Kramer	15-16S-12W	60	40	Lans Arb	3,051 3,318	181 2	2	0	0	0	Yes
11 244 2259	No	Beaver	Keener Oil Co.*	(W) Feltes	N. Feltes	8-16S-12W	50	--	Lans	3,050	8	2	1	0	0	Yes
14631	No	Beaver	Phillips Petr. Co.*	(P) Christian D	Christian D	10-16S-12W	40	--	L-KC	3,060	12	1	0	0	0	Yes
15418	Yes	Bernard	Graybol-Patton Co.*	(W) Musenberg Unit	Musenberg Unit	10-19S-11W	60	0	Lans	3,192	8	5	-	0	-	Yes
8376	--	Bottoms	Hillenburg Oil Co.*	(W) Zink A	Zink A, Birzer B	35-18S-12W 36-18S-12W	20	0	L-KC	3,130	10	3	1	0	0	Yes
15841	--	Boyd	Energy Reserves Group, Inc.	(W) C. Frieb	C. Frieb	4-18S-14W	80	0	L-KC	3,230	20	5	0	0	0	Yes
7810	--	Carroll	Everett Swander	(P) Meitner "A"	Meitner "A"	28-17S-14W	0	30	L-KC	3,100	6	3	0	0	0	No*
17564	No	Carroll North	Phillips Petr. Co.*	(P) Borchers "A"	Borchers "A", Demel "A"†	8-17S-14W 17-17S-14W	20	0	Arb-Lans	3,400	--	2	0	0	0	Yes
14333	No	Chaffee	H. A. Chapman	(W) Panning-Russell-Grunwald WF	Panning, Russell, Grunwald	31-19S-13W	40	200	L-KC	3,252	6	2	0	0	1	Yes
14048	Yes	Chaffee	Four-Way Operating, Inc.	(W) Vaughan-Russell	Russell	36-19S-14W	80	0	Lans	3,187	235	3	0	0	0	Yes
11715	No	Chase-Silica	Okmar	(W) Burmeister	Burmeister, Isern A	25-19S-11W	40	0	L-KC	3,080	7	2	0	0	0	Yes
15218	--	Cheyenne	NCRA	(W) Lucas	Lucas	4-19S-12W	30	0	Lans	3,104	15	2	0	0	0	Yes
15942	--	Frank	Raymond Oil Co, Inc.	(W) Hammeke-Neeland	Hammeke-Neeland	7,8-19S-12W	120	--	LKC	3,160	22	2	-	-	-	Yes
16052	--	Cheyenne	NCRA*	(D) Miller "A"	Miller "A"	4-19S-12W	10	0	Lans	3,100	15	1	0	0	0	Yes
5561	--	Cheyenne View	Aladdin Petr. Corp.	(P) Rinker B	Rinker B	12-19S-12W	160	80	KC	3,060	30	2	0	0	0	--
17269	--	Cheyenne View	Energy Reserves Group, Inc.	(W) Apel	Apel, Mathias	14-19S-12W	360	180	L-KC	3,140	150	1	0	0	0	Yes
5387	--	Cheyenne View	George H. Hannum (Isern Petr. Co.)	(W) Lanterman WF	Lanterman "A"	23-19S-12W	160	0	KC	3,142	49	7	-	0	-	Yes
3272	--	Cheyenne View	Sohio Petr. Co.	(W) Heinz "A" Lse.	Heinz "A" Lse.	12-19S-12W	30	--	L-KC	3,100	17	1	1	0	0	Yes
3421 7208	--	Cheyenne View	Southern States Oil Co.	(P) Kultgen	Achatz, Kultgen	11-19S-12W 12-19S-12W	240	--	L-KC	3,100	19-20	14	2	0	0	Yes
14846	Yes	Cheyenne View NW	Nadel and Gussman	(W) Cheyenne View Unit	Lucas, Schartz, Wess, Eppstein	10-19S-12W	140	0	L-KC	3,100	15	2	1	0	0	Yes
12012	No	Clarence	K.R.M. Petr. Corp.*	(D) Button	Button	35-19S-15W	160	0	L-KC	3,246	4	2	0	0	0	Yes
8476	--	Ellinwood North	American Petrofina Co. of Texas*	(W) Schwamborn	Schwamborn	28-19S-11W	100	40	L-KC	3,065	12	3	0	0	0	Yes
17067	No	Erna Northwest	Icer Addis	(W) Nordman	Nordman "B", Nordman, Ralph Nordman, Sophia Bahr	19-18S-14W 24-18S-15W	480	--	L-KC	3,300	10	8	0	0	0	Yes
8604	No	Erna Southeast	Carl W. Boxberger	(D) Russell B	Russell B	29-18S-14W	160	0	L-KC	3,258	210	2	0	0	0	Yes
11427	--	Ft. Zarah	W. L. Hartman	(W) Harris	Harris	30-19S-12W	30	0	L-KC	3,139	60	2	-	-	-	Yes
17192	--	Ft. Zarah	W. L. Hartman	(W) Kohler	Kohler	30,31-19S-12W	140	--	L-KC	3,118	240	4	-	-	1	Yes
17199	--	Ft. Zarah	Ladd Petroleum Corp.	(-) Harris "A" Lse.	Harris "A"	30-19S-12W	80	0	L-KC	3,128	70	2	1	0	0	Yes
5366	--	Great Bend Airport	Petroleum Management, Inc.	(W) Great Bend Airport	Essmiller "A", Opie	26-19S-14W	320	100	L-KC	3,188	240	2	1	0	0	Yes
8335	No	Hammeke West	Nadel and Gussman	(W) Hammeke	Hammeke	18-19S-11W	20	10	L-KC	3,142	10	2	2	0	0	Yes
17845	--	Hammer	Fell & Wolfe Oil Co.	(D) DeWerff	DeWerff, Sessler, DeWerff	1-20S-12W 2-20S-12W	450	--	Arb	3,340	20	7	0	0	0	Yes
9812	--	Hammer	Ladd Petroleum Corp.	(-) Hammer Water Flood	Hammer "B", Johanning, Birzer	35-19S-12W 36-19S-12W	160	20	L-KC	3,100	220	10	1	0	0	Yes
6983	No	Heizer Southwest	Four-Way Operating, Inc.*	(D) Hall	Hall, Harrison	28-19S-14W 29-19S-14W	160	80	Lans	3,198	236	2	0	0	1	No†
5970	No	Hiss	Brougher Oil, Inc.	(D) ---	Murphy	29-20S-13W	160	--	KC	3,150	225	2	0	0	0	Yes
13421	No	Hiss	Wayne L. Brown*	(P) McGreevy Lse.	McGreevy	30-20S-13W	80	0	L-KC	3,214	40	2	0	0	0	Yes
13046	No	Kimpler	Icer Addis	(W) Kimpler Waterflood	Kimpler "C"	31-18S-11W	80	--	L-KC	3,150	5	1	1	0	0	Yes
10802	--	Klepper	C. L. Hanes	(D) Klepper	Klepper	2-19S-11W	20	0	KC	3,040	5	1	0	0	0	Yes
16524	--	Knop	Energy Reserves Group, Inc.*	(W) Knop Field Waterflood	Knop, Fox-Rusco "B", Wess	9-19S-12W	470	0	L-KC	3,130	20	5	0	0	0	Yes
9560	No	Kraft-Prusa	Colorado Oil Co., Inc.	(W) Esfeld Lease	Esfeld	29-16S-11W	90	70	Doug	2,960	15	3	3	0	0	Yes
11520	--	Kraft-Prusa	Four-Way Operating, Inc.*	(D) Ney	Ney	17-16S-11W	40	20	Lans	3,006	304	1	0	0	0	No†
12275	No	Kraft-Prusa	Gulf Oil Corp.	(W) Joseph	Joseph	29-16S-11W	160	0	Doug	2,995	--	7	5	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: In-active	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
17142	1	0	0	0	Irreg	Vac	400	Prod	--	--	T*	1974	--	9/112	--	--	146,000	438,000	6,753	681,930	1,000	3,000	*@S
6929	2	0	0	0	Irreg	625	200	Prod + Red Bed	375	80	M	1971	S Gas	1/1	40	--	146,000	638,077	5,861	--	4,000	--	
11512	2	1	0	0	Irreg	500	104	Prod + Sh river grav	40	20	M	1972	S Gas	52/45	42.5†	--	75,886	262,874	18,995	87,844	9,126	29,449	*Converted †@60
16938	1	0	0	0	Irreg	250	490	Prod	--	--	U	1973	Wat	16/369	39	--	159,658	676,617	6,208	365,873	--	--	
11 244 2259	1	1	0	0	Irreg	350	625	Prod	--	--	T	--	Wat	--	38	--	228,125	--	6,830	--	6,830	--	*Was Mobil Oil.
14631	1	0	0	0	Irreg	0	83	Prod	--	--	U	1968	S Gas	1/3	39	--	30,517	140,847	1,150	80,233	842	1,916	*Was Thomas H. Allen
15418	3	0	0	0	4-spot	850	98	Prod + Sh Well	80	20	M	1970	S Gas	16/70	40	3.2	106,767	936,643	7,958	131,116	7,958	131,116	*Was Graybol Oil Corp.
8376	1	0	0	0	Irreg	18	125	Prod	--	--	T	1961	S Gas	73/27	39	--	45,625	--	2,692	--	2,692	--	*Was Terra Resources Inc.
15841	1	0	0	0	Irreg	0	610	Prod	--	--	U	1971	S Gas	1/4.6	38.6	--	222,547	758,186	10,520	979,936	10,520	62,902	
7810	0	1	0	0	Irreg	0	0	Prod	0	0	T	1960	S Gas	1/9	38.7	--	12,855	--	4,089	--	0	--	*Not injecting
17564	1	0	0	0	Irreg	0	107	Prod	--	--	U	1974	Grav	1/63	--	--	38,966	139,821	1,092	208,330	0	0	*Was Birmingham-Bartlett Drlg. Co. †Plugged
14333	2	0	0	1	Peri	Vac	43	Fresh	50	65	M	1968	S Gas	15/1	36	--	31,690	335,178	5,690	200,551	5,690	54,744	
14048	1	0	0	0	Irreg	500	30	Prod + Lans	3187	235	U	1971	S Gas	1/1	34	--	12,600	15,601	1,586	65,198	1,586	8,921	
11715	1	0	0	0	Peri	330	248	Prod + Arb	3300	5	T	1966	S Gas	--	34	34	90,520	920,807	2,911	235,976	2,911	8,871	
15218	1	0	0	0	Irreg	500	239	Prod + Gr	60	30	T	1969	S Gas	1/1	44*	--	87,218	538,712	9,681	97,634	5,355	30,004	*@60
15942	2	--	--	--	Irreg	60	350	Prod	360	--	S	1971	S Gas	1/0	41	--	122,490	752,042	3,657	41,038	3,657	41,038	
16052	1	0	0	0	Irreg	0	86	Prod	--	--	T	1972	S Gas	2/1	40@60	--	31,271	172,673	2,852	15,534	876	2,315	*Was Thunderbird Drlg.Inc.
5561	2	2	0	0	--	2	--	KC	3050	30	T	1976	S Gas	--	38	--	79,810	2,123,860	3,987	344,623	--	344,623	
17629	1	0	0	0	Irreg	0	74	Prod	--	--	U	1974	S Gas	1/4	38.6	--	27,265	81,777	4,822	53,918	4,822	13,720	
5387	1	--	--	--	Irreg	300	179	Prod	--	--	T	1966	S Gas	1/1	40	--	65,628	278,176	6,091	441,088	1,411	15,949	
3272	1	0	0	0	Irreg	0	245	Prod	--	--	--	1960	S Gas	1/5.1	40.1	--	89,550	1,473,380	1,334	82,808	1,334	78,793	
3421 7208	3	0	0	0	Irreg	700	343	Prod	--	--	T	--	Grav	--	39	--	417,244	2,612,349	33,585	--	33,585	--	
14846	4	0	0	0	Peri	0	71	Prod + Sh Fr	50-100	50	M	1969	S Gas	54/46	42	2.5	103,212	986,712	2,398	--	2,398	61,813	
12012	1	0	0	0	Irreg	Vac	180	Prod	--	--	U	1965	S Gas	1/49	25.3	--	55,000	714,000	2,000	--	2,000	86,700	*Was Crown Oil Co.
8476	2	1	0	0	Peri	0-Vac	158	Prod	--	--	U	1966	S Gas	1/2	42	--	115,460	3,598,752	3,664	67,285	3,664	67,285	*Was El Dorado Refining
17067	2	0	0	0	Irreg	50	355	Prod	--	--	U	1973	Gas Exp	--	40	--	129,911	511,308	13,028	89,397	2,500	22,080	
8604	1	0	0	0	Irreg	0	230	Prod	--	--	U	1961	S Gas	2/1	39	--	81,600	469,585	3,030	161,067	3,030	13,354	
11427	1	--	--	--	Irreg	60	60	Wat Sd	20	15	M	1964	S Gas	--	40	--	27,376	281,703	1,850	39,770	950	20,320	
17192	1	--	--	--	Irreg	400	910	Prod	--	--	T	1974	S Gas	--	36.5	--	266,605	624,522	2,990	5,975	350	350	
17199	1	0	0	0	Irreg	Vac	244	Prod	--	--	T	1974	--	1/32	43	--	89,375	210,963	4,018	167,483	0	0	
5366	1	0	0	0	Irreg	Vac	6	--	--	--	--	1957	S Gas	--	--	--	1,754	1,441,275	1,846	59,323	1,846	58,673	
8335	1	0	0	0	Irreg	0	35	No	--	--	F	1961	S Gas	4/1	38	--	12,810	450,110	2,307	--	631	65,431	
17845	1	0	1	0	--	300	300	--	--	--	U	1975	Wat	--	38.5	--	--	--	25,010	47,350	--	--	
9812	0	6	0	0	Irreg	0	0	Ground Water	50	--	F	1963	S Gas	58/549	38	--	0	3,835,881	12,418	330,444	12,418	313,864	
6983	1	0	0	0	Irreg	0	170	Prod	--	--	U	1959	†#	14/106	35	--	31,280	475,221	404	110,022	404	25,664	*Was Clarence J. Mermis †Intermitten production. #Partial water drive
5970	1	0	0	0	Irreg	Vac	150	Prod	--	--	T	--	Gas Exp	--	37.5	--	45,000	--	2,005	--	--	--	
13421	1	0	--	--	Irreg	0	290	Prod	--	--	U	1971	Grav	6/30	39	--	105,850	583,776	2,201	13,418	1,106	8,201	*Was Phillips Petroleum
13046	1	0	0	0	Irreg	0	50	Prod	--	--	T	1961	S Gas	--	41	--	18,300	536,900	1,351	9,847*	450	64,956	*Since 1971
10802	1	0	0	0	Line	0	200	Prod	--	--	U	1964	Grav	2/3	42	--	63,000	358,675	844	14,317	0	0	
16524	2	1	0	1	Irreg	720	288	Prod + Dak	95	155	U	1971	S Gas	1/3	39.6	--	209,760	1,023,831	7,664	616,787	7,664	113,035	*Was Clinton Oil Co.
9560	1	1	0	0	Irreg	600	270	Prod	--	--	U	1963	S Gas	16/19	36	--	81,676	1,464,795	8,370	--	8,370	163,266	
11520	1	0	0	0	Irreg	0	70	Prod + Arb	3310	10	T	1965	S Gas & Wat	1/0	33	--	21,000	226,062	2,263	176,813	2,263	13,042	*Was NCRA †Mechanical problems.
12275	1	0	0	0	Irreg	950	501	Prod	--	--	U	1966	S Gas	86/1845	40.1	--	166,655	2,056,609	12,490	253,536	12,490	253,536	

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
BARTON COUNTY (concl.)																
11293	--	Kraft-Prusa	Hazen Oil Co.*	(W) ---	Morgan "B"	22-16S-12W	--	--	KC	3,105	4	3	1	7	1	--
9163	--	Kraft-Prusa	NCRA	(W) Dolechek Estate	Dolechek Estate	24-16S-12W	30	10	Gorham	3,339	20	3	0	0	0	Yes
14488	No	Kraft-Prusa	Okmar	(W) Smith	Smith	36-16S-11W	40	0	Arb	3,373	8	4	0	0	0	Yes
16846	--	Kraft-Prusa	Petroleum Management, Inc.	(W) North Oeser	North Oeser	30-16S-11W	160	--	L-KC	3,057	--	9	0	0	0	Yes
12991	No	Kraft-Prusa	Samson Resources Co.*	(W) Krier WF	Krier A Lse., Krier C Lse.	30-16S-11W	160	0	Doug	2,980	8	5	0	0	0	Yes
13453	No	Kraft-Prusa	Skelly Oil Co.	(W) E. F. Esfeld	E. F. Esfeld	30-16S-11W	50	0	Doug-Lans	2,965	15	4	3	0	0	Yes
15196	--	Kraft-Prusa	Tenneco Oil Co.	(D) John Riemann "B"	John Riemann "B"	22-16S-12W	40	0	L-KC	3,108	85	1	0	0	0	Yes
13853	No	Lanterman	Lario Oil & Gas Co.	(P) Rehme	Rehme	15-19S-11W	40	0	L-KC + Arb	3,050	--	2	0	0	0	Yes
14882	No	Mary A	Murfin Drilling*	(W) Mary Axman Waterflood	Mary Axman	23-17S-15W	80	40	L-KC	3,414	14	2	1	0	0	Yes
17144	No	Mater	Murfin Drilling*	(W) Mater Waterflood	Ed Mater, Max Mater	11-17S-15W	160	27	Tor + L-KC	3,142	20	5	0	0	0	Yes
11059	--	Ney Southwest	Ralph R. Rhyne*	(D) Rude	Rude E.	2-16S-13W	20	15	Lans	3,100	5	1	-	-	-	Yes
13049	No	Prairie View	Icer Addis	(W) John Schartz Waterflood	Ahrens, Kowalsky, John Schartz	20-19S-11W	160	--	L-KC	3,200	150	4	0	0	0	Yes
4418	--	Prairie View	Texaco Inc.	(-) Prairie View	J. Schartz	20-19S-11W	160	--	Lans	3,406	--	1	0	0	0	No*
7104	Yes	Pritchard	Phillips Petr. Co.	(W) West Hiss LKC Unit	West Hiss LKC Unit	36-20S-14W	130	0	L-KC	3,350	50	4	1	0	0	Yes
17155	No	Putnam West	Murfin Drilling	(W) Williams Unit	Williams Unit	12-17S-14W	160	0	L-KC	3,214	30	3	0	0	0	Yes
13249	No	Roesler	Nadel and Gussman	(W) Bieberle	Bieberle	15-18S-11W	30	0	KC	3,025	10	2	0	0	0	Yes
16593	--	Roesler West	Energy Reserves Group, Inc.*	(W) Kaiser	Kaiser	15-18S-11W	160	0	L-KC	3,025	225	5	0	0	0	Yes
15193	--	Rolling Green East	Southern States Oil Co.	(P) Lonnon B	Lonnon B	25-20S-13W	160	--	KC	3,258	32	2	0	0	0	Yes
11630	Yes	St. Peter	Shelley Oil Co.	(D) Robl Unit	Robl, Musenberg, Hickel	32-18S-11W, 33-18S-11W, 5-19S-11W	240	60	Lans + Platt	2,912	216	8	0	0	1	No*
11909	--	St. Peter	Texaco Inc.	(-) St. Peter Pool Unit	H. Schlochtermeir, T. Schlochtermeir	32-18S-11W	240	--	Lans + Platt	2,900	--	5	2	0	0	Yes
12861	No	St. Peter East	Nadel and Gussman	(W) Johanning	Johanning	34-18S-11W	110	10	KC	3,060	10	6	4	0	0	Yes
14055	No	St. Peter East	Nadel and Gussman	(W) Birzer	Birzer	3,4-19S-11W	80	0	L-KC	3,100	20	3	1	0	1	Yes
9838	Yes	Sandrock	APCO Oil Corp.*	(W) Sandrock Unit	Weathers, Morrison, Jackson	27-20S-13W, 28-20S-13W	60	0	L-KC	3,400	20	4	0	0	0	Yes
12586	No	Sandrock Southeast	Kewanee Oil Co.	(W) Engleman-McDonald	Engleman, McDonald	27-20S-13W, 34-20S-13W	60	20	KC	3,261	54	3	1	0	0	Yes
13215	Yes	Sandrock	Phillips Petr. Co.	(W) Pursel Unit	Pursel Unit	28-20S-13W	55	0	L-KC	3,300	15	3	0	0	0	Yes
18106	--	Sunny Valley	Carl W. Boxberger	(D) Batchman	Batchman	18-20S-12W	160	0	L-KC	3,177	229	1	0	0	0	Yes
18247	No	Trap	Thornton E. Anderson	(W) Putnam Lse.	Putnam	26-16S-13W	40	0	L-KC	3,123	145	1	0	0	0	Yes
16089	No	Trapp	Colorado Oil Co., Inc.	(W) Siemsen	Siemsen	24-16S-14W	30	0	L-KC	3,127	14	1	0	0	0	Yes
14759	No	Trapp	John S. Martin*	(W) Oltmanns	Oltmanns	15-17S-13W	30	0	KC	3,150	10	2	-	4	1	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	3,130	27	2	1	0	0	Yes
11517	No	Trapp	Samson Resources Co.*	(D) Schneider C Lse. WF	Schneider C	2-16S-14W	160	0	Lans	3,082	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 + Top	3,121	64	5	0	0	1	Yes
15821	--	Two-Eighty-One	Cities Service Oil Co.	(D) Eveleigh "C"	Eveleigh "C", Streck "A"	27-16S-14W	32	0	L-KC	3,188	12	3	0	0	0	Yes
11972	No	Workman Northwest	Kewanee Oil Co.	(W) Buckbee	Buckbee	14-20S-12W	20	10	Arb	3,373	28	1	0	0	0	Yes
17247	No	Workman Northwest	Murfin Drilling	(P) Buckbee-Hulme	Buckbee, Hulme	15-20S-12W	240	0	Arb	3,370	51	4	1	-	-	Yes
15842	No	Workman Northwest	Petroleum, Inc.	(P) Hulme "G-I" Lse.	Hulme "G-I"	16-20S-12W	160	0	L-KC	3,160	52	6	0	0	0	Yes
		BARTON COUNTY TOTALS (Reported)					10747	1062				272	36	11	9	
BARTON-RICE COUNTIES																
9151	Yes	Mary Ida	Sohio Petroleum Co.	(W) Mary Ida Unit	Reif "A", Reif "B", Mauke, Mooney, Buehler, Musenberg, Doll	31-18S-10W, 36-18S-11W	370	--	L-KC	3,100	21	8	4	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: In-active	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
11293	2	0	2	0	Irreg	500	680	Prod	--	--	U	1972	Grav	1/18	38	--	248,200	--	3,432	--	5,070	--	*Was NCRA.
9163	1	0	0	0	Irreg	25	233	Prod + Ch Sd	525	50	M	1962	S Gas	1/3.2	42.1*	--	84,989	1,750,287	5,896	174,010	3,503	91,119	*@60
14488	1	--	--	--	Irreg	85	143	Prod	--	--	U	1972	S Gas	16/46	36	--	52,338	183,665	5,101	382,604	3,255	9,858	
16846	1	--	--	--	Irreg	Vac	138	Prod	--	--	U	1972	S Gas	2/1	--	--	50,540	292,424	25,133	1,098,917	25,133	1,034,959	
12991	1	0	0	0	Irreg	600	373	Prod	--	--	T	1966	S Gas	--	36	--	136,466	2,148,010	6,310	801,105	--	--	*Was Kathol Petroleum Inc.
13453	1	0	0	0	Irreg	350	615	Prod	--	--	T	1967	S Gas	--	40	--	225,104	2,309,487	11,464	615,247	11,464	121,941	
15196	1	0	0	0	Peri	300	280	Prod	--	--	--	1969	--	7/13	42.9	--	102,200	505,916	657	209,117	0	0	
13853	1	0	0	0	Irreg	0	300	Prod	--	--	U	1967	S Gas	14/145	37	--	112,051	952,330	2,198	37,115	0	0	
14882	1	0	0	0	Irreg	250	300	Prod	--	--	T	1969	S Gas	99/1	40	--	109,500	1,153,666	4,322	43,493	4,322	27,693	*Was 3-G Oil.
17144	1	0	0	0	Irreg	400	830	Prod + LKC	3142	20	T	1974	S Gas	9/1	37	--	303,002	515,264	7,247	299,528	3,451	10,118	*Was 3-G Oil.
11059	1	0	0	0	Irreg	0	35	Prod	--	--	U	1964	S Gas	1/4	38	--	12,075	276,650	673	12,633	410	6,875	*Was K&E Drilling Co.
13049	1	1	0	0	Irreg	900	480	Prod + Surface	40	10	M	1956	S Gas	--	38	--	175,680	2,063,530	6,221	54,764*	5,000	43,338†	*†Since 1971.
4418	0	1	0	0	--	0	0	None	--	--	--	--	--	--	--	--	0	--	2,009	--	2,009	--	*No prod. since 1974.
7104	2	1	0	0	Irreg	0	464	Prod + Fr	150	--	M	1959	S Gas	1/4.3	40	5.5	338,816	6,567,967	12,215	1,133,025	8,127	167,001	
17155	1	0	0	0	Irreg	200	375	Prod + Dak	250	20	M	1973	S Gas	4/15	36	--	136,937	289,449	8,330	55,922	8,330	17,353	
13249	1	0	0	0	Irreg	900	24	Prod + Sh Fr	100	40	F	1967	S Gas	9/1	45	--	8,602	231,552	3,742	--	3,742	28,991	
16593	3	0	0	0	Irreg	318	373	Dak	35	168	U	1972	S Gas	1/1.2	42.3	--	408,154	1,301,311	12,430	352,385	12,430	130,049	*Was Clinton Oil Co.
15193	1	0	0	0	Irreg	--	22	Prod	--	--	T	1969	Grav	--	37	--	8,030	98,439	2,758	30,344	2,758	30,344	
11630	1	0	0	0	Irreg	0	288	Prod	--	--	--	1965	S Gas	--	38	--	30,570	1,910,307	21,333	--	20,000	307,518	*Water injection began in August.
11909	2	2	0	1	Peri	Vac	204	Prod	--	--	U	1962	--	2384/3649	42	--	74,976	4,417,655	7,032	359,513	7,032	206,608	
12861	3	0	0	0	Peri	0	30	Prod + Sh	100	20	M	1966	S Gas +Wat	17/3	40	--	23,790	1,528,590	11,286	--	11,286	137,340	
14055	3	0	0	1	Peri	0	148	Prod + Sh Fr	100	0-100	M	1968	S Gas +Wat	1/4	41	--	162,000	1,350,100	1,884	--	1,884	33,296	
9838	2	0	0	0	Irreg	50	100	Prod + Ter Sd	60	16	M	1962	S Gas	Trace	30	--	75,777	1,798,598	4,625	--	4,625	150,470	*Was Schermerhorn.
12586	2	0	0	0	Irreg	Vac	243	Prod	--	--	U	1966	S Gas	68/59	30	--	177,318	1,322,093	3,465	288,489	0	28,665	
13215	2	1	0	0	Line	280	259	Prod + Sh Fr	60	--	M	1967	S Gas	1/0.5	30	18	189,366	2,034,884	9,043	365,663	6,752	105,434	
18106	1	0	0	0	Irreg	0	170	Prod + Fr	60	20	M	1976	S Gas	2/1	36	--	46,000	46,000	1,200	28,204	1,200	1,200	
18247	1	0	0	0	Irreg	0	100	None	--	--	U	1976	S Gas	1/19	36	--	21,000	21,000	1,412	149,088	0	0	
16089	1	0	0	0	Irreg	175	289	Arb	3349	3	U	1971	Wat	6/70	35	--	153,500	1,201,715	2,768	--	0	0	
14759	1	--	--	--	Irreg	Vac	180	Prod	--	--	U	1969	S Gas	31/69	39	--	35,100	455,881	3,932	402,814	1,966	--	*Was Lee Phillips Oil Co.
16882	1	0	0	0	Line	22	44	Prod + Ced H	247	44	T	1973	S Gas	17/36	41	4	16,205	102,247	4,051	195,287	4,051	16,205	
11517	1	2	0	0	Irreg	0	87	Prod	--	--	U	1965	S Gas	1/10	37	--	31,842	392,642	2,512	919,856	1,000	8,787	*Was Shell Oil.
16787	1	0	0	0	Peri	0	336	Prod + Dak	312	30	M	1973	Wat	17/33	39	--	118,465	395,355	4,668	22,109	0	0	
15821	1	0	0	0	Irreg	0	65	Prod	--	--	U	1970	S Gas	55/28	37.6	--	24,000	148,000	11,335	271,372	0	0	
11972	1	0	0	0	Irreg	Vac	14	Prod	--	--	U	1965	Wat	10/16	39	--	4,979	85,125	711	49,823	0	0	
17247	1	0	0	0	Irreg	0	127	Prod	--	--	T	1974	S Gas	1/4	38	--	46,355	105,925	3,747	242,467	--	--	
15842	1	0	0	0	Line	580	299	Prod	--	--	T	1971	S Gas	61/163	40.1	5	109,306	436,427	12,452	570,095	12,452	85,466	
	106	22	3	4													7,986,540	72,714,910	504,552	16,149,222	354,444	5,095,487	
9151	8	6	0	0	Peri	885	190	Prod + Fr	130	10	M	1962	S Gas	1/4.25	39.6	--	558,044	9,387,506	26,015	987,851	26,015	823,988	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
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	2,980 2,835	15	16	0	0	0	Yes
BARTON-STAFFORD																
10131	--	Bart-Staff	NCRA	(W) Dorfshaffer-McGreevy	McGreevy "A", McGreevy "B", Dorfshaffer	33-20S-14W 5-21S-14W	70	60	Lans	3,330	15	6	0	0	0	Yes
13810	No	Shaeffer Northeast	Kewanee Oil Co.	(W) Sharp A & B	Sharp A, Sharp B	35-20S-13W 3-21S-13W	100	40	KC	3,267	206	3	0	0	0	Yes
		BARTON-STAFFORD COUNTIES TOTAL (Reported)					170	100				9	0	0	0	
BOURBON COUNTY																
12914	--	Bronson Southeast	Hillenburg Oil Co.*	(W) Woodward A	Woodward A	12,13-25S-21E	90	0	Bartl	661	18	18	0	8	1	Yes
17316	--	Bronson Southeast	Hillenburg Oil Co.*	(W) ---	Humphrey	36-24S-21W	80	0	Bartl	661	18	18	0	11	3	Yes
14061	No	Bronson-Xenia	T. E. Bird	(W) Collins	John Camac, Audrey Collins	25-24S-21E	25	0	Cattle	610	16	6	16	16	6	No*
14355																
17329	--	Bronson-Xenia	Dee Eastwood	(W) Bronson Unit	Bronson Unit	1-25S-21E	640	0	Bartl	650	10	14	-	3	-	Yes
5545	--	Bronson-Xenia	Kanalta Resource Ltd.	(-) Zeigler	Arthur Zeigler	7,8,17, 18-24S-22E	160	--	Bartl	600	15	0	7	-	-	---
8780	No	Hepler	Walter Duncan	(W) Hepler	Freeman, Jackson, Shireman, Johnson	24-27S-21E 19-27S-22E	140	0	Tucker	675	14	35	0	0	0	Yes
		BOURBON COUNTY TOTALS (Reported)					1135	0				91	23	38	10	
BUTLER COUNTY																
9719	--	Augusta	Cities Service Oil Co.	(W) Skaer-Starkey Waterflood	Skaer, Starkey	35-27S-4E	165	100	KC Lime	2,030	5	10	0	0	5	Yes
10415	--	Augusta	Cities Service Oil Co.	(W) Augusta Unit	Augusta Unit	2,10,11,14, 15-28S-4E	732	28	KC	2,050	6	17	6	0	15	Yes
17901	--	Augusta	Cities Service Oil Co.	(W) Augusta Unit Simpson	Augusta Unit	2-28S-4E	70	0	Simp	2,568	11	3	0	0	0	Yes
15786	--	Augusta	Lyman David*	(W) Bohannon	Bohannon	2-28S-4E	--	--	KC	2,390	--	1	-	0	-	Yes
15786	Yes	Augusta	Lyman David*	(W) Lee-Prier	Lee-Prier	2-28S-4E	--	--	KC	2,390	--	4	-	0	-	Yes
12240	--	Augusta	Hammer & Maclean	(P) Ambler & Moyle	Moyle, Ambler	35-27S-4E 2-28S-4E	160	0	KC Lime	2,062	10	7	0	0	1	Yes
16242	--	Augusta	Hammer & Maclean*	(D) Safford-Mann & Safford	---	26-27S-4E	160	0	KC	2,032-2,040	10	3	0	0	0	Yes
2187	No	Augusta North	Jimmy Razook*	(D) ---	Razook	10-27S-4E	--	--	KC	2,100	10+	5	0	2	-	Yes
2120	--	Augusta North	Robert F. White*	(D) ---	Foster	21-27S-4E	160	80	KC	2,000	20	5	1	0	-	Yes
18550	No	Ballard	Metro Oil Corp.	(-) ---	Kaufman B	5-25S-3E	240	--	Miss	2,760	4	1	-	-	-	No*
15390	No	Berndsen	J. A. Allison	(P) Berndsen, Hetherington, Turner	Berndsen, Hetherington, Turner	15-26S-4E	100	60	Simp	2,448	28	8	0	0	0	Yes
2672	No	Blankenship	Hank Martell Oil Co.	(P) Dunne	Dunne	9-26S-8E	80	0	Bartl	2,400	20	2	1	0	0	Yes
6105	No	Brandt-Sensenbaugh	J. E. Morris	(D) Brewer	Brewer, Seeley	23-28S-7E	60	0	Peru	2,350	10	3	0	0	0	Yes
15259	--	Brandt-Sensenbaugh	White & Ellis Drlg., Inc.	(D) Ramp	Ramp	23,26-28S-7E	160	0	Peru	2,450	10	2	0	0	0	Yes
7926	No	Combs Northeast	Kewanee Oil Co.	(W) Gate Lse.	Gate	34-29S-5E	40	0	Bartl	2,817	8	1	0	0	0	Yes
11136	No	De Moss	Rex & Morris Drlg. 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	--	Bartl	2,650	40	10	0	0	1	Yes
13958	No	Eckel Northeast	Rex & Morris Drlg. Co.	(W) Henn	Vernon, Lill, Henn	5-27S-7E 6-27S-7E	110	0	KC A Zone	2,025	10	6	0	0	0	Yes
14986	No	Elbing	Dorman A. Ball	(W) Webreck	Webreck	18-23S-4E	80	--	Miss	2,400	35	1	1	0	-	Yes

Project no.	Injection Wells: Active	Injection Wells: In-active	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks*
14582	7	0	0	1	Peri	500	321	Prod + Dakota	360	40	T	1968	S Gas	13/70	41.3 @60	--	821,370	6,686,451	43,782	532,565	20,902	273,590	
10131	2	0	0	0	Irreg	800	197	Prod + Arb	3,550	--	T	1963	S Gas	1/2.6	30.5 @60	--	143,678	2,928,534	10,419	363,196	9,206	225,259	
13810	1	0	0	0	Irreg	900	202	Prod	--	--	U	1967	S Gas	40/46	34	--	73,608	815,407	6,976	310,762	2,920	14,600	
	3	0	0	0													217,286	3,743,941	17,395	673,958	12,126	239,859	
12914	10	0	0	0	Line	600	75	Miss Lm	832	--	F+T	1966	S Gas	32/68	31	--	27,375	--	22,380	--	22,380	--	*Was Terra Resources, Inc.
17316	8	0	1	0	Line	600	100	Miss	840	--	F+T	1966	S Gas	30/1	30	--	36,500	--	24,798	--	24,798	--	*Was Terra Resources, Inc.
14061	0	9	0	0	Line	0	0	---	--	--	-	1968	Gas Exp	1/0	32	15	0	923,060	1,556	75,978	1,556	75,978	*Revising injection system.
14355																							
17329	9	-	-	-	Irreg	350	50	Prod	--	--	-	1966	Grav	5/1	31	--	109,500	219,000	9,000	21,450	--	--	
5545	-	1	-	-	---	--	--	---	--	--	-	--	---	--	--	--	0	--	0	--	0	--	
8780	36	6	0	0	5-spot	560	15	Prod + Miss	830	30	F	1961	S Gas	--	26	--	198,453	4,445,408	6,665	473,911	6,665	--	
	63	16	1	0													371,828	5,587,468	64,399	571,339	55,399	75,978	
9719	12	2	0	0	5-spot	273	237	Prod + Arb	2,600	--	U	1962	S Gas	43/143	36	--	1,101,481	16,436,874	16,060	699,754	16,060	697,354	
10415	17	2	0	2	5-spot	367	469	Prod	--	--	T	1963	S Gas	69/232	36	--	1,732,053	28,824,026	21,242	2,968,711	21,242	1,039,682	
17901	1	0	0	0	Irreg	360	384	Prod	--	--	-	1974	S Gas	--	--	--	72,533	176,930	5,560	241,273	1,635	2,108	
15786	-	-	-	-	5-spot	--	--	Prod + KC	--	--	T	1963	Wat	--	36.8	--	--	--	615	--	--	--	*Was Farm & Ranch Uni. Inv.
15786	-	-	-	-	5-spot	--	--	Prod + KC	--	--	T	1963	Wat	--	36.8	--	14,080	--	3,321	--	--	--	*Was Farm & Ranch Uni.Inv.
12240	4	0	0	0	Irreg	250	145	Prod + KC Lm	2,026	10	U	1965	Grav	7/3	35	0	212,147	4,475,992	7,283	134,296	7,283	134,296	
16242	2	0	0	0	Irreg	0	369	Prod	--	--	U	1971	Grav	96/4	32	0	269,097	664,508	3,565	12,202	3,565	500	*Was Wilbur Skaer
2187	-	-	-	-	Irreg	Vac	500	Prod	--	--	U	--	S Gas	4/96	36	--	181,500	--	10,950	--	5,000	--	*Was Robert White
2120	1	0	0	0	Irreg	400	1,200	Prod	--	--	U	--	Wat + S Gas	1/9	--	--	350,000	10,000,000†	4,000	1,000,000†	3,500	138,000	*Was Mobil †Unknown, estimated
18550	1	-	-	-	Irreg	Grav	14	Prod	--	--	U	1976	Wat	33/67	40	--	420	420	210	210	0	0	*Started 12/1/76
15390	3	0	0	0	Irreg	Vac	250	Prod	--	--	T	1970	Wat	1/4	39	--	91,000	914,816	8,922	1,005,183	8,922	74,812	
2672	1	1	0	0	Irreg	0	50	Prod	--	--	T	--	S Gas	3/2	35	--	18,250	132,650	2,770	--	--	--	
6105	1	0	0	0	Irreg	230	236	Prod + Miss	2,700	300	U	1958	S Gas	--	--	--	86,140	--	NA*	--	NA*	--	*Oil commingled/Miss oil
15259	1	0	0	0	Irreg	0	4	Prod	--	--	T	1969	S Gas	3/2	38	--	1,000	8,940	2,269	68,964	0	0	
7926	1	0	0	0	Irreg	Vac	40	Prod	--	--	U	1960	S Gas	1/15	38	0	14,600	761,985	740	63,236	0	20,280	
11136	2	0	0	0	Irreg	115	275	Prod	--	--	U	1964	S Gas	--	40	--	200,750	--	4,773	--	--	--	
13958	1	1	0	0	Irreg	245	369	Prod + Quat*	20	20	M	1967	S Gas	11/9	37	--	137,729	1,138,882	8,079	183,562	5,655	33,091	*Shut down 3/15/76
14986	1	-	0	-	Line	--	--	Prod + Miss chat	40	35	T	1962	Grav	1/10	40	--	40	--	1,261	--	0	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
BUTLER COUNTY (Cont.)																
7145	No	Elbing	Hillenburg Oil Co.*	(P) North Lathrop	North Lathrop	17-23S-4E	80	0	KC	1,950	30	4	0	0	0	Yes
8005	No	Elbing	Hillenburg Oil Co.*	(-) South Lathrop	South Lathrop	17-23S-4E	80	0	KC	1,950	30	3	3	0	0	No†
13622	No	Elbing	Richard B. Morris*	(P) Everrt-Ferrier	Parris Everrt-Ferrier, Neer-Ferrier	20-23S-4E 29-23S-4E	70	0	KC	2,020	30	3	0	0	0	Yes
11937	No	Elbing	Phillips Petroleum Co.	(W) J.C.Scully	Scully	17-23S-4E	60	0	LKC	2,020	30	1	0	0	1	Yes
4575	No	El Dorado	R R.Abderhalden	(P) Pollard	Pollard	25-25S-4E	80	0	El Dor Sh Sd	700	20	1	4	0	0	Yes
6672	No	El Dorado	R.R.Abderhalden	(W) Deming Waterflood	Deming	19-25S-5E	80	0	El Dor Sh Sd	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 Sh Sd	650	20	1	1	0	0	No†
3509	--	El Dorado	Burton Oil Prod.	(-) Falkenberg	Falkenberg Sluss	23-26S-3E 26-26S-3E	240	-	Bartl	2,700	35	4	0	0	0	Yes
5493 6586 2577 6888	--	El Dorado	Cities Service Oil Co.	(W) Finney Simpson	Finney (2), Graham "C", Fulkerson, Millheisler "A", D.L.Howe, Millheisler "B", Thompson Pierpoint	4-26S-5E 32-25S-5E	251	370	Simp	2,460	27	20	5	0	15	Yes
6351	--	El Dorado	Cities Service Oil Co.	(W) Chesney-Hegberg MP	Chesney Hegberg	21-25S-5E 28-25S-5E	51	0	Admire Sd	650	20	8	0	--	0	Yes
				(W) Chesney White Cloud	Chesney "A"	21-25S-5E	50	0	White Cld	860	10	5	0	0	0	Yes
				(W) Chesney Kansas City	Chesney Knox & Mills Hegberg	21-25S-5E 22-25S-5E 28-25S-5E	347	100	KC	1,900	32	20	4	0	8	Yes
7869 10002	--	El Dorado	Cities Service Oil Co.	(W) Enyart Lansing-Kansas City	Brack "B", Brack "C", Hamilton Enyart "A" Abraham-Ralston, Porter Paulson	11-26S-4E 12-26S-4E 1-26S-4E 2-26S-4E	568	268	LKC	1,600-2000	22	41	1	0	7	Yes
9803	--	El Dorado	Cities Service Oil Co.	(W) Stokes Kansas City	B.Stokes & Hegberg Stapleton Pierpoint Stokes "A"	28-25S-5E 29-25S-5E 32-25S-5E 33-25S-5E	600	0	KC	2,000	20	27	4	0	6	Yes
13973	--	El Dorado	Cities Service Oil Co.	(W) Stapleton Simpson	Stapleton Moler	29-25S-5E 32-25S-5E	135	20	Up Simp	2,440	19	4	1	0	2	Yes
16163	--	El Dorado	Cities Service Oil Co.	(W) Empire Lansing	Empire Fee	17-26S-5E	103	0	Lans	1,700	20	8	0	0	0	Yes
3016	No	El Dorado	Dunne Equities, Inc.	(D) M.A.Koogler	Koogler	25-26S-4E*	265	--	Simp-Viola	2,400	40	26	0	0	0	Yes
2551	--	El Dorado	Gear Petroleum Co.	(W) Page Lease	Page	9-26S-5E	30	--	Simp	3,000	10	2	0	0	0	Yes
4830	No	El Dorado	Gulf Oil Corp.	(W) A.J.Shumway	A.J.Shumway	11-26S-4E	160	0	KC	1,975	--	16	8	0	0	Yes
13161	No	El Dorado	Okmar*	(W) Fowler	Fowler	1-26S-4E	20	0	KC	2,040	20	3	0	0	0	Yes
15109	No	El Dorado	Okmar	(W) Baker Coop	Baker West	16-26S-5E	20	20	Lans	1,650	10	1	0	0	0	Yes
7484	--	El Dorado	Saco Oil Co.	(P) Belton	Belton	3-25S-5E	40	--	Peru	2,130	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 Co.	(P) W.E.Brown	W.E.Brown	32-26S-5E	--	--	Viola Lime	2,692	12	1	1	0	0	Yes
8192 8336 6333 8386	--	El Dorado	Southern States Oil Co.	(P) Mills	Mills	27-25S-5E	160	--	El Dor KC Doug	700 2,000 2,500	--	15	0	0	0	Yes
17692	--	El Dorado	Southern States Oil Co.	(P) Cook	Cook	4-26S-5E	40	--	Viola	2,611	18	1	1	0	0	Yes
3454	--	El Dorado	Stelbar Oil Corp., Inc.	(W) Stone	Stone	2-25S-5E	80	--	Peru	2,150	20	2	2	0	0	Yes
4099	No	El Dorado	White & Ellis Drilling,Inc.*	(D) Wilson	Wilson	7-25S-5E	160	0	Miss	2,560	15	3	0	0	0	Yes
16481	No	El Dorado	Wilson Prod.Co.Inc.	(P) Wilson Prod.Co.Inc.-Hawkins	Robison North-Robison South	17-25S-5E	100	0	Miss Ch	2,500	35	9	0	1	0	Yes
8319	--	El Dorado	R.J.Wixson Co.	(D) Morgan	Morgan, Banks	13-25S-4E	180	--	Miss	2,600	59	5	2	--	--	Yes
4077	No	El Dorado	Wright Oil Co.	(W) Robison Lease	Robison	17-25S-5E	200	--	Miss Ch	2,550	30	15	1	0	0	Yes
17950	--	Entz Pool	Cities Service Oil Co.	(W) Entz-Gamble	Entz,Gamble	23-26S-4E	80	0	Simp	2,491	10	2	0	0	0	Yes
5287	--	Ferrell	Midwest Supply Co.	(-) Ferrell	Ferrell	21-28S-8E	400	--	Miss	2,750	30	10	1	0	0	Yes
16942	--	Ferrell	K.T.Wiedemann Trust	(D) Mary Jane Fouts	Fouts #5	16-28S-8E	80	0	Miss Lime	2,725	--	2	0	0	0	Yes
1909	--	Fox-Bush	MISCO Industries,Inc.	(W) Fox-Bush	Brown, Leonard Brown, Fox, Haver, Jackson Myers, Naden, Perisho, Price, Sooter	35,36-28S-5E 1,2,11,12, 13-29S-5E 18-29S-6E	560	1070	Bartl	2,800	5-55	13	1	0	3	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
7145	1	0	0	0	Irreg	0	300	Prod + Hunt	2300	15	U	1959	S Gas	--	32	--	109,500	1,749,000	3,700	--	1,100	--	*Was Terra Resources Inc.
8005	0	0	0	0	Irreg	0	0	---	--	--	--	1960	--	--	32	--	0	2,083,500	4,000	--	0	--	*Was Terra Resources Inc. †Injection shut in.
13622	1	0	0	0	Irreg	150	150	Prod + Fr	20	5	M	1967	S Gas	--	33	--	55,000	550,000	1,647	--	347	--	*Was James A.Cook
11937	2	0	0	0	Irreg	0	214	Prod*	2400-2325	--	U	1965	S Gas	1/10.7	35	10	156,000	1,795,770	1,095	56,977	0	4,293	*+Viola & Hunt
4575	1	--	0	--	Irreg	500	70	Prod	--	--	U	--	S Gas	--	35	--	25,550	--	711	--	711	--	
6672	0	8	0	0	--	0	0	Prod	--	--	T	1958	S Gas	11/28	34	6.5	0	994,496	0	79,476	0	79,476	*Temporarily shut in.
7084	1	0	0	0	Irreg	100	15	Prod	--	--	T	--	S Gas	1/10	33	--	5,500	52,950	127	1,654	127	1,654	*Was Abels Oil Co. †Injection problems.
3509	3	0	0	0	Irreg	0-30	1000	Prod	--	--	U	1951	Wat	--	39	--	365,000	--	11,000	--	5,000	--	
5493 6586 2577 6888 6351	12	3	0	4	Irreg	168	359	Prod + Arb	2426	11	T	1950	S Gas	5/0	34.5	--	1,899,208	50,485,849	45,764	4,578,283	45,764	2,827,529	
	19	0	--	0	5-spot	143	69	No*	--	--	F	1975	S Gas	--	37	--	560,797	595,826	4,560	7,704,560	4,560	4,847	*Water from Lake Bluestem,
7869 10002	25	0	0	1	5-spot	588	428	Prod + Arb	2400	193	T	1963	S Gas	--	36	--	4,301,841	46,569,881	93,408	1,793,213	93,408	1,761,984	
9803	19	0	0	2	5-spot	588	366	Prod + Arb	2500	--	T	1962	S Gas	9/38	36	--	2,477,755	32,558,566	60,511	1,620,026	60,511	1,153,129	
13973	4	1	0	0	5-spot	263	468	Prod + Arb	2404	672	T	1967	S Gas	0/0	36	--	674,840	5,710,517	15,590	1,498,253	15,590	244,644	
16163	4	0	0	0	Irreg	134	192	Prod *	2500	--	T	1971	S Gas	3/2	36.1	--	356,764	1,760,336	13,819	455,753	13,819	68,969	*+ Viola Simp.
3016	10	0	0	0	Irreg	0	5,900	Prod	--	--	U	1951	Gas Exp	--	34	--	21,594,000	883,345,524	26,686	3,347,916	26,686	3,347,916	*+29,30,32-26S-5E
2551	2	0	0	0	Irreg	200	245	Prod	--	--	U	--	S Gas	--	36	--	89,425	403,535	1,892	--	1,892	--	
4830	6	0	0	0	5-spot	650	3158	Prod	--	--	U	1963	S Gas	21/143	33.5	--	1,438,764	13,145,816	33,906	684,886	33,906	684,886	
13161	1	0	0	0	Peri	340	875	Prod + Arb	2440	5	U	1966	S Gas	--	33	--	320,250	3,284,970	3,219	57,506	2,124	20,464	*Was L. Lamb
15109	1	0	0	0	Peri	275	338	Prod + KC	1750	10	U	1969	S Gas	18/158	34	--	123,708	1,097,333	1,841	38,229	1,841	13,322	
7484	--	--	--	--	-- .	50	50	Prod	--	--	U	1958	Grav	1/9	34.3	--	--	--	1,737	179,685	1,737	18,632	
12221	1	--	0	--	5-spot	100	100	Prod	2160	3	T	1965	S Gas	4/1	36	--	53,750	--	1,374	--	--	--	
7096	1	0	0	0	Irreg	0	224	Prod	--	--	T	1959	Grav	--	32	--	81,760	2,103,501	1,417	88,408	1,417	88,408	
8192 8336 6333 8386	2	0	0	0	Irreg	400	880	Prod	--	--	T	1959	Grav	--	35	--	642,318	12,755,378	11,904	703,850	11,904	703,850	
17692	1	0	0	0	Irreg	150	722	Prod	--	--	T	1975	Wat	--	34	--	263,500	592,030	4,037	7,877	4,037	7,877	
3454	1	0	0	0	Irreg	900	150	Prod	--	--	T	1951	S Gas	--	35	--	54,750	1,579,850	20,727	--	20,727	399,078	
4099	1	0	0	0	Irreg	50	60	Prod	--	--	U	1954	Wat	--	40	--	21,600	1,972,400	5,586	--	0	0	*Was Henderson Oil Co.
16481	1	--	0	--	Irreg	100	500	Prod	--	--	U	1972	Grav	3/17	43	--	182,000	1,041,450	45,600*	456,727	22,800*	--	*27,500MCF + 456,727MCF
8319	--	--	--	--	5-spot	--	--	Prod	--	--	U	1960	--	5/3	40	--	--	--	3,199	--	--	--	
4077	2	0	0	0	Irreg	200	500	Prod	0	0	T	--	S Gas	1/4	42	--	180,000	--	45,625	--	30,000	--	
17950	2	0	0	0	Irreg	140	237	Prod	--	--	U	1975	S Gas	--	0	--	108,624	112,306	4,000	297,159	4,066	4,066	
5287	4	1	0	0	Irreg	500	400	Prod	--	--	T	1955	Grav	--	37	--	600,000	--	16,508	--	16,508	--	
16942	1	0	0	0	Irreg	0	5	Prod	--	--	U	1973	Wat	--	35	--	1,830	11,276	1,411	172,938	--	--	
1909	8	0	0	13	5-spot	--	--	Prod	--	--	T	1947	--	--	--	--	412,450	--	11,361	--	11,361	--	

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
BUTLER COUNTY (cont.)																
18231	No	Fox-Bush-Couch	Santa Robin Operated by Ernest Price,Jr.	(D) Santa Robin & Price	Santa Robin	25-29S-5E	320	--	Bartl	2,800	10-40	6	-	7	-	Yes
1650	--	Fox-Bush-Couch	Southern States Oil Co.	(P) Brown (North)	Brown A	25-29S-5E	72	--	Bartl	2,735	45	2	1	0	0	Yes
5496	No	Fox-Bush-Couch	Tomlinson Oil Co., Inc.	(D) Speer and Bunnell	Bunnell, Speer	25-28S-5E 27-28S-5E	80	0	Bartl	2,790	25	3	0	0	0	Yes
2903	Yes	Fox-Bush-Couch	James H. Webster	(P) North Fox Bush	Craig, Kingsley, Bowyer, Mills, Speedling, Malter, Bunnell, Shawver	23-28S-5E 24-28S-5E 25-28S-5E 26-28S-5E 35-28S-5E	1,020	--	Bartl	2,750	50	5	-	-	-	---
10457	Yes	Harlan	Adair Oil Co.	(P) Harvey	Harvey	26,35-23S-4E	280	40	KC	2,140	7	4	0	0	0	Yes
16646	--	Hazlett	Range Oil Company, Inc.	(P) Sommers	Sommers	5-25S-5E	120	--	Congl Sd	2,375	10	1	-	-	-	Yes
17052	No	Hazlett	Rex & Morris Drlg. Co.	(D) Fannie	Fannie	29-23S-5E	40	0	Miss	2,450	25	2	0	0	0	Yes
16357	--	Hazlett	K. T. Wiedemann Trust	(W) Clearwater Unit	Clearwater, Ammeter, H.A. Goering, E.R. Goering	31-23S-5E	360	0	Osage Miss	2,459	24	25	0	0	0	Yes
3805	--	Keighley	R. W. Musgrove*	(D) Barnhill	Barnhill	12-27S-7E	160	--	Bartl	2,750	30	2	-	-	-	Yes
15654	--	Keighley	R. W. Misgrove*	(D) Worrell	Worrell	12-27S-7E	160	--	Bartl	2,750	30	2	-	-	-	Yes
16166	No	Keighley	Lee Phillips Oil Co.	(P) Keighley Northeast Flood Unit	Saco Drumm, Drumm Institute, Gray "B", Gray "A", Gray "C"	30-26S-8E 31-26S-8E 6-27S-8E	--	--	Bartl	2,700	42	11	0	0	5	Yes
17561	No	Keighley Northeast	Dick Hess	(D) Keighley N.E.	Pike, Gray Estate	31-26S-8E	240	0	Bartl	2,670	50	4	2	8	-	Yes
37-05-05	No	Kramer-Stern	Dunne Equities, Inc.	(D) Blakeman	Blakeman, Clay "B"	4-28S-6E	240	0	Viola	3,089	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	3,006	12	10	4	0	1	Yes
16178	No	Kramer-Stern	Rex & Morris Drlg. Co.	(W) Lucas "A" & "B" Waterflood Unit	Lucas "A", Lucas "B"	11-28S-6E	160	0	Lower Simp	3,000	6	9	0	0	0	Yes
17260	--	Kramer-Stern	Saco Oil Company	(D) Kramer	Kramer, Gilliland, Lindgren	3-28S-6E	--	--	Viola	3,070	10	8	0	0	0	Yes
976 3074 6984 8301	--	Kramer-Stern	Southern States Oil Co.	(P) Shriver-Stern	Stern, Shriver, Patterson	27,28,33-27S-6E 33,34-27S-6E 34-27S-6E	680	--	Viola	3,080	40	18	5	0	0	Yes
3218	--	Kramer-Stern	Texaco Inc.	(-) Tabing	F. Tabing	28-27S-6E	--	--	Viola	3,075	16	1	0	0	0	Yes
17267	No	Kramer-Stern	Woodward Oil Acct.	(-) ---	North & South Blakeman	3-28S-6E	160	--	Viola	3,060	4	4	1	1	-	Yes
13911	--	Leon	Hammer and Maclean	(D) Maclean Lse.	Maclean	17-27S-6E	160	0	Viola	3,129-3,136	17	2	0	0	0	Yes
6426	Yes	Muddy Creek	R. R. Abderhalden	(W) So. Muddy Creek Waterflood	Doyle, Probert, Hodges	13-29S-4E	60	20	Bartl	2,800	20	2	2	0	0	Yes
6853	No	Muddy Creek	R. R. Abderhalden	(W) North Muddy Creek Waterflood	E. Fresh, C. Williams	7-29S-5E	60	0	Bartl	2,730	13	3	1	0	0	Yes
6099	No	Muddy Creek	Tomlinson Oil Co., Inc.	(W) Stewart "A" Lse.	Stewart "A"	6-29S-5E	20	0	Bartl	2,700	9	1	1	0	0	Yes
11990	--	Paulson	American Petrofina Co. of Texas*	(P) Paulson Waterflood Station #1	Busenitz, Guinty, Webreck, Scully "A&B", Hinz	13-23S-3E 23-23S-3E 24-23S-3E	320	120	Miss	2,460	28	19	4	-	-	Yes
13254	--	Paulson	American Petrofina Co. of Texas*	(P) Paulson Waterflood Station #2	Paulson "C"	25-23S-3E	160	0	Miss	2,460	28	2	1	0	0	Yes
15596	No	Pierce	Baker Oil Inc.	(D) Jones	Jones	33-25S-4E	20	--	Miss chat	2,525	40	2	0	0	0	Yes
16947	--	Pierce	White & Ellis Drlg., Inc.	(D) Albers	Albers	21-25S-4E	320	0	Miss	2,550	10	9	0	0	0	Yes
17323	--	Potwin	Kansas Petroleum, Inc.*	(P) Potwin Moore	Mulnix, Moore "A", McCraner "B", Moore "B", McCraner "C", Long	35-24S-3E 36-24S-3E 1-25S-3E	400	--	Miss	-1,350	10±	7	5	-	-	Yes
18194	--	Potwin	Ray Law*	(W) Potwin Unit	McCraner D	2-25S-3E	--	--	Miss Dol	2,671	9	2	0	0	0	Yes
11095	--	Potwin	Rex & Morris Drilling Co.	(D) Maxwell	Maxwell, Maxwell "A", McGill, Penner	31-24S-4E 32-24S-4E	410	0	Miss Dol	2,670	9	13	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
18231	1	-	-	-	Irreg	Vac	800	Prod	--	--	U	1976	Grav	16/84	41.5	--	284,000	284,000	20,753	--	--	--	
1650	1	0	0	0	Irreg	--	191	Prod	--	--	T	1959	Grav	--	40	--	69,715	1,497,486	2,473	109,658	2,473	109,658	
5496	1	0	0	0	Line	150	724	Prod	--	--	U	1957	Gas Exp	--	37.8	--	264,260	9,255,946	2,118	513,229	2,118	103,483	
2903	-	-	-	-	---	Grav	250	Prod	--	--	T	--	---	--	42	--	--	--	4,157	--	--	--	
10457	1	0	0	0	Irreg	250	10	Prod	--	--	U	1963	Wat	--	32	--	6,050	174,962	4,330	83,637	1,750	19,380	
16646	1	-	-	-	Irreg	0	45	Prod	--	--	U	1972	Wat	1/1	40	--	16,425	--	1,539	30,362	385	--	
17052	1	0	0	0	Irreg	0	210	Prod	--	--	U	1973	S Gas	9/210	41	--	76,650	--	2,500	123,727	0	0	
16357	2	0	0	0	Irreg	500	534	Prod	--	--	T	1971	Grav	--	40	--	390,671	1,685,413	19,861	131,687	--	--	
3805	1	-	-	1	Irreg	0	30	Prod	--	--	U	1950	Wat	5/95	39	--	10,000	--	1,300	--	0	--	*Was White & Ellis
15654	1	-	-	-	Irreg	0	30	Prod	--	--	U	1950	Wat	5/95	39	--	10,000	--	1,300	--	0	--	*Was White & Ellis
16166	6	0	0	0	Irreg	0	710	Prod + Doug	1,580	20	U	1971	S Gas	11/89	37	--	259,150	3,060,295	45,799	855,545	0	0	
17561	2	-	-	-	Irreg	0	50	Prod + Bartl	3,300	200	T	--	Grav	4/50	38	--	18,250	27,000	6,831	--	6,831	--	
37-05-05	2	0	0	0	Irreg	--	500	Prod	--	--	U	--	Gas Exp	1/1	35	--	366,000	--	13,146	--	13,146	--	
13048	3	0	0	0	Irreg	--	163	Prod	--	--	U	1966	Grav	3/2	34	--	179,046	730,482	18,645	206,309	18,645	206,309	
16178	1	0	0	0	Irreg	350	689	Prod + Miss	2,750	50	U	1971	S Gas	7.5/12.5	34	--	251,485	947,094	14,827	413,798	4,942	12,117	
17260	-	-	-	-	Irreg	Vac	975	Prod	--	--	U	1974	Wat + Grav	5/95	--	--	--	--	16,103	--	16,103	--	
976 3074 6984 8301	8	0	0	0	Irreg	875	718	Prod + Viola	--	--	M	1959	Grav	--	34	--	2,095,542	26,372,110	38,008	1,017,032	38,008	1,017,032	
3218	1	0	0	0	Irreg	Vac	380	Prod	--	--	-	1952	Wat	5/9	--	--	138,790	965,346	3,285	109,581	0	0	
17267	1	-	-	-	Irreg	Vac	800	Prod*	--	--	U	1955†	---	--	35	--	292,000	--	5,000	--	--	--	*Disposal of Prod wat only †Approximately
13911	1	0	0	0	Irreg	0	200	Prod	--	--	U	1968	Grav	5/95	35	--	73,000	657,000	Approx. 2,228	10,971	2,228	10,971	
6426	1	0	0	0	Line	700	150	Prod + Doug	800	70	T	1962	S Gas	3/1	38	3.0	55,000	1,413,011	2,295	89,625	2,295	89,625	
6853	3	0	0	0	Irreg	350	40	Prod + Doug	560	--	T	1963	S Gas	3/0	36	--	43,800	544,835	4,279	81,509	4,279	81,509	
6099	1	1	0	0	Peri	434	77	Prod + Doug	1,599	30	T	1958	S Gas	--	38.4	--	28,245	520,002	2,179	118,028	2,179	57,717	
11990	3	2	0	0	Irreg	650	450	Prod	--	--	U	1965	Wat	1/5	41	--	492,894	4,703,498	26,397	939,505	26,397	939,505	*Was El Dorado Refg. Co.
13254	1	0	0	0	5-spot	50	436	Prod	--	--	U	1967	Wat	1/20	39.9	--	159,431	4,079,924	1,094	44,730	1,094	43,658	*Was El Dorado Refg. Co.
15596	1	0	0	0	Irreg	0	30	Prod	--	--	U	1970	Grav	--	43	--	10,950	72,900	570	36,493	0	0	
16947	1	0	0	0	Irreg	0	20	Prod	--	--	T	1973	S Gas	3/1	40	--	7,200	25,800	5,001	242,981	--	--	
17323	1	-	-	-	Irreg	0	--	Prod	--	--	U	1974	S Gas	--	39.5	--	192,960	482,400	9,568	23,056	2,000	6,008	*Was Goering & Hedrick
11186	1	0	0	0	---	0	80	Prod	--	--	U	--	---	1/2	42	--	18,000	--	2,000	--	2,000	--	*Was Clinton Oil Company
11095	2	1	0	0	Irreg	350	242	Prod	--	--	U	1964	Wat	--	43	--	176,660	713,177	7,784	--	3,114	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
BUTLER COUNTY (concl.)																
8391 8608	--	Potwin	R. J. Wixson Company	(D) ---	Joseph, Moore, Neiman, Ulmer, Dohren A, Dohren B	3-25S-3E 10-25S-3E 11-25S-3E	520	--	Miss	2,700	--	22	-	1	-	---
9368	--	Reynolds-Shaffer	American Petrofina Co. of Texas*	(D) Brewer	Brewer	33-26S-6E	80	0	Miss	2,784	12	5	0	0	0	Yes
17763	No	Reynolds-Shaffer	Murfin Drilling Company	(P) Reynolds Shaeffer Waterflood	Daugherty, Beadles, Maclean, Tatum, Edwards	33-26S-6E 34-26S-6E 3-27S-6E 33-26S-6E 4-27S-6E	560	220	Miss	2,794	21	12	4	0	0	Yes
4039	--	Reynolds-Shaffer	Yuma Oil Company	(D) Doughty & Palmer	Doughty, Palmer	6-27S-6E	40	--	Bartl	2,700	10	3	0	0	0	Yes
12229 12310	--	Rosalia	Continental Oil*	(P) Rosalia	Zimmerman	11-25S-7E	480	0	Squir	2,560	30	5	1	-	0	Yes
4169	No	Sallyards	Okmar*	(W) Drumm-Bitler	Drumm, Bitler	20-26S-8E	80	0	Bartl	2,660	25	2	2	0	0	Yes
16653	No	Salter	Indian Wells Oil Co., Inc.*	(D) Swindell	Swindell	22-28S-3E	80	0	Simp	3,003	6	1	0	0	0	Yes
1319	No	Seward	W. R. Gross	(D) Seward	Seward	12-27S-7E	50	--	Bartl	2,700	30	1	0	0	0	No*
10166	--	Shinn	K. T. Wiedemann Trust	(W) Shinn Waterflood	Shinn	19-29S-8E	120	0	Miss Dol	2,760	16	13	0	0	0	Yes
2096	--	Smock-Sluss	Bisagno Bros., Inc. & Bisagno Six Oil Co., Inc.	(D) Bisagno	Bisagno Bros. Inc., Bisagno Six Oil Co., Bisagno #17	35-26S-5E	90	10	Bartl	2,700	40	4	2	0	0	Yes
13206	No	Smock-Sluss	J.E. Morris, Oil Producer and Operator	(D) Knutson	Knutson, Irvine	11-27S-5E	320	0	Bartl	2,700	30	3	1	0	0	Yes
17996	No	Snowden-McSweeney	Ernest Price, Jr.	(D) Woods Bros.	Woods Bros.	16-29S-6E	160	--	Peru	2,480	16-20	3	-	4	-	Yes
3430	No	Snowden-McSweeney	Earl F. Wakefield, Inc.	(D) Wakefield "Fee"	Wakefield "Fee"	9-29S-6E	200	0	Bartl	2,800	20	7	4	0	0	Yes
4029 6580	No	Towanda	Kewanee Oil Company	(W) Rice-Wait	Rice, Wait	5-26S-4E	240	80	Viola Simp	2,445 2,476	30 30	12	2	0	0	Yes
16406	--	Whitewater East	White & Ellis Drlg., Inc.*	(D) Edmiston	Edmiston	33-25S-4E	240	0	Miss	2,460	8	5	0	0	0	Yes
15542	No	Whitewater West	Indian Wells Oil Co., Inc.*	(D) Vachal	Vachal	33-25S-3E	80	--	Miss	2,724	7	1	0	0	0	Yes
15546	No	Whitewater West	Indian Wells Oil Co., Inc.*	(D) Hamilton-Scully	Scully, Hamilton	28-25S-3E 34-25S-3E	400	--	Miss	2,725	22	5	0	0	0	Yes
17962	--	Womack	Continental Oil	(-) Womack	Womack Un.	17-28S-6E	130	0	Bartl	2,772	9	6	0	-	-	Yes
1318	No	Young	Dunne Equities, Inc.	(D) Willhite	Willhite	27-26S-7E	80	--	KC	2,108	28	5	0	0	0	Yes
3258	No	Young	Okmar	(W) Young Co-op	Young A, Young B, Young-Inger, Willhite AR, Willhite A & B	27-26S-7E	110	0	KC	2,140	37	8	0	0	0	Yes
5932	--	Young	(J.E. Morris) Rex & Morris Drilling Co.	(D) Guenther	Johnson*, Guenther "A", Guenther "B"*	20-26S-7E 29-26S-7E	440	160	Miss	2,750	20	9	0	0	0	Yes
12982	--	Young Southwest	Crowe Drilling Co., Inc.	(P) PMA Ranch	PMA Ranch	32-26S-7E	80	0	Miss	2,724	8	-	-	-	-	---
		BUTLER COUNTY TOTALS (Reported)					19129	2766				686	96	24	72	
BUTLER-COWLEY COUNTIES																
5547	--	Fox-Bush-Couch	Stelbar Oil Corp.	(W) Brown and Shawver Atlanta Ranch	Brown, Brown, Brown, Shawver Atlanta Ranch	36-29S-5E 31-29S-6E 1-30S-5E 6-30S-6E	640	320	Bartl	2,800	30	3	0	0	0	Yes
16144	No	Rock Northeast	Stelbar Oil Corp., Inc.	(-) Abildgaard	Hoyt, Holt, Holt-Gimple, Gimple, Pottorff, Abildgaard	29-29S-5E 31-29S-5E 32-29S-5E 6-30S-5E	960	--	Bartl	2,832	18	13	0	0	0	Yes
		BUTLER-COWLEY COUNTIES TOTALS (Reported)					1600	320				16	0	0	0	
BUTLER-MARION COUNTIES																
16185	Yes	Elbing	C. E. Bayes	(-) Bayes Oil Co.	Hawk, Ayers	33-22S-4E 3-23S-4E	81	0	KC lime	2,060	40	2	1	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks.
8391	–	–	–	–	---	--	--	Prod	--	--	–	1961	Wat	--	40	--	--	--	8,030	--	--	--	
8608																							
9368	1	0	0	0	Irreg	0-Vac	95	Prod	--	--	U	1962	S Gas	1/5	34	--	34,591	367,329	3,598	120,582	3,598	24,431	*Was El Dorado Refg. Co.
17763	1	0	0	0	Irreg	400	411	Prod + Arb	3,229	--	T	1975	Wat	1/4	35	--	150,335	330,263	10,386	573,626	2,887	3,287	
4039	1	0	0	0	---	Vac	50	Prod	--	--	U	1951	Wat	4/96	--	--	18,250	--	5,822	--	5,822	--	
12229	1	–	–	–	Irreg	0	298	Prod	--	--	U	1965	S Gas	--	40	--	104,000	409,002	0	†	0	†	*Was Oasis Pet., Inc.
12310																							†Press. Maint.
4169	1	0	0	0	Irreg	75	110	Prod	--	--	U	1954	S Gas	--	36	--	40,260	772,370	5,688	122,808	5,688	17,639	*Was H. C. Bennett
16653	1	0	0	0	Irreg	0	6	Prod	--	--	T	1972	Other	1/9	29.7	--	2,190	110,595	678	206,572	--	--	*Was Kathol Petroleum.
1319	1	0	0	0	Irreg	0	150	Prod	--	--	U	--	---	--	33	--	27,300	768,530	323	83,414	--	--	*Well down intermittently, well problems.
10166	6	0	0	0	Irreg	850	419	Prod	--	--	T	1963	Other	--	39	--	919,592	7,646,333	31,041	356,826	--	--	
2096	3	0	1	–	Irreg	90	600	Prod	--	--	T+S	1955	Grav	10/1	37.9	--	108,000	15,258,000	10,096	106,078	9,591	--	
13206	1	0	0	0	Irreg	0	290	Prod	--	--	U	1967	S Gas	3/2	39	--	105,850	878,185	5,334	134,126	1,778	7,716	
17996	1	–	1	–	Irreg	Vac	100	Prod	--	--	–	1975	---	1/1	36	--	18,000	22,500	5,082	13,509	--	--	
3430	2	0	0	0	5-spot	0	32	Prod	--	--	U	1960	S Gas	--	39	--	81,760	3,923,442	3,114	225,683	1,557	112,842	
4029	2	2	0	0	Irreg	340	983	Prod	--	--	U	1954	Wat	--	38	--	717,818	16,688,369	28,095	4,273,512	--	--	
6580																							
16406	1	0	0	0	Irreg	0	25	Prod	--	--	T	1972	S Gas	1/2	40	--	9,000	42,875	2,435	131,266	--	--	*Was Kimray, Inc.
15542	1	0	0	0	Irreg	0	12	---	--	--	T	1970	---	2/3	43	--	4,380	46,720	1,265	17,442	--	--	*Was Kathol Petr., Inc.
15546	1	0	0	0	Irreg	0	47	Prod	--	--	T	1970	Other	2/3	43	--	17,155	652,255	5,221	116,337	--	--	*Was Kathol Petr., Inc.
17962	5	0	–	–	---	250	138	Prod	--	--	T	1976	S Gas	--	--	--	--	--	--	--	--	--	
1318	2	0	0	0	Irreg	0	300	Prod	--	--	U	--	Gas Exp	--	34	--	219,600	--	2,319	--	--	--	
3258	3	1	0	0	Peri	310	439	Prod + Miss	2,700	10	U	1952	S Gas	--	34	--	160,674	3,944,062	17,387	1,087,391	15,184	178,175	
5932	1	0	0	0	Irreg	0	537	Prod + Squir	2,494	50	U	1957	S Gas	36/420	33	--	196,000	--	8,692	--	4,500	--	*Was Rex & Morris
12982	5	0	1	0	Peri	10	90	Prod	--	--	–	1966	---	--	--	--	--	900	--	--	--	--	
	277	26	3	23													50,560,233	1,239,962,494	1,039,558	42,951,402	705,367	16,616,209	
5547	1	0	0	0	Line	Vac	30	Prod	--	--	T	1957	S Gas	--	39	--	10,950	961,910	1,837	--	1,837	144,912	
16114	1	1	0	0	Line	300	40	Prod	--	--	U	1971	S Gas	--	37	--	14,600	80,200	14,199	271,519	--	--	
	2	1	0	0													25,550	1,042,110	16,036	271,519	1,837	144,912	
16185	2	0	0	0	---	--	40	---	--	--	–	1954	Grav	4/20	--	--	14,400	--	1,549	--	900	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
CHASE COUNTY																
18257 --		Atyeo-Pixlee	The Buckeye Corp.*	(W) Snyder Lease	Snyder	1-22S-9E	20	--	Miss	2,362	8	1	0	0	0	Yes
16856 --		Teter-Scott	Glacier Petroleum Co.	(P) Hartley "A"	Hartley "A"	35-22S-9E	50	--	Bartl	2,457	36	4	--	--	--	Yes
CHASE COUNTY TOTALS (Reported)							70	0				5	0	0	0	
CHASE-GREENWOOD COUNTY																
15055	Yes	Atyeo-Pixlee	The Buckeye Corp.*	(W) Evans Unit	Evans	12-22S-9E 7-22S-10E	250	0	Miss Lm	2,400	30	13	0	0	0	Yes
CHASE-GREENWOOD COUNTY TOTALS (Reported)							250	0				13	0	0	0	
CHASE-LYON COUNTIES																
519	No	Atyeo-Pixlee	E.W.Sauder*	(-) Annie Hughes & H.W.Hughes	Annie Hughes H.W.Hughes	24-21S-9E 19-21S-10E	80	40	Bartl	2,200	25	11	1	0	0	Yes
CHASE-LYON COUNTIES TOTALS (Reported)							80	40				11	1	0	0	
CHAUTAUQUA COUNTY																
17641 --		Cedar Vale	R.Mendenhall Jr.*	(W) Leedy	Leedy	10-34S-8E	40	0	Pawnee-Altamont	1,900	150	4	--	2	--	Yes
14002 --		Cloverdale	Olympic Petroleum Co.	(W) Cloverdale Field Unit	F.McConaghy, J.H.Haden, Haden "G" Ruby Haden R.O.Hawkins	12-33S-8E 13,14-33S-8E	243	15	Cattle Sd	2,030	15	14	2	0	0	Yes
469 --		Elgin	John M.Denman Oil Co.	(D) Fleisher-Newman	Newman Fleisher Kygar Whartenby	12,13-35S-9E 18-35S-10E 7-35S-10E 18-35S-10E 17,18-35S-10E 18-35S-10E	1560	0	Peru	1,540	40	13	0	2	0	Yes
10744	No	Hale-Inge	Layton Oil Co.	(W) Hale Flood	Monroe, Harmon, Krusky Sweeney, Vaughn, Fee, Alexander	18-32S-13E 19-32S-13E	200	0	Wiser	1,130	12	9	9	0	0	Yes
9072 --		Landon-Floyd	Patteson Bros. Inc.	(D) Shaffer	Nile McNee	14,23-32S-10E	220	0	Miss	1,950	8	4	2	0	--	Yes
4746 --		Leniton	John M. Denman Oil Co.	(P) Lowe Unit	Keith, McAfee, Mattocks	20-33S-10E	320	0	Peru	1,440	25	12	0	0	1	Yes
5161 --		Leniton	John M. Denman Oil Co.	(P) R.L.Mendenhall Unit	Eggen, Goode "A", Goode "B", McCall J.Smith Burden W.W.Smith	17-33S-10E 17,20-33S-10E 18,19-34S-10E 20-33S-10E	1040	0	Peru	1,040	50	24	2	0	2	Yes
6721	No	Leniton	Charles J. Martin*	(W) Staats Chautauqua Unit	Staats Chau. Unit	21,28-33S-10E	40	--	Peru	1,300	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	0	0	Yes
11863 --		Oliver	Adair Oil Company	(P) McNee	Oliver, McNee	2-32S-10E	95	10	Miss	2,000	6	1	0	0	0	Yes
36-01---28		Peru-Sedan	Roy A. Burt*	(D) Gardner	---	26-33S-11E	160	0	Peru	1,200	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	1,177	22	3	2	0	0	Yes
3221 --		Peru-Sedan	Deck Oil Company*	(W) McMillan	McMillan	27-34S-12E	160	--	Peru	1,100	15	12	-	0	-	Yes
10903 --		Peru-Sedan	Walter Darnall	(D) Paullus Heirs	Paullus Heirs	6-35S-12E	102	--	Peru	1,100	50	4	-	0	0	Yes
15 --		Peru-Sedan	John M. Denman Oil Co.	(P) Blundell	Blundell	36-34S-11E	80	0	Peru	1,000	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	1,073	16	3	3	0	6	Yes
388 --		Peru-Sedan	John M. Denman Oil Co.	(P) Peru Farm	Peru Farm, Swallow	31-33S-12E 16-34S-12E 3-34S-11E	490	0	Peru	980	38	13	10	0	3	Yes
462 --		Peru-Sedan	John M. Denman Oil Co.	(D) Hann Unit	Hann, Ellexson, Hatfield, Alexander, Spurlock, Pennell	35-34S-11E 36-34S-11E 31-34S-12E 1-35S-11E	930	0	Peru	1,100	30	41	0	0	0	Yes
463 --		Peru-Sedan	John M. Denman Oil Co.	(D) Albright Fee	Albright	15,16-34S-11E	680	0	Peru	1,165	0	7	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
18257	1	0	0	0	4-spot	Grav	10	Prod	--	--	U	1973	S Gas	1/1	33	--	3,400	--	306	--	0	--	*Aztec Oil Co., Division
16856	2	-	-	-	Irreg	250	278	Prod	--	--	U	--	S Gas	--	40	--	86,180	--	--	--	--	--	
	3	0	0	0													89,580	0	306	0	0	0	
15055	2	0	0	0	5-spot	300	400	Prod	--	--	U	1960	S Gas	--	38	--	152,000	--	11,068	--	4,000	--	*Aztec Oil Co., Division
	2	0	0	0													152,000	0	11,068	0	4,000	0	
519	2	2	0	1	Irreg	450	70	Prod	--	--	T	1939	Grav	1/4	39	--	50,000	1,975,000	9,600	484,000†	3,000	207,100	*Was Ohio †Since 1955
	2	2	0	1													50,000	1,975,000	9,600	484,000	3,000	207,100	
17641	1	-	0	-	Irreg	25	115	Prod	--	--	U	1975	Gas Exp	1/1	38	--	41,975	59,975	15,351	--	11,513	--	*Was R. Mendenhall Est.
14002	4	0	0	0	Line	700	165	Sh Fr. wat wells	20	4-6	F	1968	S Gas	1/9	38.9	--*	240,250	2,631,412	17,862	850,141	17,862	420,253	*103° Reservoir Temp.
469	3	0	0	0	Irreg	--	21	Prod	--	--	U	--	Grav	--	38	--	23,400	2,939,960	3,898	728,431	3,898	437,059	
10744	4	0	0	0	5-spot	350	60	Prod	--	--	T	1974	S Gas	--	33	--	87,600	213,350	1,523	3,340	1,523	3,340	
9072	2	-	-	-	Irreg	0	950	Prod	--	--	U	1962	Grav	1/10	30	--	345,000	--	6,741	--	--	--	
4746	1	1	0	0	Irreg	275	45	Prod	--	--	U	--	S Gas	--	32	--	15,875	139,275	2,646	16,571	2,646	16,571	
5161	2	0	0	1	Irreg	250	40	Prod	--	--	U	--	S Gas	--	31	--	31,100	1,363,300	5,183	332,390	5,183	332,390	
6721	1	0	0	0	5-spot	175	60	Prod	--	--	U	--	Gas Exp	1/4	30	--	20,000	--	600	--	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	515,000	6,043	133,843	6,043	133,843	
11863	1	0	0	0	Irreg	0	--	Prod	--	--	U	1965	Wat	--	29	--	6,000	131,235	503	17,312	0	0	
36-01-28	2	0	0	0	Irreg	Grav	3	Prod	--	--	U	1933	Grav	--	34	--	940	--	2,330	--	760	--	*Was Sinclair
289	1	0	0	0	5-spot	0	10	Prod	--	--	U	--	Grav	--	33.6	--	3,660	--	428	--	0	--	*Was Little Nick Oil Co.
3221	1	1	0	0	Irreg	150	240	Prod	--	--	U	1952	S Gas	--	34	--	82,125	--	3,336	487,908 Est.	0	--	*Was G. B. Suppes
10903	1	1	0	0	Irreg	0	70	Prod	--	--	U	--	Grav	1/50	36	--	18,250	--	728	--	728	--	
15	1	0	0	0	Irreg	250	15	Prod + Salt Sd	450	60	U	--	S Gas	--	34	--	4,500	31,700*	751	4,585*	751	4,585	*Since 1/1/72
139	1	2	0	1	Irreg	300	15	Prod + Salt Sd	450	60	U	1955	S Gas	--	32	--	9,050	230,750	1,511	37,662	1,511	37,662	
388	3	7	0	5	Irreg	250	150	Prod + Salt Sd	450	60	U	1955	S Gas	--	33	--	62,450	1,133,750	10,409	203,534	10,409	203,534	
462	15	0	0	2	Irreg	--	30	Prod	--	--	U	--	S Gas	--	35	--	152,502	14,202,528	25,417	3,509,311	25,417	2,105,587	
463	1	0	0	0	Irreg	--	25	Prod	--	--	U	--	Grav	--	35	--	8,520	91,520*	1,420	20,431*	1,420	20,431	*Since 10/1/68

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
CHAUTAUQUA COUNTY (concl.)																
465	--	Peru-Sedan	John M. Denman Oil Co.	(D) Bird Unit	Bird, Lemmon, Johnson, Keenan	25,26-34S-10E 26-34S-10E 27-34S-10E 34-34S-10E	1,320	0	Peru	1,360	40	35	4	1	2	Yes
467	--	Peru-Sedan	John M. Denman Oil Co.	(D) Morton-Riley	Riley, Morton	27-33S-12E 34-33S-12E	360	0	Peru	990	30	8	3	0	2	Yes
468	--	Peru-Sedan	John M. Denman Oil Co.	(D) Lemmon-Beck	Dunham-Lemmon, Beck	25,36-34S-11E 1-35S-11E	550	0	Peru	1,125	50	30	0	0	5	Yes
1029	--	Peru-Sedan	John M. Denman Oil Co.	(P) Casement	A. Casement, C. Casement	33-33S-11E 5-34S-11E	350	0	Peru	1,187	16	10	0	0	0	Yes
1473	--	Peru-Sedan	John M. Denman Oil Co.	(P) Gregg	Gregg	14,15,21,22,23, 26,27,28-33S-11E	2,300	80	Peru	1,224	33	12	16	0	8	Yes
17030	--	Peru-Sedan	John M. Denman Oil Co.	(P) C. C. Poor Farm	C. C. Poor Farm, Conley, Haney-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	19	9	1	1	Yes
17031	--	Peru-Sedan	John M. Denman Oil Co.	(D) Bowman Unit	Dennis, Orton, Winans, Spire	27-34S-11E 34-34S-11E	350	0	Peru	1,220	40	21	1	2	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	1,000	16	6	7	0	3	Yes
16970	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Stafford	Stafford	9-34S-12E	200	0	Peru	1,027	35	8	8	0	0	Yes
16971	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	Bowen, Winchell	20-34S-12E 20,29-34S-12E	240	0	Peru	1,055	15	20	5	1	0	Yes
16972	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	Michel De Armond, C.H. Inglefield, G.B. Oakes	15-34S-12E 22-34S-12E	310	0	Peru	984	20	16	12	0	0	Yes
16973	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	E.E. Brooks, F.G. Hills	28-34S-12E	200	0	Peru	1,020	19	8	6	0	0	Yes
16974	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	Neff, Ewers, Bales, R.M. Hartzell	24-34S-11E 19-34S-12E	554	0	Peru	1,055	15	27	6	3	0	Yes
4134	No	Peru-Sedan	Bill D. Farris	(W) Logsdon	Logsdon	26-34S-11E	240	0	Peru	1,150	10	10	-	0	-	Yes
4135	No	Peru-Sedan	Bill D. Farris	(W) Coulter Raymon	Coulter Raymon	15-34S-12E	240	0	Peru	1,150	7	6	4	1	0	Yes
18386	No	Peru-Sedan	Bill D. Farris	(W) Farris	Farris	11-34S-12E	80	0	Peru	1,000	7	4	0	0	0	No*
14682*	--	Peru-Sedan	William V. Herbert	(D) Parker "B"	Parker "B"	26-34S-11E	80	0	Red Sd	978	9	6	0	0	0	Yes
14682	--	Peru-Sedan	Bill D. Farris*	(D) Parker	Parker	26-34S-11E	80	0	Red Sd	978	9	3	3	0	-	Yes
17888	No	Peru-Sedan	Liberty Hill Oil Corp.	(P) MacFarlane-DeLong	Flossie White, MacFarlane-DeLong, Smith-Lolly, K-Bever	22-34S-11E 23-34S-11E	470	--	Peru	1,120	20	20	0	13	0	No*
556	No	Peru-Sedan	Nunneley & Powell	(D) Kimbrell	Kimbrell	4-34S-12E	40	20	Peru	1,050	18	4	0	0	0	Yes
5477	No	Peru-Sedan	Nunneley & Powell	(D) Violet Stafford	Violet Stafford	8-34S-12E	40	0	Peru	1,050	20	16	0	2	0	Yes
6132	No	Peru-Sedan	Nunneley & Powell	(D) Big Turner	Big Turner	3-35S-12E	80	0	Peru	1,000	10	3	0	0	0	Yes
6170	Yes	Peru-Sedan	Nunneley & Powell	(D) Blount	Blount	34-34S-12E	160	0	Peru	1,035	20	4	0	0	0	Yes
6170	Yes	Peru-Sedan	Nunneley & Powell	(D) J.R. Chance	J.R. Chance	34-34S-12E	160	40	Peru	1,035	12	15	0	0	0	Yes
18389*	--	Peru-Sedan	A.E. Perkins	(W) ---	Joe Reed	12,13-34S-12E	320	0	Weiser	930-935	20-60	-	-	-	-	---
6320	--	Peru-Sedan	Petroleum Enterprises	(P) ---	Hills	22-34S-12E	--	--	Peru	1,000	15	10	-	-	-	Yes
14956	--	Peru-Sedan	Petroleum Enterprises	(P) ---	Heath-Murray	27-34S-11E	60	--	Peru	1,130	15	9	-	-	-	Yes
3556	No	Peru-Sedan	Shannon Brothers	(D) Turner-Johnson	Johnson, Turner	6-35S-12E 7-35S-12E	80	40	Peru	1,180	40	3	0	0	0	Yes
		CHAUTAUQUA COUNTY TOTALS (Reported)					16613	205				531	117	28	33	
CHEYENNE COUNTY																
18584	No	Cherry Creek	Shakespeare Oil Co., Inc.	(P) M. Orth	Orth, Rudolph Walter, Robert Walter	3,10-3S-41W 9-3S-41W 4,9,16,21,22-3S-41W	2,480	--	Lans "E" Zone	4,669	7	4	0	4	0	No*
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	1,280	--	Morrow	5,450	9	3	3	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
465	5	0	0	0	Irreg	--	45	Prod	--	--	U	--	Grav	--	38	--	83,580	566,480*	13,931	121,797*	13,931	121,797*	*Since 10/1/68
467	1	0	0	0	Irreg	0	40	Prod	--	--	U	--	Grav	--	34	--	13,680	155,180*	2,281	34,325*	2,281	34,325*	*Since 10/1/68
468	8	0	0	0	Irreg	0	10	Prod	--	--	U	--	Grav	--	34	--	82,750	706,850*	13,793	154,148*	13,793	154,148*	*Since 10/1/68
1029	4	0	0	0	Irreg	--	20	Prod + Salt Sd	450	60	U	1955	S Gas	--	32	--	31,000	2,721,459	5,165	333,744	5,165	333,744	
1473	3	8	0	4	Irreg	300	22	Prod + Salt Sd	460	60	U	1955	S Gas	--	34	--	24,000	1,758,700	4,005	1,753,494	4,005	1,753,494	
17030	4	0	0	0	Irreg	275	50	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	77,680	1,261,080	12,947	1,117,360	12,947	1,117,360	
17031	3	1	0	0	Irreg	--	65	Prod	--	--	U	--	---	--	35	--	71,950	275,550*	11,993	58,222*	11,993	58,222	*Since 10/1/68
17033	3	3	0	0	Irreg	350	15	Prod + Salt Sd	450	50	U	1955	S Gas	--	34	--	12,400	940,800	2,066	697,799	2,066	697,799	
16970	5	4	0	0	Irreg	200	27	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	49,545	1,132,929	3,375	165,647	3,375	165,647	
16971	4	3	0	0	Irreg	185	54	Prod + Salt Sd	450	60	U	1965	S Gas	--	34	--	78,770	428,285	25,003	122,909	25,003	122,909	
16972	3	13	0	0	Irreg	225	34	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	37,216	2,407,637	8,038	589,383	8,038	589,383	
16973	2	5	0	0	Irreg	200	25	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	18,299	1,481,732	4,085	200,425	4,085	200,425	
16974	7	7	0	0	Irreg	300	40	Prod + Salt Sd	450	60	U	1966	S Gas	--	34	--	101,152	1,076,388	26,560	298,322	26,560	298,322	
4134	1	-	-	-	5-spot	50	50	Prod	--	--	U	1967	Grav	1/10	34	--	18,200	182,000	2,200	22,000	--	--	
4135	1	-	-	-	5-spot	50	50	Prod	--	--	U	1967	Grav	1/10	34	--	18,200	182,000	3,600	36,000	--	--	
18386	1	0	0	0	5-spot	150	30	Prod	--	--	U	1976	Grav	1/1	22	--	1,800	1,800	365	365	--	--	*Started 10/1/76
14682	1	0	0	0	Irreg	120	6.08	Prod	--	--	U	1968	Wat	7/18	37	--	7,771	101,803	604	15,767	--	--	*Period from 1/1/76 to 7/31/76
14682	1	-	-	-	Irreg	120	6.08	Prod	--	--	-	1968	Wat	7/18	37	--	8,491	102,523	924	16,087	--	--	*Lse sold to Bill D. Farris
17888	2	0	0†	0	Irreg	100	350	Prod	--	--	U	1975	Wat + Gas Exp	3/20	34	--	320,200	437,600	76,124	87,324	0	0	*Returning prod. water - no make-up water †converted one well
556	1	0	0	0	Irreg	0	15	Prod	--	--	U	1941	Grav	1/5	34	--	5,000	--	960	--	0	--	
5477	2	0	0	0	Irreg	150	40	Prod	--	--	U	1957	Grav	1/4	34	--	20,000	--	8,000	--	2,500	--	
6132	1	0	0	0	Irreg	0	10	Prod	--	--	U	1958	Grav	1/3	33	--	3,000	--	1,000	--	0	--	
6170	1	0	0	0	Irreg	0	20	Prod	--	--	U	1958	Grav	1/5	34	--	7,000	--	1,000	--	0	--	
6170	2	0	0	0	Irreg	200	30	Prod	--	--	U	1958	Grav	1/4	34	--	12,000	--	3,000	--	1,000	--	
18389	-	-	-	-	5-spot	--	--	Prod	--	--	U	1977	Wat + S Gas	--	30	--	--	--	--	--	--	--	*Not started yet
6320	1	-	-	-	Irreg	75	110	Prod	--	--	-	--	S Gas	--	35	--	40,000	--	1,665	--	--	--	
14956	1	-	-	-	---	200	75	Prod	--	--	T	--	S Gas	--	35	--	27,000	--	4,358	--	--	--	
3556	1	0	0	0	Irreg	0	10	Prod	--	--	U	1953	Grav	1/3	35	--	3,600	46,000	1,039	12,163	500	10,700	
	125	58	0	13													2,357,481	39,650,551	344,761	12,182,740	226,906	9,373,530	
18584	1	0	1	0	Irreg	0	73	Prod	--	--	U	1976	Wat	1.7/.6	33	--	800	800	1,460	1,460	0	0	*Started Water 12/21/76
6764	1	5	0	0	Irreg	0	210	Prod	--	--	U	1959	S Gas	12/1	36	3	76,975	5,372,911	5,628	1,151,893	5,628	556,618	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
COFFEY COUNTY																
15677	No	Crandall	Reed Oil Co.	(D) Leroy Field	Sutherland, Wright "B"	31-22S-16E	10	0	Squir	1,065	6	4	0	0	1	Yes
18449	No	LeRoy North	BMG, Inc.	(P) Remer	Remer-Riverside Farms	28-22S-16E	160	--	Squir	1,000	20	2	-	-	-	Yes
18102	No	LeRoy North	Kenneth Winn	(D) ---	K. Winn	21-22S-16E	160	0	Squir	995	6	24	0	25	1	Yes
17175	--	LeRoy North	Arthur Klaus	(D) C & C Oil Co.	C & C Oil Co.	22-22S-16E	80	0	Squir	1,015	12	4	0	0	0	Yes
17568	No	Neosho Falls-LeRoy	Lancer Oil Enterprises	(W) ---	Meats, McGinnis	1-23S-16E	160	0	Squir	964	10	11	1	-	-	No*
11074	No	Neosho Falls-LeRoy	L.E. Bartlett	(W) Rue-B-Lee No. 2	Rue-B-Lee	12-23S-16E	10	--	Squir	945	7	4	-	0	*	Yes
11619	No	Neosho Falls-LeRoy	L.E. Bartlett	(W) Rue-B-Lee No. 1	Rue-B-Lee	35-22S-16E	30	--	Squir	962	4-12	15	-	-	-	---
11714	No	Neosho Falls-LeRoy	Glenn B. Boden	(P) Boden Lse.	Boden	35,36-22S-16E	120	10	Squir	970	10	8	0	0	0	Yes
17356	--	Ottumwa	R. K. Teichgraeber	(-) Metzler	Metzler	26-20S-14E	190	0	Miss	1,600	10	1	1	0	0	Yes
199	--	Virgil North	French & Winterscheid, Inc.	(P) Kelly	Kelly	14-23S-13E	90	20	Miss lm	1,800	6	9	0	0	0	Yes
5633	--	Virgil North	French Oil Company	(P) Pilcher	Pilcher	16-23S-14E	20	0	Miss lm	1,700	5	2	0	0	0	Yes
202, 5835	--	Virgil North	French & Winterscheid, Inc.	(P) Olinger & Olinger B	Olinger	14-23S-13E	90	0	Miss lm	1,800	5	5	0	0	0	Yes
17368	No	Virgil North	French & Winterscheid, Inc.	(-) Bahr	Henry Bahr	14-23S-13E	20	--	Viola	2,100	--	-	-	-	-	Yes
13052	--	Winterscheid	Arnold E. Kraft	(W) Vostrze, Shotwell McCarthney	Vostrze, Shotwell, McCarthney	14-23S-14E	40	0	Miss lm	1,600	15	7	0	0	1	Yes
13346	--	Winterscheid	Arnold E. Kraft	(W) Scott, Wiley, Cochran	Scott, Wiley, Cochran	14-23S-14E	80	0	Miss lm	1,600	15	7	0	0	0	Yes
COFFEY COUNTY TOTALS (Reported)							1260	30				103	2	25	3	
COFFEY-WOODSON COUNTIES																
2863	--	Neosho Falls-LeRoy	Howard Newland*	(W) Neosho Falls Flood	Murray, Remlinger, Wolf, Maynard	13-23S-16E, 24-23S-16E	80	0	Squir	940	12	19	2	1	0	Yes
8745	--	Virgil North	Sun Production Co.	(-) Chris A. Bahr-Joseph B. Bahr	Joseph B. Bahr, Chris A. Bahr	14-23S-13E, 23-23S-13E	140	25	Miss lm	1,700	125	7	0	0	1	No*
COFFEY-WOODSON COUNTIES TOTALS (Reported)							220	25				26	2	1	1	
COMANCHE COUNTY																
17128	Yes	Collier Flats	Halliburton Oil Prod. Co.	(P) Collier Flats Unit	Thornhill, O. Baker, Norton, Schweitzer	24-33S-20W, 25-33S-20W, 26-33S-20W	480	240	L-KC	4,777	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	3,100	12	7	0	0	0	Yes
16740	No	Albright	W. D. Short*	(W) Albright	Hart, Brown, Rahn	1-34S-5E, 2-34S-5E, 10,11-34S-5E	560	0	Miss	3,100	15	19	1	0	0	Yes
11121	--	Bernstorf	Gralapp and Everly	(D) Sontag Bernstorf Unit	Bernstorf (Gralapp and Everly), Sontag (Gralapp and Everly), Bernstorf (E.F. Wakefield, Inc.)	33-31S-4E, 34-31S-4E, 4-32S-4E	80	140	Bartl	3,049	22	3	4	0	0	Yes
5563, 7358	Yes	Biddle	Stewart Brothers	(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	2,900	18	2	1	0	-	Yes
9844	Yes	Bolack	R. R. Abderhalden	(W) Bolack W.F. Unit	---	20,21-32S-6E	150	0	Cattle	150	16	3	0	0	0	Yes
17807	--	Box	K. T. Wiedemann Trust	(W) Melvin R.Stolp	Stolp #8	20,29-30S-7E	160	0	Miss	2,854	30	8	0	0	0	Yes
16770	--	Brandenburg	Aylward Drilling Co.	(D) Brandenburg	Brandenburg	3-35S-3E	160	0	Miss	3,355	15	3	0	0	0	Yes
16081	No	Branson	Gralapp and Everly	(W) Branson	Branson-Gralapp and Everly	29,32-32S-7E	150	--	Bartl	2,900	20	2	4	0	-	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
15677	2	0	0	0	Irreg	0	110	Prod	--	--	U	1970	S Gas	1/0	21	--	40,150	42,800	994	2,956	0	0	
18449	1	-	-	-	Irreg	60	60	Prod	--	--	U	--	S Gas	1/18	31	12	9,120	9,120	445	--	225	--	
18102	1	-	-	-	---	--	--	Prod	--	--	U	1975	Grav	15/1	24	--	365	--	3,650	--	--	--	
17175	1	0	0	0	3-spot	0	5-10	Prod	--	--	U	1973	Grav	1/1	25	25	1,750	--	2,000	--	400	--	
17568	2	-	-	-	Irreg	120	1.5	Prod	--	--	U	1974	Grav	3/2	25	--	3,426	4,981	4,448	10,371	0	--	*Inj. only as required to dispose of prod. brine
11074	1	-	0	-	4-spot	300	11,212	---	--	--	-	--	---	--	--	--	--	--	--	--	--	--	*2 wells used for gas.
11619	2	-	0	-	7-spot	300	15,738	---	--	--	-	--	---	--	--	--	--	--	--	--	--	--	
11714	1	0	0	0	Line	10-25	10	Prod	--	--	T+P	1965	Wat	1/1	26.6	--	3,600	53,693	1,360	42,280	500	21,500	
17356	1	-	0	-	Irreg	350	450	Prod	--	--	U	1976	---	6/350	35	--	96,250	96,250	971	971	--	--	
199	1	0	0	0	Irreg	90	350	Prod	--	--	T	1945	Wat	9/11	38	--	99,000	--	5,920	--	4,440	191,101	
5633	1	0	0	0	Irreg	75	90	Prod	--	--	T	1955	Wat	48/52	36	--	12,000	408,000	641	--	641	45,190	
202 5835	2	0	0	0	Irreg	Vac	150	Prod	--	--	T	1960	Wat	3/2	36	--	36,500	486,500	3,533	--	2,332	59,414	
17368	1	0	0	0	Irreg	Grav	10	Prod	--	--	T	1974	Wat	9/1	--	--	0	0	0	0	0	0	
13052	1	0	0	0	4-spot Peri	250	65	Prod	--	--	U	1966	Wat	3/1	38	--	23,725	94,900	2,555	5,475	730	1,825	
13346	4	0	1	0	5-spot Peri	350	230	Prod	--	--	F+T	1966	Wat	1/3	38	--	83,950	335,800	5,110	9,490	1,460	2,510	
	22	0	1	0													409,836	1,532,044	31,627	71,543	10,728	321,540	
2863	6	5	0	0	5-spot	300	30	Prod + KC	320	20	U	1952	---	--	26-27	--	65,700	1,988,634	7,151	368,316	7,151	7,151	*Was Susmio Oil Co.
8745	0	0	0	10	---	--	0	---	--	--	-	1961	S Gas	--	30.8	5.4	0	13,365,501	42,403	410,956	42,403	410,956	*Inj. into lime stopped, wat disposed in the Arb.
	6	5	0	10													65,700	15,354,135	49,554	779,272	49,554	418,107	
17128	2	0	0	0	Irreg	0	80	L-KC	4,644	16	U	1973	S Gas	1/0	44	--	29,200	165,075	9,713	134,438	9,000	20,200	
10481	1	0	0	0	Irreg	50	300	Prod	--	--	U	1964	S Gas	1/1	39	--	91,250	413,175	12,396	287,978	5,000	22,600	*Was Harbar Oil & Gas Co.
16740	2	0	0	0	Irreg	0	145	Prod + Lay	2,400	100	U	1963	Gas Exp	1/1	37	1.8	52,925	430,700	16,431	486,089	3,700	12,788	*Was Sun Oil Company
11121	1	-	0	-	Peri	135	290	Prod + Stal	1,899	--	U	1964	Wat	9/1	42	--	15,000	228,193	652	165,242	--	--	
5563 7358	2	1	0	0	Line	160	440	Prod + Stal	1,000	--	U	1961	Gas Exp	4/1	39	--	178,516	9,409,681	669	326,740	--	--	
9844	2	0	0	0	Line	800	400	Prod + Lay + Miss lime	1,900 3,150	80 7	T	1963	S Gas	5/2	37	8	292,000	3,947,964	6,997	374,440	6,997	374,440	
17807	1	0	0	0	Irreg	0	78	Prod	--	--	U	1975	Other	--	39	--	28,622	200,299	6,763	300,514	--	--	
16770	1	0	0	0	Irreg	Vac	54	Prod	--	--	T	1973	S Gas	38/62	35	--	19,593	73,908	5,033	130,970	2,500	9,383	
16081	3	0	0	1	Irreg	225	100	Prod	--	--	T	1970	Wat	1/1	39	--	37,780	324,392	10,253	276,063	2,650	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
COWLEY COUNTY (Cont.)																
9593	--	Burden	Texaco Inc.	(W) Burden Unit	J.I.Lauppe, N.Brewer 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 30-31S-6E 31-31S-6E	1124	0	Bartl	2,950	30	11	0	0	7	Yes
16342	--	Burden	Wilson Drilling Co.	(P) Keesey-Blanchet	Blanchet Weigel Keesey	17-31S-6E 18-31S-6E 20-31S-6E	1040	0	Bartl	2,820	80	15	0	2	0	Yes
18164	Yes	Cedar Vale West	Gemoco, Inc.	(W) West Cedar Vale Waterflood	Jarboe A, McEwen Zimmerman B Zimmerman A	9-34S-8E 15-34S-8E 16-34S-8E	480	140	Pawnee	2,064	20	4	2	6	--	Yes
11853	No	Combs	Rex & Morris Drilling Co.	(W) Graham	Graham Saxton Swain	5-30S-5E 7-30S-5E 8-30S-5E	160	0	Bartl	2,875	25	2	0	0	0	Yes
4028	No	Combs	Tomlinson Oil Co., Inc.	(D) Combs	Combs	5-30S-5E	40	0	Bartl	2,830	9	3	2	0	0	Yes
16269	No	Daniels	Lee Phillips Oil Co.	(P) Daniels Flood	Knowles Holt	7-30S-5E 8-30S-5E	100	0	Bartl	2,950	40	5	0	0	1	Yes
16632 8007	--	David	Gear Petroleum	(W) North David Unit	--	25,26-30S-4E	273	--	Bartl	2,975	18	4	0	0	4	Yes
5535	No	Eastman	Dunne Equities, Inc.*	(W) Eastman	Eastman	6-31S-6E	60	0	Bartl	2,816	62	0	1	0	0	No
13509	--	Estep	Texaco Inc.	(P) C.W.Estep	C.W.Estep	21-34S-6E	160	--	Stal	1,802	16	1	0	0	0	Yes
7841	--	Estes	Texaco Inc.	(P) G.O.Brooks	G.O.Brooks M.M.Spangler, E.G.Jabara	1-32S-6E 6-32S-7E	560	--	Cott Gr	2,136	12	1	4	0	1	Yes
16839	No	Estep West	Clyde M.Becker	(P) Goatley-Dunn	Dunn Potter Goatley	19-34S-6E 20-34S-6E 29-34S-6E	410	--	Miss	3,070	15	7	0	2	0	Yes
18180	No	Frog Hollow	Merlin Hickman	(P) Bloomfield Lease	Bloomfield Dunlap	15-32S-5E 21-32S-5E	240	0	Bartl	3,000	12	4	1	0	0	Yes
7136	No	Frog Hollow	Phillips Petroleum Co.	(W) Lena Lease	Lena	17-32S-5E	25	0	Bartl	3,035	25	4	0	0	0	Yes
14230	Yes	Frog Hollow East	Merlin Hickman	(P) East Frog Hollow Unit	Josephine Devore Glenn Miller T.E.Allen, C.L.Miller et ux. G.F.Miller et ux., R.H.Miller et ux., Mabel C. Miller	11-32S-5E 12-32S-5E 14-32S-5E 15-32S-5E	427	0	Bartl	3,000	13	5	0	0	0	Yes
3549	No	Geuda Springs	Earl F.Wakefield, Inc.	(D) Hower	Hower	32-33S-3E	40	0	Bartl	3,300	34	1	0	0	0	Yes
4538	--	Gibson	McNeish Oil Operations	(W) Wilson	Wilson	29-34S-3E	40	10	Bartl	3,380	18	1	0	0	0	Yes
15017	--	Graham	Berger Oil Co. *	(W) --	Nixon	10-33S-3E	100	0	Miss Ch	3,241	10	3	0	0	0	Yes
13495	No	Graham	Crest Petroleum	(-) Bradbury, Miller, Wright "A"	Bradbury Miller, Wright "A"	10-33S-3E 15-33S-3E	273	0	Miss Ch	3,255	30	10	--	--	1	Yes
15536	Yes	Graham	Crest Petroleum	(W) Crest Graham Unit	Myer, Trego Trego, Kroth, Dobbins, L.Whitson Myer C.Whitson, Crane	1-33S-3E 12-33S-3E 6-33S-4E 7-33S-4E	680	0	Miss Ch	3,233	26	16	0	0	0	--
16280	No	Graham	Crest Petroleum	(-) Nelson	Nelson, Winters	2-33S-3E	80	0	Miss Ch	3,268	30	4	0	0	0	Yes
16692	--	Graham	Crest Petroleum	(P) Wright "B"	Wright "B"	10-33S-3E	80	0	Miss Ch	3,251	16	1	0	0	1	Yes
8938	No	Graham	Earl F.Wakefield, Inc.	(P) Boyles	Boyles	11-33S-3E	160	0	Bartl	3,275	15	4	0	0	0	Yes
4843	No	Harvey	Aylward Drilling Co.	(D) Harvey Unit	Harvey	23-34S-3E	10	9	Bartl	3,278	20	1	0	0	0	Yes
14142	No	Harvey	Aylward Drilling Co.	(P) Fussell Water Flood	Fussell, Pearson	14-34S-3E	80	0	LKC	2,839	6	3	0	0	0	Yes
4536	--	Harvey	McNeish Oil Operations	(W) Snyder	Snyder	15-34S-3E	40	--	Bartl	3,270	18	3	0	0	0	Yes
18569	--	LFJ	Range Oil Co., Inc.	(D) Jarvis "B"	Jarvis "B"	33-32S-5E	320	--	Miss	3,129	15	1	--	--	--	No*
6722 5238	--	McKay	W.J.Lamberton	(W) McKay	Bergkamp Broce Klink "A", Broce, Klink "B"	6-35S-4E 7-35S-4E 8-35S-4E	150	60	Bartl	3,300	25	10	--	31	11	Yes
14558 14880	--	Maddix North	Roger M.Wheeler	(-) North Maddix Unit	--	1,2,12,14-33S-5E	240	0	Miss	3,000	15	19	2	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: In-active	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
9593	5	1	0	17	5-spot	600	293	Prod	--	--	--	1963	S Gas	868/372	38	--	534,537	27,690,006	30,569	1,342,059	27,631	1,045,125	
16342	2	0	0	0	Irreg	450	350	Prod	--	--	T	1968	--	10/1	38.4	--	125,000	1,408,500	34,125	293,750	5,000	40,000	
18164	2	--	--	--	Peri	60	125-150	Prod + Way	1946	8	T&S	1975	Wat	1/2	37-38	--	91,250	91,350	9,406	125,976	570	--	
11853	1	0	0	0	Irreg	230	320	Prod	--	--	U	1965	S Gas	30/110	40	--	116,800	--	2,225	235,999	--	--	
4028	1	2	0	0	Peri	400	198	Prod	--	--	U	1954	S Gas	--	40	--	72,431	818,804	2,284	405,694	2,284	108,643	
16219	1	0	0	0	Irreg	0	150	Prod	--	--	U	1971	S Gas	12/79	39	--	56,575	1,520,423	7,677	153,690	--	--	
16632 8007	2	1	0	5	Irreg	400	149	Prod + Stal*	1950	100	U	1960	S Gas	2/1	39	--	54,385	--	2,941	804,565	2,941	--	*Water supply well abandoned,all water produced.
5535	0	1	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*Was the Buckeye Corp, division Aztec Oil Co.
13509	1	0	0	0	Irreg	Vac	149	Prod	--	--	--	1967	S Gas	48/9	41	--	54,537	304,928	5,158	124,697	3,632	92,918	
7841	1	1	0	0	Irreg	Vac	149	Prod	--	--	U	1961	Wat	--	38.2	--	54,537	--	3,622	--	0	--	
16839	2	--	1*	--	Peri	0	250	Lay	2288	100	T	1973	S Gas	15/15	40	--	63,000	109,250	17,252	65,979	0	0†	*Converted †Increase due to new drilling.
18180	1	--	--	--	Irreg	Gravity	300	Prod	--	--	U	1976	Wat	--	41	--	90,000	--	5,842	--	--	--	
7136	1	0	0	0	5-spot	0	148	Prod	--	--	U	1959	Wat*	1/5.6	41	5	53,958	948,476	5,698	123,823†	5,698	123,660	*+S Gas †From 3/1/59
14230	--	--	--	--	Irreg	Gravity	150	Prod	--	--	U	1968	Gas Exp	--	38	--	50,000	--	4,241	--	--	--	
3549	1	0	0	0	Irreg	0	400	Prod	--	--	T	1954	S Gas	--	39	--	146,000	2,915,000	1,145	70,007*	573	35,003	*From 1954.
4538	1	0	0	0	5-spot	0	1	Prod	--	--	U	1959	S Gas	--	34	--	365	1,394,278	1,166	104,280	1,166	104,280	
15017	1	0	0	0	Line	0	34	Prod + Lay Sd	2550	75	U	1969	Gas Exp	4/8	41	--	12,500	115,172	9,321	71,942	9,321	71,942	*Was Maggard Oil.
13495	5	1	0	0	--	Vac	60	Prod + Stal	2190	50	--	1967	S Gas	40/56	41	--	100,000	1,593,270	12,903	182,501	12,903	182,501	
15536	6	0	0	0	Peri	Vac	71	Prod + Stal	2180	68	T	1970	S Gas	43/50	40	--	158,360	1,355,752	20,732	133,236	20,732	133,236	
16280	1	0	0	0	Irreg	Vac	90	Prod	--	--	T	1971	S Gas	18/100	40	--	33,745	202,540	4,178	27,743	4,178	27,743	
16692	1	0	0	0	Line	Vac	43	Prod	--	--	T	1972	S Gas	10/50	41	--	15,695	66,659	2,840	16,782	2,840	16,782	
8938	1	0	0	0	Irreg	0	60	Prod	--	--	U	1961	S Gas	--	40	--	87,600	1,591,700	3,291	123,906	823	30,977	
4843	1	0	0	0	Irreg	Gravity	130	Prod	--	--	T	1961	Grav	1/1	37	--	47,450	239,970	1,774	46,689	1,774	46,004	
14142	1	0	0	0	Irreg	520	150	Prod	--	--	T	1968	S Gas	--	37	--	54,750	236,800	5,078	138,794	5,078	26,897	
4536	2	--	--	--	Irreg	0	10	Prod +Ark River	8	20	F	1955	S Gas	--	37	--	3,650	1,124,402	2,719	151,717	2,719	151,717	
18569	1	--	--	--	Irreg	0	30	Prod	--	--	U	1976	Wat & S Gas	3/7	36	--	990	990	600	3,386	0	--	*Started December 1976
6722 5238	10	--	--	--	Line	200	100	Prod +Ark River	10	26.5	F	1959	S Gas	All	40	--	350,000	--	14,832	--	14,832	--	
14558 14880	4	0	0	0	Irreg	218	351	Prod + Stal	2062	35	T	1969	S Gas	94.4/ 41.8	38	20	513,060	2,661,931	51,518	960,922	35,640	167,952	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
COWLEY COUNTY (concl.)																
17596	Yes	Murphy	Stelbar Oil Corp., Inc.	(–) Jones	Jones, Collinson, McLaughlin, Weir, McMillin, Peters	30-34S-3E 31-34S-3E	880	--	Bartl	3,395	20	19	0	0	0	Yes
18482	--	Nigger Creek	Range Oil Co., Inc.	(P) Peters	Peters	21-34S-3E	320	0	Cleve	2,963	15	13	-	-	-	No*
10928	--	Posey	Moran Oil Co.*	(W) Muret Lse.	Muret	21-33S-4E	160	10	Miss	3,150	10	4	0	0	0	Yes
3427	--	Rahn	Rance Arnold*	(D) ---	Jesse Rahn	13-34S-5E	100	0	Bartl	2,900	20	1	1	0	0	Yes
3386	Yes	Rahn	W.D. Short*	(W) Rahn Unit I	Rahn Unit I, Cox, Berry, Waldschmidt	32-33S-6E	150	130	Bartl	3,100	15	0	3	0	0	Yes
3239 9696	--	Rainbow Bend	Mead Production Co.	(D) Hunt Rainbow Bend Unit	J.U. Hunt	16-33S-3E	50	80	Bartl	3,200	20	2	0	0	0	Yes
6330 2918	--	Rainbow Bend	S & G Oil Company, Inc.	(–) J. U. Hunt	J. U. Hunt, E. E. Hunt	16-33S-3E 21-33S-3E	365	0	Bartl	3,200	25	1	2	0	0	Yes
7468	--	Rainbow Bend West	George R. McNeish Oil	(W) Rainbow Bend West Unit	Hesket, Holman, Nelson	19-33S-3E	85	--	Bartl	3,180	12	4	2	0	0	Yes
2999	Yes	Rainbow Bend	W. D. Short*	(W) West Rainbow Bend Unit	West Rainbow Bend Unit	20-33S-3E	300	0	Bartl	3,150	30	10	1	0	0	Yes
15895	Yes	Rock	Steve Cowan*	(D) Rock Unit I	Rock Unit I	11-30S-4E	420	260	Bartl	2,705	40	1	0	0	0	Yes
3085	Yes	Rock	Stelbar Oil Corp., Inc.	(–) Rock Unit	Gamble, Stelbar-Apco & Mobil, Starkey	11-30S-4E 14,15-30S-4E 16-30S-4E	760	600	Cattle	2,750	20	4	10	0	0	Yes
12366	Yes	Rock North	Stelbar Oil Corp., Inc.	(–) Rock North	Shawver, Shawver, Davis, Daves, Hornaday	2-30S-4E 3-30S-4E 9-30S-4E 10-30S-4E	680	--	Cattle	2,800	20	12	6	0	0	Yes
6951	--	School Creek North	Petroleum Enterprises	(P) ---	Beamer, Davis, Miller	10-32S-7E 11-32S-7E	60	--	Lay	2,140	30	15	-	-	-	Yes
6985	--	School Creek North	Petroleum Enterprises	(P) ---	Barger	3-32S-7E	--	--	Lay	2,021	15-25	8	-	-	-	Yes
12927	--	Smith	Brunson-Spines, Inc.	(W) Smith Waterflood Project	Mowder Unit, Huggins, Hann, Hann "B", Holtje, Hann "B"	10-31S-3E 15-31S-3E	120	0	Bartl	3,000	16	7	3	0	0	Yes
8457	--	Stayton South	S. J. Roark*	(–) ---	A. R. Husted	5-33S-4E	80	0	Bartl	3,200	--	3	0	4	0	No
10811	Yes	Trees	Braden-Deem, Inc.	(W) Trees Waterflood	Tracts 4,5,6, Tracts 1, 2, 3	19-30S-4E 30-30S-4E	200	80	Bartl	2,860	12	3	5	0	1	Yes
17207	--	Turner North	Hammer & Maclean	(D) Hammer	Hammer	18-32S-6E	160	--	Bartl	2,800	75	8	0	0	0	Yes
16946	No	Waldschmidt	Crest Petroleum, Inc.	(P) Waldschmidt-Rahn	Rahn, Waldschmidt	7-34S-6E 7,8-34S-6E	720	0	Miss	3,065	20	7	0	1	0	Yes
8340	No	Werner	E.T. Lindsay Estate*	(D) Feaster Unit	Cranston, Feaster, Kadau, Wahlenmaier-Turner	30-32S-6E	240	40	Lay	240	7.2	9	1	1	-	Yes
15713	No	Wilmot-Floral	Dawson-Markwell Expl. Co. for RayMark Assoc., Ltd.	(W) Nora King Unit	Aubry Peters, W.J. Pendergraft, John Jarvis, Nora King	17-31S-5E 20-31S-5E	460	60	Bartl	2,884	12	4	1	0	0	Yes
18069	No	Wilmot-Floral	Dawson-Markwell Expl. Co.	(P) North Winfield Lake Unit	Stuber	28,32,33-30S-5E 4,5-31S-5E	2,040	0	Miss Dol	2,875	40	3	1	1	2	Yes
1857	No	Winfield	Gulf Oil Corporation	(D) M. Shannon	M. Shannon	24-32S-4E	30	0	Bartl	2,930	--	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	2,900	7	5	0	0	0	Yes
		COWLEY COUNTY TOTALS (Reported)					17352	1809				336	64	48	29	
COWLEY-ELK COUNTIES																
18027	--	Grand Summit	Petroleum Enterprises	(P) ---	Denton & Ferguson	3,4-31S-8E	--	--	Miss	1,927	20	7	-	1	-	Yes
CRAWFORD COUNTY																
14980	No	Farlington	G.N. Babcock	(D) ---	Granneman	3-28S-23E	160	0	Peru	180	15-20	17	5	11	2	No*
▶11453	--	Farlington	Walter Duncan	(W) Burge	Burge	2-28S-23E	85	0	Peru	175	20	30	2	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

▶ See Supplemental List on Pages 101-102.

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp.@ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
17596	3	0	0	0	4-spot	400	500	Prod + Stal	2,400	150	U	1974	S Gas	--	40	--	384,000	1,185,000	6,281	25,135	--	--	
18482	1	-	0	-	Irreg	0	190	Prod	--	--	U	1976	Wat+S Gas	1/4	40	--	17,000	--	9,000	--	0	--	*Started 10/76
10928	1	0	0	0	Irreg	160	250	Prod + Stal	2,000	70	U	1964	S Gas	1/1	42	--	91,250	875,041	6,404	91,478	--	--	*Was Bedell-Catt Drlg. Co.
3427	1	1	0	0	Irreg	--	--	Prod + Elgin Sd	1,200	25	U	1952	S Gas	--	36	--	105,000	--	2,735	--	2,735	--	*Was B. B. Blair
3386	1	5	0	0	Irreg	150	650	Lay	2,100	100	U	1945	Gas Exp	10/1	40	--	237,250	--	--	1,158,222	--	1,158,222	*Was Continental Oil
3239	1	1	0	0	Irreg	0	150	Prod	--	--	U	1952	Wat	3/2	41	--	54,000	2,215,800	3,645	311,229	--	--	
9696 6330 2918	1	0	0	0	Irreg	350	1,350	Prod	--	--	U	1957	---	--	40	--	277,150	4,427,228	5,543	--	5,543	348,174	
7468	2	2	0	0	Peri	0	141	Prod + Arkansas River Underflow	16	20	F+U	1960	S Gas	--	40	--	51,570	3,830,836	3,002	234,588	3,002	234,588	*In separate wells.
2999	1	1	0	0	Irreg	0	1,000	Prod	--	--	T	1952	Gas Exp	99/1	44	2.5	511,000	48,022,000	14,956	2,514,956	10,000	2,510,000	*Was Sun Oil Company.
15895	1	0	0	0	Irreg	0	15	Prod	--	--	U	--	S Gas	--	--	--	4,375	--	1,056	--	528	--	*Was CRA Inc.
3085	2	14	0	0	Line	970	174	Prod	--	--	T	1951	S Gas	--	38	--	127,076	28,789,475	8,638	--	8,638	1,284,165	
12366	7	5	0	0	Line	780	570	Prod + Stal	1,800	100	T	1966	S Gas	--	39	--	1,453,434	11,560,170	93,336	1,477,013	93,336	877,015	
6951	3	-	-	-	---	175	250	Prod	--	--	T	1963	S Gas	--	39	--	150,000	--	16,816	--	--	--	
6985	3	-	-	-	Line	100	250	Prod	--	--	T	--	S Gas	--	39	--	160,000	--	11,605	--	--	--	
12927	4	0	0	0	Irreg	1,350	413	Prod + Stal	2,150	100	U	1966	S Gas	9/60	37	--	604,770	6,056,193	17,341	495,674	17,341	495,674	
8457	-	-	-	-	4-spot	Vac†	51	---	--	--	-	--	---	--	--	--	--	--	--	--	--	--	*Was Laura Jane Oil Co. †Puts in return wat only.
10811	1	3	0	0	Irreg	1,100	326	Prod + Ground	32	10	M	1964	S Gas	10/1	40	60	118,845	2,053,376	6,160	351,150	6,160	351,150	
17207	1	0	0	0	Irreg	--	179	Prod	--	--	U	1975	Grav	1/17	37	--	65,407	125,772	25,921	32,547	--	--	
16946	1	0	0	0	4-spot	Vac	6	Prod	--	--	T	1973	S Gas	2/4	38	--	2,190	8,780	15,200	41,266	0	0	
8340	3	-	-	-	Irreg	Grav	250	Prod + KC lime	2,450	6	T	1961	S Gas	--	37	--	91,250	689,930	11,049	--	1,979	14,848	*Was E.T. Lindsay
15713	3	1	0	0	Irreg	300	200	Prod + Miss chat	3,000	20	T	1970	S Gas	10/1	40.5	5	73,000	543,303	16,569	76,339	16,569	16,569	
18069	1	0	1	0	Peri	0	250	Prod	--	--	T	1976	S Gas	1/8	40	--	90,250	90,250	9,776	13,596	9,776	9,776	
1857	1	0	0	0	Irreg	--	--	Prod	--	--	U	1948	S Gas	20/58	41	--	3,979	757,950	5,891	--	0	0	
9975	1	0	0	0	Peri	20	23	Prod	--	--	T	1963	Wat	--	38	--	41,975	794,710*	3,104	69,265*	776	17,316*	*Since 1963
	113	41	2	23													8,371,632	173,444,327	616,359	14,948,631	357,565	10,142,088	
18027	2	-	-	-	Irreg	50	125	Prod	--	--	T	1975	Gas Exp	--	32	--	90,000	--	4,214	--	--	--	
14980	3	4	-	-	Irreg	160	20	Prod + Miss	628	67	-	1967	S Gas	--	30	19	15,000	126,500	826	6,106	--	--	*Purchase wat from neighbor
11453	22	3	0	0	5-spot	180	15	Prod + Miss	628	67	F	1965	S Gas	--	31.8	18.9	116,088	1,581,314	4,876	128,300	4,876	--	
9856	18	0	0	0	5-spot	175	15	Prod + Burgess	610	7	F	1962	Wat	--	31.5 @ 62°F	18.9	97,000	1,362,650	5,075	143,119	--	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
CRAWFORD COUNTY (concl.)																
17959	No	McCune	MOCO Oil Company	(W) George Samp	George Samp	7-31S-22E	240	0	Bartl	202	10-12	6	0	0	0	No*
7487	--	Walnut Southeast	Roy Fultz*	(W) Wintjen	Wintjen	27-28S-22E	20	0	Bartl	385	15	7	–	0	-	No†
3105	No	Walnut Southeast	Morris Stephens*	(W) Walnut Water Flood	Engel	28-28S-22E	205	--	Bartl	370	12	43	2	0	-	Yes
		CRAWFORD COUNTY TOTALS (Reported) (Includes projects in supplemental list.)					1190	0				148	9	11	2	
DECATUR COUNTY																
15099	--	Adell Northwest	Continental Oil	(W) Adell NW	Adell NW	26,27,34, 35-5S-27W	333	0	L-KC	3,703	23	8	2	-	-	Yes
15829	--	Altory	Raymond Oil Company, Inc.	(W) Steffen	Steffen	34-3S-27W	60	--	L-KC	3,520	32	2	–	-	-	Yes
17018	No	Blees	A. L. Abercrombie, Inc.	(D) Blees	Blees, Blees "A", Huff "B"	8-1S-26W	360	80	L-KC	3,250	10	3	0	0	0	Yes
10845	Yes	Decatur Center	Halliburton Oil Prod. Co.	(W) Decatur Center Unit	Witt, Harmon, Witt, Ruzicka	16-3S-28W 21-3S-28W	800	70	L-KC	3,744	30	5	1	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	3,715-3,500	8.7	10	2	0	0	Yes
15013	No	Jording	Halliburton Oil Prod.	(P) Jording "A"	Jording "B", Mines, Jording	14-2S-30W 23-2S-30W	640	120	L-KC	3,847	25	5	1	0	0	Yes
17441	Yes	Olive	John O. Farmer, Inc.	(-) Olive Flood	Anna Miller, Reeves, Barrett	12-2S-28W 14-2S-28W	480	--	L-KC	3,468	5	4	–	0	1	Yes
16181	Yes	Paddock	Donald C. Slawson	(W) Paddock Unit	Paddock Unit	28,29,32, 33-2S-28W	740	0	L-KC	3,600	4	8	0	0	0	Yes
17588	No	Petracek	Okmar Oil Co.	(W) Petracek	Petracek	9-4S-27W	320	0	L-KC	3,559	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	3,740	4	6	1	0	0	Yes
14949	No	Pollnow	Shenandoah Oil Corp.	(D) Amanda-Pollnow	Amanda, Pollnow, Rogers	5,6-3S-29W 36-2S-30W	60	--	KC	3,750	4	5	–	-	-	Yes
13755	Yes	Vavroch	Halliburton Oil Prod. Co.	(W) Vavroch	Vavroch	33-3S-28W 4-4S-28W	320	80	L-KC	3,808	25	4	2	0	0	Yes
12401	--	Warner	Cities Service Oil Co.	(W) Warner Unit	Warner Unit	1,2,11, 12-1S-27W	220	0	L-KC	3,226	12	9	2	0	1	Yes
		DECATUR COUNTY TOTALS (Reported)					5687	760				71	11	0	2	
DICKINSON COUNTY																
15080	--	Lost Springs	Frank Jones Oil Operations	(P) Lost Springs	Wm. Martin B	34-16S-4E	320	20	Miss	2,280	20	9	0	0	0	Yes
DOUGLAS COUNTY																
12705	Yes	Baldwin	James E. Russell Petroleum	(W) Baldwin Unit	Baldwin Unit	36-14S-20E 2-15S-20E 6-15S-21E	120	0	Squir	800	18	13	0	1	0	No*
6934	No	Baldwin	Russell Hays	(D) Smith-Danly Farms	---	9-15S-20E	5	--	Squir	820	10	2	1	0	-	Yes
		DOUGLAS COUNTY TOTALS (Reported)					125	0				15	1	1	0	
DOUGLAS-FRANKLIN COUNTIES																
8295	No	Baldwin	Layton Oil Company	(W) Baldwin Flood	E. Early, W. Early, W. Finnerty, Pearson, N & S Finnerty, Bell, Broers, Higbie, Williams	11-15S-20E 14-15S-20E 23-15S-20E 24-15S-20E	177	0	Squir	820	24	38	1	2	0	Yes
EDWARDS COUNTY																
6178	No	Enlow	Messman-Rinehart Corp.*	(D) Hahn "A"	Hahn "A"	4-24S-16E	100	0	L-KC	3,740	6	1	1	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abnl. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Injected-water data: Depth, ft.	Injected-water data: Thick., ft.	Injected-water data: Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection: 1976	Water Injection: Cum. 12-31-1976	Total Oil recovered from project Pri. & sec.: 1976	Total Oil recovered from project Pri. & sec.: Cum. 12-31-1976	Oil recovered by enhanced methods: 1976	Oil recovered by enhanced methods: Cum. 12-31-1976	Remarks
17959	4	3	0	0	Irreg	80-100	--	Prod + Arb (Fresh wat)	--	--	F	1958	Wat + S Gas	--	29	--	--	--	501	--	501	--	*Intermittent
7487	0	-	0	-	5-spot	320	3	Prod + Arb	650	450	M	1968	Grav	17/3	28	--	0	--	260	--	0	--	*Was Russell Fultz †Replacing water line
3105	59	1	0	0	7-spot	370	6	Prod + Arb	950	--	F	1959	Grav	--	28	--	129,210	3,111,140	5,369	221,491	5,369	221,491	*Was General American Oil
	112	11	0	0													359,311	6,183,617	18,942	500,798	10,746	221,491	
15099	4	9	-	-	Irreg	500	487	Cedar Hill	1,900	40	U	1970	S Gas	--	34.7	--	712,930	2,550,863	46,203	524,502	46,203	451,217	
15829	1	-	-	-	Irreg	600	203	Prod + Stray	62	--	M	1971	S Gas	1/0	34	--	138,700	471,015	3,776	40,673	3,776	40,673	
17018	2	-	0	-	Irreg	1,200	400	Cedar Hills	1,608	100	U	1973	S Gas	--	32.2	--	82,800	435,579	8,781	122,829	5,000	15,338	
10845	3	0	0	0	Line	1,300	990	Prod + Cedar Hills	2,150	70	T+S	1964	S Gas	2/1	36	*	288,256	1,506,509	28,331	596,204	28,331	110,607†	*16.7 @ 40° †Corrected figure.
8190	2	4	0	2	Irreg	1,320	368	Prod + Cedar Hills	1,680	--	U	1961	S Gas	51/177	37	--	268,590	7,440,411	26,915	655,929	26,915	438,282	
15013	1	0	0	0	Irreg	350	45	Prod	--	--	-	1970	S Gas	19/1	34	--	16,425	106,213	4,836	82,647	2,800	6,300	
17441	1	-	0	-	Irreg	950	250	Prod + Cedar Hills	1,420	100	U	1974	Grav	--	37	--	99,687	286,852	29,628	71,747	13,500	31,500	
16181	4	0	0	0	Irreg	1,650	211	Prod + Chey	1,520	20	T	1971	S Gas	1/1	35.5	4 Est.	309,282	1,194,612	26,085	395,786	23,951	110,551	
17588	1	0	0	0	Peri	Vac	91	Prod + Tor	3,500	5	U	1974	S Gas	21/65	34	--	33,306	69,957	9,349	151,793	999	1,915	
7653	2	0	0	0	Irreg	1,240	893	Prod + Dak	1,425	25	T	1960	S Gas	10/0	38	--	326,726	4,382,403	11,515	827,098	11,515	397,013	*Was Union Texas
14949	1	-	-	-	Irreg	0	100	Prod	--	--	T	1969	S Gas	5/1	35	--	36,635	116,847	7,069	132,504	2,000	2,000	
13755	3	1	0	0	Line	1,300	1,080	Prod + Cedar Hills	2,120	80	T+S	1968	S Gas	4/1	36	*	394,267	3,723,337	45,926	1,336,190	45,926	240,951	*16.7 @ 40°
12401	7	1	0	0	Irreg	1,094	156	Prod + Chey	1,265	--	T	1966	S Gas	97/60	34	--	396,927	4,446,016	26,268	865,190	26,268	348,630	
	32	15	0	2													3,104,531	26,730,614	274,682	5,803,092	237,184	2,194,977	
15080	1	0	0	0	Irreg	0	100	Prod	--	--	T	1969	Grav	1/9	35	--	36,500	--	6,064	--	0	--	
12705	3	5	4	0	---	172	26	Roubidoux	1,900	--	T+S	1966	S Gas	--	26	80	28,271	108,671	3,277	46,375	3,277	20,926	*Redevelopment for Waterflood
6934	1	-	0	-	Irreg	*	12	Prod	--	--	U	1959	S Gas	--	27	--	4,000	85,000	1,100	--	700	12,000	*Atmospheric
	4	5	4	0													32,271	193,671	4,377	46,375	3,977	32,926	
8295	26	5	5	0	Line	670	63	Sand	60	40	F	1964	S Gas	1/8	26	--	602,250	6,153,793	17,358	402,218	17,358	402,218	
6178	1	1	0	0	Irreg	Grav	12	Prod	--	--	U	1958	Wat	--	31	--	3,900	1,292,188	1,942	193,978	1,942	71,273	*Was Natural Gas & Oil Co.

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ELK COUNTY																
16218	--	Bush-Denton	Perkins Oil Company	(D) Clad Criger	Clad Criger	34-29S-9E	80	0	Miss lm	2,289	52	1	0	0	0	Yes
5118	No	Bush-Denton	Perkins Oil Company	(D) ---	Kyser-A,	10-30S-9E	200	--	Miss lm	2,375	29	9	0	0	0	Yes
15543					Kyser-B, Hyde	9,10-30S-9E										
16219																
15710	No	Hale-Inge	Traverse Corporation	(W) Howell-O'Neal Pilot Waterflood	Howell, O'Neal, Kimzey	27-31S-12E	110	0	Stray	695	14	6	12	0	0	Yes
15710	No	Hale-Inge	Traverse Corporation	(W) Inge Waterflood	Inge, Temple	34-31S-12E	127	0	Stray	660	10	20	6	0	0	Yes
10390	No	Moline	W.R. Gross	(D) Moline	M. Eyman	9-31S-10E	160	--	Miss	2,003	17	2	0	0	0	No*
11214	--	Schrader	Aladdin Petroleum Corp.	(P) Shrader	Shrader	12-31S-8E	160	0	KC	1,650	40	11	0	0	0	Yes
16500	No	Webb	BMG, Inc.*	(D) Durbin	Durbin	23-31S-10E	10	--	KC	1,356	10	3	-	0	0	Yes
17042	No	Webb	Tomlinson Oil Co., Inc.	(D) Durbin	Durbin	13-31S-10E	80	0	Miss	1,937	10	0	1	0	0	Yes
		ELK COUNTY TOTALS (Reported)					927	0				52	19	0	0	
ELLIS COUNTY																
10613	--	Air Base	American Petrofina Co. of Texas	(W) Pratt	Pratt Airbase	27-13S-16W	80	15	Gorham	3,460	15	6	0	0	0	Yes
16340	No	Air Base East	Hinkle Oil Company	(W) Air Base East	Brungardt "A", Brungardt "B", Leiker East	25-13S-16W	200	0	L-KC	3,400	15	4	0	0	0	Yes
17737	Yes	Antonino South	Energy Sources, Inc.	(W) Antonino South Waterflood Unit	Antonino South Waterflood Unit	26,35-14S-19W	310	--	L-KC	3,750	--	10	-	11	-	Yes
17768	No	Antonino Southwest	Murfin Drilling*	(P) Feitz Waterflood	Murfin Drlg. Co. Feitz	34-14S-19W	160	0	L-KC	3,592	3	3	0	0	0	Yes
12629	Yes	Beeching	Icer Addis	(W) Beeching Waterflood Unit	Beeching, Daisy, Gorham, Sarah	34,35-15S-16W	800	--	L-KC	3,330	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	3,322	0	8	0	-	-	Yes
11239	--	Bemis-Shutts	Fell & Wolfe Oil Co.*	(D) Pearl Cress	Pearl Cress	13-11S-17W	80	--	L-KC	3,068	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 Top	3,100 3,350	--	3	0	0	1	Yes
12788	No	Bemis-Shutts	Lario Oil & Gas Company	(P) Henderson "E"	Lario-Henderson "E", Sohio-Henderson "A"	22-11S-18W	160	0	Arb	3,520	--	2	0	0	0	Yes
7923	--	Bemis-Shutts	Mallonee-Mahoney, Inc.*	(W) Windholz	Hall "A", Windholz "A", Windholz "B"	2-12S-17W 3-12S-17W	340	--	Arb	3,600	50	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	3,350	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 27-12S-18W	200	0	L-KC	3,404	7	5	0	0	0	Yes
12769	--	Bemis-Shutts	Shade & Berry	(-) ---	Henderson 1-E	15-11S-18W	40	--	L-KC	3,132	10	3	-	-	-	Yes
11621	--	Bemis-Shutts	Sierra Petroleum Co., Inc.	(D) Schmeidler "E"	Schmeidler "E"	8-12S-17W	160	0	L-KC + Arb	3,340	224	4	0	2	0	Yes
15294	--	Bemis-Shutts	Sohio Petroleum Company	(W) Bemis "I" Lse.	Bemis "I"	4-12S-17W	80	0	Arb	3,560	--	3	0	0	0	Yes
16345	--	Bemis-Shutts	Sun Production Company	(-) Bemis Co-op Waterflood	Sun Jorgensen, Sun-Hadley "A", Phillips-Sites, Sun-Hadley "BC" & Peavey A, Phillips-Hendrecks & Peavey	7-11S-17W 12-11S-18W 13-11S-18W	960	0	L-KC Top	2,950	20	26	0	0	0	Yes
16346																
16347																
16348																
16345	--	Bemis-Shutts	Sun Production Company	(-) Bemis Co-op Waterflood	Sun-Jorgensen, Sun-Hadley "A", Phillips-Sites, Sun-Hadley "BC" & Peavey A, Phillips-Hendrecks & Peavey	7-11S-17W 12-11S-18W 13-11S-18W	960	0	Top Tor L-KC	2,794	--	27	0	0	0	Yes
16346																
16347																
16348																
10120	--	Bemis-Shutts	Tenneco Oil Company	(W) Frank S. Wasinger Unit	Frank S. Wasinger Unit	21-11S-18W	160	120	L-KC	3,320	6	8	0	0	0	--
7733	--	Catherine	Isis Operating Inc.*	(P) ---	Wolfe, Walter, Schmidt	4-13S-17W 9-13S-17W	240	0	L-KC	3,342	220	2	0	0	0	Yes
11933	--	Catherine	Kewanee Oil Company	(W) Catherine Unit	---	10,11-13S-17W	0	190	KC	3,250	210	9	0	0	1	No*
10619	--	Catherine Northwest	Texaco Inc.	(W) M. Wolf "A"	M. Wolf	4-13S-17W	--	--	Tor-Lans	3,350	37	1	1	0	1	Yes
15300	Yes	Catherine South	Sterling Drlg. Company	(P) Catherine South Unit	---	14-13S-17W	200	--	L-KC	3,276	8	4	1	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
16218	2	-	-	-	Irreg	25	150	Prod	--	--	U	1971	Grav	5/95	36	--	71,175	291,275	1,580	--	750	--	
5118	6	-	-	-	Irreg	0	400	Prod	--	--	U	1955	Grav	5/95	37	--	876,000	--	16,500	--	7,500	--	
15543																							
16219																							
15710	15	0	0	0	5-spot	280	25.7	Sandstone	30	90	F	1975	S Gas	--	32	14	140,735	149,510	571	571	571	571	
15710	18	2	0	0	5-spot	375	45.7	Prod + Salt Sd	445	20	T	1967	S Gas	1/25	32	14	300,361	2,453,573	9,461	103,668	--	--	
10390	1	0	0	0	Irreg	0	250	Prod	--	--	U	--	---	--	38	--	75,000	367,000	114	2,018	--	--	*Wells down intermittently - problems.
11214	3	0	0	0	Irreg	200	400	Prod	1,650	30	T	1963	S Gas	--	34	--	134,915	1,544,987	10,210	482,840	10,210	482,840	
16500	1	0	0	0	5-spot	300	450	Prod + KC + Miss	1,975	6	U	1972	S Gas	1/20	30	15	164,250	--	5,900	--	2,850	--	*Was M.B. Tanner
17042	1	1	0	0	---	Vac	279	Prod	--	--	U	1973	S Gas	1/2	31.5	--	101,898	423,755	11,171	244,159	2,129	6,705	
	47	3	0	0													1,864,334	5,230,100	55,507	833,256	24,010	490,116	
10613	1	0	0	0	Irreg	450	357	Prod	--	--	U	1967	Wat	1/6	33.7	--	130,203	1,757,191	7,432	248,093	7,432	69,264	
16340	1	0	0	0	Peri	20	80	Prod + Arb	3,650	50	T	1970	S Gas	3/2	40	--	40,748	336,102	13,176	363,688	10,176	116,299	
17737	1	-	11	-	Irreg	1,400	425	Prod	--	--	U	1973	Wat + S Gas	100/5	38	--	154,006	--	18,871	461,107	--	--	
17768	1	0	0	0	Irreg	Vac	94.5	Prod + Dak	550	37	T	1975	S Gas	1/4	38	--	34,475	50,480	7,209	76,083	1,809	1,809	*Was 3-G Oil Company
12629	1	0	0	0	Irreg	0	210	Prod	--	--	U	1966	Gas Exp	1/8	36	--	76,860	907,710	4,975	30,296*	2,500	23,075*	*Since 1971
16660	1	0	-	-	Irreg	0	500	Prod	--	--	U	1972	S Gas	--	30.3	--	180,000	3,296,317	8,750	213,650	--	--	
11239	1	0	0	0	Irreg	Vac	70	Prod + KC	--	--	U	1964	---	--	32	--	--	--	2,563	--	--	--	*Was Gulf Oil Corp.
12116	0	0	0	0	Irreg	--	0	Prod	--	--	-	1965	S Gas	29/176	28	--	0	208,410	7,281	164,656	3,793	88,606	
12788	1	0	0	0	Irreg	0	4,138	Prod	--	--	U	1966	Wat	18/1,515	28	--	1,514,569	15,124,157	6,739	98,843	--	--	
7923	1	-	0	0	Irreg	Vac	210	Prod	--	--	T	1960	Wat + S Gas	13/7	30.1	--	78,620	848,948	8,236	226,922	4,672	98,124	*Was George Vye
12976	1	0	0	0	Peri	Vac	455	Prod + Arb	3,600	5	U	1966	S Gas	--	33	--	166,530	1,751,438	7,635	939,864	3,837	35,054	
14315	2	0	0	0	Line	232	330	Prod	--	--	T	1968	S Gas	18/8	30.5	15	241,211	1,193,899	8,325	317,592	8,325	90,046	
12769	1	0	0	0	---	Vac	400	Prod	--	--	U	1966	S Gas	--	35	--	146,000	1,411,000	1,800	--	1,400	54,400	
11621	1	0	0	0	Irreg	Grav	123	Prod	--	--	T	1965	S Gas	--	29.9	7	45,210	794,330	6,450	--	3,225	45,482	
15294	1	1	0	0	Irreg	100	22.6	Prod	--	--	T	1969	Wat	1/1	31.3	--	8,276	440,009	52,319	131,131	0	22,595	
16345	7	0	0	0	---	15	352	Prod + Arb	3,300	50	T	1972	S Gas	1/3.14	--	--	642,405	3,001,494	91,645	413,459	77,890	404,071	
16346																							
16347																							
16348																							
16345	5	0	0	0	---	--	420	Prod + Arb	3,300	50	T	1972	S Gas	1/3.14	--	--	764,112	3,765,606	94,841	508,300	80,615	484,685	
16346																							
16347																							
16348																							
10120	-	0	0	0	Irreg	213	244	Prod	--	--	U	1963	S Gas	16/84	27.5	--	356,527	5,149,658	30,156	1,888,155	30,156	455,903	
7733	1	0	0	0	Irreg	Vac	140	Prod	--	--	U	1959	S Gas	1/14	35	--	42,000	--	2,555	--	--	--	*Was E. T. Drube
11933	0	2	0	0	Peri	0	0	Prod	--	--	U	1966	S Gas	77/1,359	29	--	0	530,049	17,667	1,506,867	0	6,849	*No water injected
10619	1	1	0	1	Irreg	Vac	271	Prod	--	--	U	1964	---	2061/3342	31	--	99,086	1,786,583	1,962	110,007	1,962	54,560	
15300	1	0	0	0	Irreg	250	150	Prod + Dak	734	10	U	1970	Grav	--	33	--	54,750	429,065	4,196	64,690	4,196	52,876	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S – T – R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ELLIS COUNTY (Cont.)																
17121	Yes	Chrisler South	Okmar	(W) Madsen Unit	Snapp, Madsen McGuire	27-11S-16E 28-11S-16E	100	0	LKC	3017	148	3	1	0	0	Yes
5605	No	Cromb	Maurice L.Brown Co.	(P) Zachman	Zachman	15-11S-20W	160	0	LKC	3554	8	5	1	0	1	Yes
13603	No	Dechant	Icer Addis	(W) Dechant	Dechant	6-15S-18W	80	--	LKC	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, Dechant	1-15S-19W	90	0	Arb	3700	300	6	0	0	0	Yes
17098	No	Dinges	Palomino Petroleum*	(D) Dinges	Dinges	10-15S-18W	160	0	LKC	3348	46	1	0	0	0	Yes
13073	Yes	Eagle Creek	Veeder Supply & Development Co.	(W) Eagle Creek Unit	Eagle Creek Unit	2,10,11-11S-20W	200	160	Tor-LKC	3270	25*	6	2	0	0	Yes
7142	--	Emmeram	Hillenburg Oil Co.*	(W) Froelich	Froelich A, Froelich B, Froelich C	4-13S-16W	20	0	LKC	3200	22	4	0	0	0	Yes
6605 11769	No	Emmeram Northeast	Kewanee Oil Co.	(-) Froelich E,F,& Sitz	Sitz Froelich E Froelich F	16-12S-16W 27-12S-16W 34-12S-16W	0	160	KC	3270	4	2	1	0	0	Yes
5267	--	Fairport	Shenandoah Oil Corp.*	(W) Katie Austin Brungardt	Weiland "C"	36-12S-16W	130	--	LKC & Dodge	3900	90	8	--	--	--	Yes
8741 14251	No	Fairport	Shenandoah Oil Corp*	(W) Schmitt "A" & "B"	Schmitt "A" Schmitt "B"	1-13S-16W 12-13S-16W	50	40	LKC	3050	20	4	--	--	--	Yes
10416	No	Fairport	Shenandoah Oil Corp.*	(W) Weiland "B"	Weiland "B"	1-13S-16W	70	0	LKC& Dodge	3050	30	7	--	--	--	No
14253	No	Gatschet	Cecil M.Keller	(W) Gatschet Waterflood	Gatschet, Sack	13-13S-19W	320	160	LKC	3368	5	3	0	4	1	Yes
6890	No	Herzog	Palomino Petroleum *	(D) Braun-Dinkle	Braun	32-13S-16W	80	0	LKC	3227	6	2	1	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	2	0	0	No*
13651	No	Leiker Southeast	Aylward Drilling Co.	(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 Waterflood	Craig-Lundy	11-16S-11W	160	0	LKC	3000	200	2	0	0	0	Yes
13535	--	Lieb East	Chief Drilling Co. Inc.	(-) Lundy	Lundy	16-11S-16W	120	0	LKC	0	0	3	0	0	0	Yes
14316	Yes	Meistrell	Petroleum Inc.	(W) Meistrell LKC Unit	O'Brien "B", Meistrell "D"	9-11S-18W	160	0	LKC	3262	8	3	0	0	0	Yes
13093	No	Mixer	Murfin Drilling	(P) Mixer Repressuring	Mixer "C"	7-11S-20W	160	110	LKC	3372	19	2	0	0	0	Yes
18064	--	Neddam	Shade & Berry	(D) --	Wasinger, Madden	16-11S-18W	80	--	LKC	3145	10	1	0	0	0	Yes
18056	--	Nicholson	Continental Oil	(W) Nicholson	Nicholson Unit	30-11S-20W	90	0	LKC	3762	70	4	0	--	--	Yes
17979	No	Pleasant	Dane G.Hansen Trust	(D) Storm	Storm	34-13S-20W	80	0	LKC & Arb	3499	250	3	0	0	0	Yes
17236	No	Pleasant	Murfin Drilling	(W) Kingsley	Kingsley	34-13S-20W	160	0	LKC	3523	35	3	0	0	0	Yes
15916	No	Pleasant	Reed Oil Co.	(D) Storm	Storm	35-13S-20W	--	0	Squir	3840	12	2	0	0	1	Yes
15850	--	Rajewski	Meltzer Oil Co.*	(P) Rajewski	Rajewski	28-15S-17W	80	--	KC	3400	6	1	1	--	--	Yes
13426	No	Ruder	Gulf Oil Corp.	(W) J.A.Swires	J.A.Swires	8-15S-18W	80	0	LKC	3260	0	2	2	0	0	Yes
15955	--	Ruder	Gene Brown Co.*	(-) --	Ruder "C"	8-15S-18W	--	--	--	--	--	2	--	--	--	No†
16804	--	Schmeidler	Frontier Oil Co.	(P) Giebler	Giebler	28-12S-17W	160	0	LKC	3400	6	3	0	0	0	Yes
14553	No	Schoenchen	Okmar	(W) Wolf	Wolf	16-15S-18W	--	--	LKC	3300	4	--	--	--	--	No*
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	(W) Albert	Albert, Wickham, Fred	10-11S-19W	160	--	LKC	3244	5	4	0	0	0	Yes
14016	No	Solomon	Okmar	(W) Albert-Fred	Albert Fred	10-11S-19W 15-11S-19W	120	0	Arb	3600	5	0	2	2	0	No*
13553	No	Sugarloaf South	Okmar	(W) Dreiling	Dreiling A, Dreiling C	28-13S-17W	60	0	LKC	3280	5	2	1	0	0	Yes
16583	--	Sugarloaf Southeast	American Petrofina Co. of Texas*	(P) Braun "B"	Braun "B"	26-13S-7W	80	0	Arb	3484	336	4	0	0	0	Yes
13434 15682	No	Toulun	Willie E.Schultz	(W) Braun	Braun	35-13S-17W	25	0	LKC	3235	12	2	0	0	0	Yes
9849	No	Toulon South	Okmar	(W) Brungardt Waterflood	Goetz D Brungardt Christina	10-14S-17W 14-14S-17W 15-14S-17W	100	--	LKC	3430	7	3	1	0	0	Yes
13544	No	Toulon Southwest	Okmar	(W) Dinkel A	Dinkel, Dinkel A	16-14S-17W	50	0	Arb & LKC	3500 3250	5	3	0	0	0	Yes
9229	No	Turkville	Palomino Petroleum *	(D) McCombs	McCombs	11-11S-17W	40	0	LKC	3175	7	1	0	0	0	Yes
9694	--	Ubert Northwest	Edmiston Oil Co. Inc.	(-) Schmidt Lease	Schmidt	36-12S-18W	--	--	LKC	3600	--	4	0	0	0	No*
11815	No	Ubert 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*

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press., psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
17121	2	0	0	0	Irreg	0	1120	Prod	--	--	U	1969	S Gas	1/1	35	--	410,051	1,693,107	2,629	183,669	2,629	17,718	
5605	2	0	1	0	Irreg	206	192	Prod	--	--	T	1957	S Gas	--	28	27.5*	140,479	2,192,465	14.820	218,473	14,820	89,458	*@ 100
13603	1	0	0	0	Irreg	0	6	Prod	--	--	U	--	Gas Exp	--	39	--	2,196	11,471*	699	6,897*	200	1,346	**Since 1971
16276	1	0	0	0	Irreg	0-Vac	3217	Prod	--	--	U	1971	Wat	1/50	28.7	--	1,174,482	2,987,033	7,087	291,400	--	--	*Was Imperial Oil Co.
16262	1	0	0	0	Irreg	0	850	Prod	--	--	U	1971	Wat	7/93	30	--	310,000	1,607,000	22,523	281,067	1,200	6,000	*Was Alpine Drilling Co.
17098	1	0	0	0	Irreg	0	9	Prod	--	--	U	1973	S Gas	3/14	31	--	3,295	16,495	700	167,835	0	100	*Was Colorado Oil & Gas Co.
13073	4	4	0	0	Peri	65	213	Prod + Dak	800	200	T	1967	S Gas + Wat	15.3/84.7	33	--	311,588	4,524,105	9,573	142,627	9,573	142,627	*Cumulative porosity
7142	1	0	0	0	Irreg	15	30	Prod	--	--	T	1959	Wat	72/28	36	--	10,950	--	2,381	--	2,381	--	*Was Terra Resources Inc.
6605	1	1	0	0	Irreg	0	20	Prod	--	--	U	1961	S Gas	--	34	--	7,300	352,334	2,920	245,502	0	11,705	
11769																							
5267	1	--	--	--	Peri	0	0	Prod	--	--	U	1957	S Gas	2/3	35	--	0	1,800,050	22,084	1,571,558	0	1,243,890	*Was Solar Oil Co.
8741	1	--	--	--	Peri	130	328	Prod	--	--	T	1961	S Gas	2/23	35	--	119,846	1,715,163	5,905	1,668,652	5,905	1,353,359	*Was Solar Oil Co.
14251																							
10416	2	--	--	--	Peri	0	478	Dak	300	300	T	1963	S Gas	3/20	32	--	174,471	2,553,746	13,952	2,178,189	13,952	219,735	*Was Solar Oil Co.
14253	1	0	1	0	Irreg	Vac	239	Prod + Chey	740-1090	250	U	1968	S Gas + Wat	5/1	35	--	51,070	761,231	9,372	98,503	7,029	73,877	
6890	1	0	0	0	Irreg	0	9	Prod	--	--	U	1962	S Gas	--	33	--	3,295	88,645	1,550	201,086	--	--	*Was Hinkle Oil Co.
15930	1	0	0	0	Irreg	Vac	2117	Prod	--	--	U	--	--	149/409	38.4	--	772,640	2,815,539	19,338	162,324	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	*Will start at later date.
13651	2	0	0	0	Irreg	500	375	Prod	--	--	U	1967	S Gas	--	35	--	273,750	2,077,828	10,173	258,378	10,173	192,892	*Graf lease is part of a joint project of Aylward and Baruch-Foster Corp.
13428	1	0	0	0	Irreg	300	450	Dak + Chey	350	100	M	--	S Gas	--	--	--	162,150	1,498,219	2,217	15,446	2,217	22,666	
13535	1	0	0	0	Irreg	300	350	Prod + Dak+Chey	--	--	U	1967	S Gas	1/4	35.8	--	123,350	1,234,626	4,596	221,488	2,298	41,973	
14316	1	0	0	0	Line	736	403	Prod + Quat	75	100	M	1968	S Gas	23/19	34.6	8	147,121	1,051,340	7,048	245,510	7,048	96,515	
13093	1	0	0	0	Irreg	350	157	Prod + Arb	3650	8	T	1966	S Gas	17/8	34	--	57,305	--	3,274	--	3,274	--	
18064	1	0	0	0	--	Vac	50	Prod	--	--	U	1976	S Gas	--	35	--	30,000	30,000	700	68,000	0	--	
18056	3	0	--	--	--	0	477	Prod	--	--	T	1976	S Gas	--	--	--	438,238	438,238	7,170	7,170	1,330	1,330	
17979	1	0	0	0	Irreg	Vac	296	Prod	--	--	U	1975	S Gas	7/93	40	--	108,040	142,776	5,666	7,445	--	--	
17236	1	0	0	0	Irreg	Vac	562	Prod + Arb	3800	10	T	1974	S Gas	1/3	38	--	205,142	511,329	6,836	110,712	3,116	7,358	
15916	1	0	0	0	Irreg	200	400	Prod	--	--	U	1970	Wat	6/4	38	--	80,300	418,135	3,880	33,943	--	--	
15850	1	1	--	--	Irreg	Vac	20	Prod + KC	3400	6	U	1968	Grav	1/1	36	--	4,745	--	2,347	--	--	--	*Was Lee Phillips.
13426	1	1	0	0	Irreg	800	883	Prod	--	--	U	1967	S Gas	16/36	33.9	--	340,950	2,322,204	6,571	49,261	6,571	40,161	
15955	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	---	---	--	--	--	*Was Kaiser-Francis †Prod wat to Ruder "D"SWD
16804	1	0	0	0	Irreg	0	100	Prod	--	--	U	1972	S Gas	2/3	29	--	36,500	152,935	5,821	28,047	1,940	7,423	
14553	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	0	0	2,294	156,682	0	0	*Project not started.
13234	4	0	0	0	Irreg	150	167	Prod + Dak	430	60	M	1970	S Gas	1.06/1	41.2*	--	243,586	1,810,341	15,306	260,329	5,624	123,634	*@60
10846	1	0	0	0	Peri	0	250	Prod + Arb	3500	5	U	1964	S Gas	--	34	--	91,250	871,880	15,436	--	6,600	73,288	
14016	1	0	1	0	Peri	Vac	1850	Prod + LKC	3200	5	U	1968	Wat	48/4500	26	--	677,100	7,116,100	13,121	--	0	--	*Discontinued.
13553	1	0	0	0	Peri	Vac	141	Prod + Arb	3530	5	U	1967	S Gas	34/20	30	--	51,606	320,299	5,111	359,688	654	3,280	
16583	1	0	0	0	Irreg	0-Vac	601	Prod	--	--	U	1972	Wat	1/2	34	--	219,681	1,164,760	8,483	658,124	--	--	*Was El Dorado Refg. Co.
13434	1	0	0	0	Irreg	225	400	Prod + Fr	220	80	M	1967	S Gas	3/5	33	--	153,000	1,021,158	3,600	58,218	3,600	58,218	
15682																							
9849	2	0	0	0	Peri	1800	245	Prod + Arb	3500	3	U	1963	S Gas	--	35	--	89,809	1,959,699	6,308	520,996	4,100	96,735	
13544	1	0	0	0	Irreg	0	447	Prod	--	--	U	1960	S Gas	--	33	--	74,122	1,163,014	8,767	421,949	7,627	108,594	
9229	1	0	0	0	--	0	4	Prod	--	--	U	1962	S Gas	2/3	36	--	1,465	24,750	1,247	81,533	450	600	*Was Colorado Oil & Gas
9694	0	1	0	0	Irreg	0	0	Prod	--	--	U	1963	Pumping	--	28.5	--	0	--	6,233	511,751	0	--	*No water injected 1976.
11815	0	2	0	0	Irreg	--	0	Prod	--	--	U	1965	S Gas	49/138	29	--	0	630,186	8,600	480,595	--	---	*No water injected.

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1976—*Continued*

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ELLIS COUNTY (concl.)																
11068	No	Victoria North	Richard L. Mai	(P) Schulte	Quint, Schulte	7-14S-16W 8-14S-16W	160	117	L-KC	3,214	6	5	-	1	-	Yes
13470	--	Wheatland	Petroleum Management, Inc.	(W) Leiker	Leiker	18-15S-17W	20	0	L-KC	3,282	225	2	1	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	3,338	146	17	0	0	0	Yes
15425	No	Younger	Okmar Oil Company	(W) Hoffman	Hoffman	32-13S-17W	40	0	L-KC	3,318	5	3	0	0	0	Yes
		ELLIS COUNTY TOTALS (Reported)					9825	1262				294	18	20	6	
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	3,225	4	21	0	0	0	Yes
ELLSWORTH COUNTY																
16438	--	Geneseo-Edwards	Cities Service Oil Company	(D) Rathbun Arbuckle	Rathbun	16-17S-8W	96	0	Arb	3,206	25	4	0	-	0	Yes
13631	Yes	Lorraine	Petroleum, Inc.	(W) Lorraine Unit	Rolfs, Offner, Nienke, Janzen	11-17S-9W 12-17S-9W	480	0	L-KC	2,870	10	5	0	0	0	Yes
10057	No	Stoltenberg	Icer Addis	(W) Zvolanek "B"	Zvolanek "B"	33-15S-10W	30	--	Simp	3,246	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	2,840	14	12	0	0	0	Yes
14991	No	Wilson Creek	L.G. Stephenson & Co., Inc.	(P) Boreil B-2	Boreil B, B-2, C, A-1, A-2, E. Soukup, H. Kratky	20-14S-10W 29-14S-10W	640	0	Lans	2,820	20	30	0	0	0	Yes
16265	--	Wilson Creek	L.G. Stephenson & Co., Inc.	(P) Vopat D	Vopat D	21-14S-10W	160	0	Lans	2,820	20	11	0	0	0	Yes
16442 16708	--	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	2,800	20	16	0	0	0	Yes
16499	No	Wilson Creek	L.G. Stephenson & Co., Inc.	(-) Pekarek	Pekarek	20-14S-10W	120	0	Lans	2,820	20	5	0	0	0	Yes
		ELLSWORTH COUNTY TOTALS (Reported)					2006	0				84	0	0	0	
FINNEY COUNTY																
16552	--	Damme	Texaco Inc.	(P) Garden City "B"	Garden City "B"	5-22S-33W	480	--	Marm	4,412	--	9	1	0	0	Yes
9779	Yes	Nunn	The Maurice L. Brown Co.	(P) Nunn	McHugh, Maune, Davis, Nunn, Ely, Aeilts, Gobleman	23-21S-34W 26-21S-34W 26,27-21S-34W 27-21S-34W 34-21S-34W	1,440	160	Marm	4,276	9	18	2	1	0	Yes
		FINNEY COUNTY TOTALS (Reported)					1920	160				27	3	1	0	
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	5,050	15	63	6	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Injected-water data: Depth, ft.	Injected-water data: Thick., ft.	Injected-water data: Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
11068	2	1	0	0	Peri	50	200	Prod	--	--	T	1964	S Gas	4/1	34	--	70,000	1,000,000	6,217	--	4,000	92,130	
13470	0	-	-	-	Irreg	0	0	---	--	--	U	1967	S Gas	1/0	36	--	0	373,962	6,631	29,501	2,190	5,815	
15655	5	1	0	0	Peri	Vac	202	Prod	--	--	T	1970	S Gas	2/1	37	--	370,981	1,812,116	35,273	712,246	35,273	239,013	
15425	1	0	0	0	Peri	Vac	139	Prod	--	--	U	1970	S Gas	30/67	34	--	50,874	251,567	8,097	314,988	5,547	22,635	
	88	18	14	1													12,368,316	95,854,509	757,339	20,793,185	413,309	6,613,877	
3145	10	2	0	0	Irreg	373	454	Prod + Dak	475	--	T	1961	S Gas	155/107	37	--	1,668,385	19,154,241	64,076	3,338,985	64,076	1,210,934	
16438	1	0	0	0	Irreg	820	72	Prod	--	--	F	1972	S Gas	25/420	37.3	--	26,621	126,332	5,028	540,682	891	5,297	
13631	1	0	0	0	Line	947	831	Prod + Dak	200	50	M	1967	Wat	693/292	35.8	7	303,431	2,771,920	12,543	385,081	12,543	147,644	
10057	1	0	0	0	Irreg	0	110	Prod	--	--	U	1962	Wat	--	37	--	40,260	386,510	2,739	9,917*	2,000	28,287	*Since 1973
16302	2	0	0	0	Peri	300	150	Prod	--	--	U	1971	S Gas	9/1	38	--	109,500	250,000	25,000	170,000	3,700	13,200	
14991	4	0	0	0	Peri	188	343	Prod	--	--	U	1969	S Gas	83/17	38	--	502,739	2,498,334	48,323	1,078,435	--	--	
16265	2	0	0	0	Peri	450	51	Prod	--	--	U	1972	S Gas	83/17	39	--	18,556	489,516	31,449	581,534	--	--	
16442	3	0	0	0	Peri	400	59	Prod	--	--	U	1972	S Gas	83/17	39	--	65,299	447,247	50,382	606,412	--	--	
16708																							
16499	1	0	0	0	Peri	500	465	Prod	--	--	U	1972	---	83/17	39	--	99,277	597,189	15,427	298,156	--	--	
	15	0	0	0													1,165,683	7,567,048	190,891	3,670,217	19,134	194,428	
16552	1	0	0	0	Irreg	240	986	Prod	--	--	U	1972	S Gas	688/57	--	--	359,845	1,212,207	114,879	994,016	--	--	
9779	1	1	0	0	Line	0	253	Prod	--	--	T	1958	S Gas	--	30	*	90,026	3,045,095	41,481	3,382,445	20,740	239,024	*11.6 @ 100°
	2	1	0	0													449,871	4,257,302	156,360	4,376,461	20,740	239,024	
13423	7	0	0	0	Irreg	120-580	385	Prod	--	--	T	1966	Wat + S Gas	2573/3278	33.5	--	978,321	8,343,962	511,946	18,511,376	--	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
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	(D) Kurtz	Kurtz	32-16S-21E	15	0	Squir	625	10	3	–	–	–	Yes
7526	No	Paola-Rantoul	Elton R. Greer	(W) Wellsville Flood	Ackley, Rice, Lidikay, Rhoads, Royer, Dorsey, Bell	3-16S-21E 4-16S-21E 10-16S-21E	300	0	Squir	700	30	30	21	0	1	Yes
18352	--	Paola-Rantoul	Jackson Oil Company	(W) Wellsville	Collins, Coons, Shawen, Todd, Beckmeyer	31-15S-21E 32-15S-21E	--	--	Squir	720	20	39	–	3	–	Yes
17266	No	Paola-Rantoul	LL&B Oil Company*	(P) Finch Lease	---	29-16S-21E	190	0	Squir	630	14	9	6	0	0	Yes
5495	No	Paola-Rantoul	Glenn Layton, Jr.	(P) Naylor	Naylor	33-16S-21E	5	--	Squir	630	20	1	1	–	–	Yes
11109	No	Paola-Rantoul	Layton Oil Company	(W) LeLoup Area	Revey, Burgoon, Collins, Barnhizel, Shawen-Hill	30-15S-21E 31-15S-21E 32-15S-21E	580	0	Squir	720	20	18	17	0	0	Yes
12728	--	Paola-Rantoul	Glenn Layton, Jr.	(P) Hays	Hays	20-16S-21E	20	--	Squir	630	20	4	–	–	–	Yes
5012	No	Paola-Rantoul	Rader Oil Company	(P) McConnell	McConnell	18-16S-21E	160	0	Squir	685	12	9	0	1	0	Yes
17259	No	Paola-Rantoul	Rader Oil Company	(P) Coffman	Coffman	29-16S-21E	80	0	Squir	625	15	3	0	0	0	Yes
17387	No	Paola-Rantoul	Rader Oil Company	(P) Stephens-McGlashon	Stephens, McGlashon	7-16S-21E	278	0	Squir	710	10	5	0	1	0	Yes
18459	No	Paola-Rantoul	Rader Oil Company	(P) Slaven-Ayers	Slaven, Ayers	19-16S-21E 30-16S-21E	198	0	Squir	690	10	4	0	3	0	Yes
15342	No	Paola-Rantoul	Reed Oil Company	(W) Rantoul Project	Gilliland, McCullough, Detwiler	19-17S-21E 20-17S-21E	59	0	Squir	610	8	18	0	0	0	Yes
5419	--	Paola-Rantoul	L. O. Tenk	(W) Carter Waterflood	Needham, Ritchal, Carter	17-18S-21E 17,18-18S-21E	640	0	Squir	550	17	23	0	4	0	Yes
		FRANKLIN COUNTY TOTALS (Reported)					2585	0				176	45	12	1	
GOVE COUNTY																
13915	--	Albin	Chief Drlg. Co., Inc.*	(P) ---	Albin	10-14S-27W	320	0	Miss	4,330	16	1	0	0	0	Yes
17846	No	Campus Siding	A.L. Abercrombie, Inc.	(D) Bloom	Bloom	2-11S-31W	240	3	L-KC	4,021	3	1	0	0	0	Yes
13217	--	Castle Rock	Chief Drlg. Co., Inc.	(P) Sauer	Sauer	27-14S-27W	160	160	Miss	4,300	16	1	0	0	0	Yes
16501	--	Castle Rock	Pickrell Drlg. Co.	(D) Albin G-H Unit	Albin G-H Unit, Leighton B-F Unit	29-14S-27W	200	0	KC	3,917	12	5	0	0	0	Yes
17166	--	Chapman	Pickrell Drlg. Co.	(W) Chapman A	Oshay, Chapman A	26-15S-26W 35-15S-26W	120	0	Marm (Ft Scott)	4,338	17	2	0	0	0	Yes
17366	No	Missouri Flats	Donald C. Slawson	(W) Beesley "C"	Beesley "C"	27-14S-28W	320	0	L-KC	3,700	6	2	0	0	0	Yes
15205	--	Rosa	Pickrell Drlg. Co.	(P) Rosa Becker B	Becker B	34-15S-27W	40	0	KC	4,000	6	1	0	0	0	Yes
		GOVE COUNTY TOTALS (Reported)					1400	163				13	0	0	0	
GRAHAM COUNTY																
9707	--	Blazier	Cities Service Oil Co.	(W) Blazier L-KC Unit	Blazier Unit	21,27,28-7S-25W	180	0	L-KC	3,800	20	4	4	0	1	Yes
14844	--	Bollig	Bankoff Oil Company	(W) Bollig Inj.	Bollig, Sauer, Brungardt	28-9S-25W 33-9S-25W	120	80	Lans	3,870	4	3	0	0	0	Yes
17942	No	Brassfield Northeast	Murfin Drlg. Co.	(P) Wolfe WF	J.O. Farmer, Gustafson, MDC-Wolfe	25-9S-22W 1-10S-22W 36-9S-22W	480	0	L-KC	3,570	204	3	0	0	0	Yes
15497	--	Brush Creek	Cities Service Oil Co.	(W) Brush Creek L-KC Unit	Brush Creek L-KC Unit	4,9-9S-23W	106	0	L-KC	3,740	10	10	0	0	0	Yes
15929	--	Brush Creek Northwest	Dane G. Hansen Trust	(D) Wilson "K"	Wilson "K", McVey	32-8S-23W	240	0	L-KC	3,700	200	3	0	0	0	No*
17655	No	Brush Creek Northwest	Murfin Drlg. Co.	(P) Brush Creek Inj. Co-op	Wilson K, McVey K, D.G. Hansen, Tr., Fountain A, Fountain B	32-8S-23W 5-9S-23W	--	--	L-KC	3,686	40	6	0	0	0	Yes
18506	--	Cooper	John O. Farmer, Inc.	(-) Acheson	Acheson	14-10S-21W	160	--	L-KC	3,514	5	4	–	–	–	No
12527	No	Cooper	Petroleum, Inc.	(W) Cooper Pilot Flood	Schmahlfeldt	24-10S-21W	160	0	Arb	3,740	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	3,510	6	6	0	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
11721	12	0	0	0	Line	700	14	Prod + Sand	60	40	F	1970	S Gas	1/5	26	--	62,962	459,968	867	8,831	867	8,831	
17598	1	-	-	-	Irreg	500	20	Prod + Pond	--	--	M	1969	---	9/1	30	--	7,000	50,000	560	4,360	--	--	
7526	21	61	0	0	Line	690	10	Prod + Arb	1,500	300	T	1959	S Gas	130/58	28	40	91,250	9,693,388	9,528	856,914	--	--	
18352	15	-	-	-	Irreg	650	335	Prod + Arb	1,600	10	T	1965	Grav	1/3	25	--	359,116	1,537,838	13,369	237,922	3,279	77,129	
17266	1	8	0	0	4-spot	490	20	Prod + Squir	630	14	U	1974	Grav	19/1	--	--	7,200	--	874	--	874	--	*Was Glenn Layton
5495	4	-	-	-	Irreg	400	10	Prod	--	--	T	1962	Grav	9/1	28	--	4,000	--	460	--	--	--	
11109	3	4	0	0	5-spot	650	12	Prod	--	--	U	1965	S Gas	1/3	25	--	12,855	12,855	2,027	13,975	2,027	13,975	
12728	4	-	-	-	---	600	90	Prod + Pond	--	--	M	1948	Grav	9/1	29	--	24,000	--	820	--	--	--	
5012	2	0	0	0	Irreg	150	22	Prod	--	--	U	1970	S Gas	10/1	26	--	16,500	71,300	3,800	--	350	1,560	
17259	2	0	0	0	Irreg	425	5	Prod	--	--	U	1975	S Gas	1/10	28	--	3,600	10,850	585	1,735	--	--	
17387	4	0	0	0	Irreg	150	20	Prod	--	--	U	1974	S Gas	1/9	27	--	29,000	48,250	2,000	4,470	540	1,264	
18459	1	0	0	0	Irreg	175	9	Prod	--	--	U	1976	S Gas	4/1	33	--	1,050	1,050	3,000	3,000	--	--	
15342	11	0	0	0	Irreg	500	21	Prod + Gravel	20	5	M	1970	S Gas	1/0	29	--	82,883	715,381	5,532	60,086	5,532	60,086	
5419	8	0	0	0	5-spot	275	2	Prod + Miss	945	87	T+S	1957	S Gas	1/0	27	--	5,700	498,000	5,351	--	--	--	
	89	73	0	0													707,116	13,098,880	48,773	1,191,293	13,469	162,845	
13915	1	0	0	0	Irreg	--	85	---	--	--	U	--	S Gas	--	36	--	28,050	103,269	12,833	34,476	2,500	7,500	*Was Tidewater Oil Co.
17846	1	-	-	-	Irreg	150	6	Prod	--	--	U	1975	---	10/9	385	--	2,000	4,140	2,268	13,414	--	--	
13217	1	0	0	0	Irreg	0	76	Prod	--	--	U	--	S Gas	--	36	--	24,500	85,338	1,806	10,727	400	2,200	
16501	1	0	0	0	Irreg	0	11	Prod	--	--	U	1972	S Gas	84/28	38	2.5 (Est.)	4,026	56,941	5,522	129,326	--	--	
17166	1	0	0	0	Irreg	0	11	Prod	--	--	U	1975	S Gas	11/18	39	2.5 (Est.)	4,026	5,001	2,846	39,526	--	--	
17366	1	0	0	0	Irreg	0	142	Prod	--	--	U	1974	S Gas	5/1	38	3.5 (Est.)	51,919	74,217	30,741	129,163	1,375	2,875	
15205	1	0	0	0	Irreg	0	13	Prod	--	--	U	1970	S Gas	12/14	38	2.5 (Est.)	4,758	30,534	2,133	62,955	500	3,139	
	7	0	0	0													119,279	359,440	58,149	419,587	4,775	15,714	
9707	4	0	0	0	Peri	405	201	Prod + Dak	1,500	--	T	1962	S Gas	1/1	39	--	264,988	3,917,931	19,161	978,811	19,161	465,739	
14844	1	0	0	0	Irreg	65	150	Prod	--	--	U	1969	Grav	4/1	36	--	54,800	630,990	6,403	93,700	6,000	88,827	
17942	1	0	0	0	Irreg	0	200	Prod + Dak + Arb	830 3,908	430	T	1975	S Gas	1/4	38	--	73,023	133,148	8,079	63,669	2,919	5,759	
15497	5	0	0	0	Irreg	352	287	Prod + Cedar Hills	1,480	256	T	1970	S Gas	29/175	35	--	585,496	4,190,370	18,982	1,067,230	18,982	269,588	
15929	0	0	0	0	Irreg	Vac	228	Prod	--	--	U	1971	S Gas	1/1	31	--	83,165	468,800	4,489	38,152	--	--	*No wat injected; all put in Murfin's Fountain #1
17655	1	0	0	0	Irreg	Vac	249	Prod	--	--	T	1974	Grav + S Gas	1/5	34	--	90,804	236,713	10,272	138,840	10,272	--	
18506	1	-	-	-	Irreg	200	750	Prod	--	--	U	1976	Grav	--	32	--	67,500	67,500	4,300	4,300	0*	--	*Lans oil since started
12527	1	0	0	0	Irreg	Vac	--	Prod	--	--	U	1966	S Gas + Edgewater	2254/ 2834	34.8	8	92,840	970,040	11,357	711,514	11,357	185,902	
7966	1	0	0	0	Irreg	200	586	Prod	--	--	U	1960	Wat	--	35	--	213,890	4,176,041	8,849	--	8,849	157,143	*Was Natural Gas & Oil

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
GRAHAM COUNTY (cont.)																
9110	Yes	Diebolt	Sun Production	(W) Diebolt LKC	Diebolt LKC Unit	16,17,20,21,28, 29-10S-23W	1,920	640	L-KC	3,050	20	22	21	0	3	Yes
14576	--	Elrick	Shenandoah Oil Corp.*	(W) Elrick Unit	Elrick Unit	3,9,10,14, 15-10S-25W	1,640	0	KC	3,800	150	31	9	0	0	Yes
15410	--	Elrick East	Texaco Inc.	(W) East Elrick	J.P. Billinger, H.J. Rome "C", Frank	11-10S-25W	400	--	L-KC	3,750	2.5	5	0	0	0	Yes
16551	--	Emor	Texaco Inc.	(W) D. Spies	Spies	35-9S-25W	80	--	L-KC	3,800	3	2	0	0	0	Yes
10747	--	Evergreen North-west	Sunflower Operating Co.	(W) ---	Evergreen N.W. LKC Unit	8,17-9S-23W	240	0	L-KC	3,703	10	6	1	0	0	Yes
11084 11076	--	Fabricius	Cities Service Oil Co.*	(-) Fabricius L-KC Unit	Fabricius Lansing-Kansas City Unit	19,23,24,25, 26-7S-23W	680	80	L-KC	3,836	10	5	4	0	1	Yes
18387	Yes	Gra-Sher	Kimbark Operating Co.	(W) Gra Sher	Gra Sher Unit	6-10S-25W	640	0	Lans	3,700	220	9	2	-	0	No*
16842 17634	*	High Hill	King Oil Company	(P) High Hill	D. Rush "B", Hobbs Unit, D. Rush "A", G. Rush Estate "AB", G. Rush Estate "C"	17-10S-24W 18,19-10S-24W 20-10S-24W	880	0	L-KC	3,725	250	9	0	1	0	Yes
9991	--	Holley	Cities Service Oil Co.*	(W) Holley Unit	Holley	33-8S-24W	460	20	L-KC	3,957	4	5	0	0	2	Yes
6453	--	Holley	Fell & Wolfe Oil Co.*	(D) Blackburn	Blackburn	33-8S-24W	160	--	KC	3,968	6	2	0	0	0	Yes
8742	--	Holley	Fell & Wolfe Oil Co.*	(W) Holley Pool	Ida Keith	10-9S-24W	160	--	L-KC	3,924	40	4	0	0	0	Yes
10363	--	Holley	Fell & Wolfe Oil Co.*	(D) Clark	Clark	10-9S-24W	160	--	KC	3,960	3-6	1	0	0	0	Yes
11613	--	Holley	Fell & Wolfe Oil Co.*	(-) Holley Pool	G. Keith, Keith "A", A.E. Hildebrand	4-9S-24W	630	--	L-KC	3,775	209	9	0	0	0	Yes
12174	--	Holley	Herndon Drlg. Co.	(-) Keith Waterflood	Keith	9-9S-24W	90	0	KC	3,882	4	3	1	-	-	Yes
9577	--	Holley	Petroleum Management, Inc.	(W) Holley	T.L. Smith et al Wm. L. Bell, R. Keith, A. McKinley, L. Keith, Keith "A", Keith "B", Schemberger "C", A.J. Clark, W.L. Bell, Schemberger, L. Keith "b-c", W.L. Bell, F.E. Watte, R. McKinley, D. Clark "A"	30-8S-24W 31-8S-24W 32-8S-24W 25-8S-25W 36-8S-25W 5-9S-24W 6-9S-24W	2,800	--	Lans	3,950	8	7	13	0	39	Yes
10367	--	Holley Southeast	Cities Service Oil Co.*	(W) Holley Southeast Waterflood	Nickelson	15-9S-24W	160	0	L-KC	3,847	12	1	1	0	0	Yes
15766	--	Hoof	Cities Service Oil Co.	(W) Hoof L-KC Unit	Hoof L-KC Unit	9,16-10S-23W	573	0	L-KC	3,850	16	18	1	0	1	Yes
16528	--	Hoof Northwest	Cities Service Oil Co.	(W) Hoof N.W. L-KC Unit	Hoof N.W. L-KC Unit	31-9S-23W	253	0	L-KC	3,900	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	3,700	220	6	0	0	0	Yes
13981	No	Ironclad	Glenn W. Peel Oil Operator	(D) Desair Lease	Desair	26-9S-22W	160	0	L-KC	3,640	160	2	0	0	0	Yes
13960	No	Jackson Branch	Beren Corp.*	(P) H.H. Stewart	H.H. Stewart	8-9S-23W	120	35	L-KC	3,625	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	3,825	200	2	2	0	0	Yes
18399	--	Knoll North	Koch Exploration Co.	(-) Knoll North (L/KC) Unit	Ploeger, Stevenson, Walz, Dreiling	29-8S-25W 32-8S-25W	--	--	L-KC	3,770	approx. --	7	0	0	1	No*
15310	--	Kohart	Petroleum Management, Inc.	(-) Moore-Kurtz	Moore, Kurtz	27-9S-24W 34-9S-24W	40	10	L-KC	3,906	997	1	-	-	-	No
9379 10386	--	Law Northwest	Burch Exploration, Inc.	(D) ---	Hildebrand "A", Morris	28-9S-23W 29-9S-23W	320	120	L-KC	3,900	180	6	2	0	0	Yes
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) L-KC	Lans-KC	14,23-9S-21W	400	0	L-KC	3,420	30	7	1	0	0	Yes
14977	--	Morel	NCRA	(D) Shaw	Shaw	7-9S-21W	10	0	L-KC	3,641	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	3,600	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	3,600	8	7	0	0	0	Yes
6240 9836	No	Penokee	Barnett Oil, Inc.	(-) Penokee Repressuring System	Lyon, Paxson	2-8S-24W 11-8S-24W	240	200	L-KC	3,790	9	1	-	-	-	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abnd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Injected-water data: Depth, ft.	Injected-water data: Thick., ft.	Injected-water data: Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection: 1976	Water Injection: Cum. 12-31-1976	Total Oil recovered from project Pri. & sec.: 1976	Total Oil recovered from project Pri. & sec.: Cum. 12-31-1976	Oil recovered by enhanced methods: 1976	Oil recovered by enhanced methods: Cum. 12-31-1976	Remarks
9110	4	15	0	9	--	--	520	Prod	--	--	U	1962	S Gas	1/1.9	42	--	759,308	23,898,834	55,741	1,697,128	55,741	1,697,128	
14576	5	9	0	0	Irreg	0	335	Prod	--	--	T	1969	S Gas	9/1	40	3	527,310	13,361,605	116,429	1,896,794	87,470	1,098,560	*Was Empire Drilling Co.
15410	6	0	0	0	5-spot	320	125	Prod + Ced H	1690	190	U	1971	*	42/116	41	2.6	273,629	2,664,376	17,842	239,839	17,842	185,014	*Liquid expansion & S Gas drive.
16551	1	0	0	0	Irreg	Vac	122	Prod	--	--	U	1972	S Gas	45/94	41	--	44,649	203,968	11,845	82,624	--	--	
10747	--	1	0	0	--	0	--	Prod	3703	--	T	1964	S Gas	--	36	--	87,600	--	--	--	--	--	
11084 11076	6	4	0	0	Peri	540	267	Prod + Ced H	1435	--	T	1964	S Gas	4/1	40	--	876,332	7,358,971	16,499	1,394,534	16,499	548,199	*Was Imperial Oil Co.
18387	--	--	--	--	Peri	--	--	Prod	--	--	--	--	S Gas	4/5	40	--	0	0	10,696	1,092,745	0	0	*Have not started water injection yet.
16842 17634	4	0	0	0	Peri	150	147	Prod + Ced H	1678	109	U	1973	S Gas	1/2	37	--	216,540	471,658	49,317	831,169	30,000	58,000	*Partially unitized
9991	4	0	0	2	Irreg	870	124	Prod + Ced H	1800	--	T	1963	S Gas	1/1	37	--	224,830	2,527,972	9,487	547,115	9,487	228,330	*Was Imperial Oil Co.
6453	1	0	0	0	--	300	220	Prod	--	--	--	1958	--	--	33	--	--	--	2,008	--	--	--	*Was Sun Oil Co.
8742	1	0	0	0	--	500-600	290	Prod + Wat Sd	100	--	F	1963	--	--	38.5	--	122,154	1,201,991	2,395	9,763	--	--	*Was NCRA.
10363	1	0	0	0	Irreg	450	325	Prod	--	--	--	1965	--	--	31.3	--	88,945	--	2,625	--	--	--	*Was Sun Oil Co.
11613	4	0	0	0	Irreg	300	1,250	Prod + Wat Sd	95	--	F	1965	--	--	41	--	224,316	3,378,447	4,770	--	--	--	*Was Hildebrand-NCRA.
12174	--	--	--	--	5-spot	0	150	Sh Sd	40	--	F	1966	Wat	68/56	40	--	54,750	600,052	2,312	--	2,150	62,369	
9577	4	9	0	0	Irreg	325	87	Prod + Ced H	1800	--	U	1963	S Gas	6727/8277	40	--	181,725	21,755,731	10,249	1,967,488	10,249	1,967,488	
10367	2	0	0	2	Irreg	800	131	Prod + Ced H	1400	--	T	1964	S Gas	14/63	37	--	117,251	1,353,161	4,144	322,124	4,144	87,990	*Was Imperial Oil Co.
15766	8	0	0	0	Peri	540	304	Prod + Ced H	1556	180	T	1970	S Gas	102/453	35	--	730,856	5,656,472	73,941	3,484,795	73,941	548,553	
16528	6	0	0	0	Peri	497	284	Prod + Dak	1662	78	T	1972	S Gas	26/38	38	--	543,471	2,190,059	52,235	1,016,983	52,235	230,029	
13102	3	0	0	0	Irreg	Vac	321	Prod + Dak	1322	88	T	1966	S Gas	4/1	39	--	352,360	1,590,878	35,034	384,569	--	--	
13981	1	0	0	0	Irreg	Grav	35	Prod	--	--	U	1968	Wat	30/16	38	--	25,550	108,284	5,408	59,685	5,408	59,685	
13960	1	0	0	0	Peri	Vac	251	Prod	--	--	U	1968	S Gas	8.5/91.5	33	--	91,866	2,819,176	153	60,031	153	20,453	*Was Amerada.
16383	1	0	0	0	Irreg	Vac	267	Prod	--	--	U	1972	S Gas	1/1	38	--	97,557	400,762	15,464	198,458	--	--	
18399	0	0	0	0	--	--	--	--	--	--	--	--	--	1/1	40.7	--	0	--	25,173	694,351	0	--	*No injection yet.
15310	0	1	0	0	Irreg	--	--	--	--	--	--	1970	S Gas	All	--	--	0	0	621	3,842	0	0	
9379 10386	1	0	0	0	Irreg	300	409	Dak	1600	210	U	1962	S Gas	--	36	--	149,554	2,253,135	14,928	298,198	149,554	2,253,135	
9536	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--*	*Currently inactive.
14298	1	1	0	0	Irreg	1397	37	Prod + Arb	3750	40	T	1968	S Gas	--	--	--	505,164	3,349,216	19,223	285,999	19,223	215,683	
14977	1	0	0	0	Irreg	Vac	73	Prod	--	--	T	1969	S Gas	All	32.4*	--	26,472	139,332	1,594	19,816	1,594	16,869	*At 60.
11191	3	0	0	0	Peri	800	81	Prod + Ced H	1432	--	T	1966	S Gas	9.5/47.5	38	--	152,920	1,646,005	6,990	450,665	6,990	160,758	
13357	2	0	0	0	Irreg	Vac	1417	Prod	--	--	U	1966	S Gas	--	38.5	--	517,205	2,339,874	10,816	1,146,260	10,816	162,924	
6240 9836	1	1	--	--	Irreg	350	50	Prod	--	--	U	1961	S Gas	4/1	37	--	18,300	1,782,800	1,161	96,277	1,161	49,548	

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
GRAHAM COUNTY (concl.)																
14964	Yes	Redline Northwest	Petroleum, Inc.	(W) Redline NW L-KC Unit	Ninemire (Kaiser-Fran), Ninemire, Lacerte, Lacerte "D", Lacerte "A", Blakley	24-9S-23W 25-9S-23W 30-9S-22W	960	0	L-KC	3,800	15	6	0	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	3,650	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	3,800	60	3	0	0	0	Yes
17324	No	Schnebly	Thornton E. Anderson	(P) Jones	Jones	9-8S-22W	40	40	L-KC	3,507	3	1	0	0	0	Yes
9397	No	Shiloh	Willie E. Schultz	(D) Minium	Minium	1,2-9S-25W	200	150	L-KC	3,800	60	2	0	0	0	Yes
7334	No	Van	Koch Exploration Company	(W) Sandzen	Sandzen	14-9S-22W	70	--	L-KC	3,490	20	3	0	0	0	No
10328	--	Van	NCRA	(W) Van Loenen	Van Loenen	14-9S-22W	50	10	Lans	3,497	15	4	0	0	1*	Yes
10172	Yes	Vesper	Petroleum, Inc.	(W) Vesper Unit	Sutor "E", Rice, Lacerte "C", Manaugh, Vesper	31-9S-22W 36-9S-23W	920	80	L-KC	3,460	22	12	7	0	0	Yes
GRAHAM COUNTY TOTALS (Reported)							~~18177~~	~~1955~~				~~270~~	~~73~~	I	~~49~~	
GRAHAM-SHERIDAN COUNTIES																
15006	No	Lindenman	Okmar Oil Company	(W) Lindenman Co-op	Lindenman, Ward, Vejl, Horton	31-6S-25W 36-6S-26W	130	0	L-KC	3,830	5	4	0	0	0	Yes
GRAHAM-TREGO COUNTIES																
6808	--	Diebolt	Cities Service Oil Co.*	(W) N.W. Wakeeney Coop	Diebolt, Osborn, Walker and Surmeier, Osborn, Erickson	33-10S-23W 4-11S-23W 5-11S-23W 9-11S-23W	290	160	L-KC	3,588	4	7	0	0	14	Yes
GREENWOOD COUNTY																
8384	--	Atyeo-Pixlee	R. J. Wixson	(D) York-Pixlee	Pixlee "B"	5,8-22S-10E	240	--	Bartl	2,240	30	4	-	-	-	---
17019	--	Beaumont	Adair Oil Company	(P) Fowler	Fowler, Lewis	24-27S-8E	600	40	Miss	2,426	16	3	0	0	0	Yes
17096	No	Beaumont	Stewart Bros.	(D) W. W. Edgar	W. W. Edgar, Leroy Edgar	2-28S-8E 11-28S-8E	250	0	Miss	2,490	14	4	0	0	0	Yes
10680	--	Beaumont	K.T. Wiedemann Trust	(D) Edgar	Edgar #4	2-28S-8E	50	0	Miss	2,480	24	4	0	0	0	Yes
12117	--	Beaumont	K.T. Wiedemann Trust	(W) Temple-Lewis	Lewis A, Lewis C, Temple	25-27S-8E	600	--	Miss	2,431	--	19	0	0	0	Yes
17590																
8755	--	Browning	American Petrofina Co. of Texas*	(W) Browning "A"	Browning "A"	19-22S-10E	120	0	Bartl	2,550	28	6	2	0	0	Yes
14909	--	Browning	American Petrofina Co. of Texas*	(W) Browning "C"	Browning "C"	24-22S-9E	30	0	Bartl	2,550	28	1	2	0	0	Yes
8109	Yes	Burkett	J. & T. Cooper*	(W) Bratton-Mansfield	Bratton-Mansfield	13-23S-10E	200	200	Bartl	2,300	20	10	8	0	0	Yes
2072	No	DeMalorie-Souder	R. R. Abderhalden*	(W) DeMalorie-Souder Unit	Central Unit, East Unit, West Unit	1,12-22S-10E 2,12-22S-10E 11-22S-10E	660	0	Bartl	2,100	55	18	1	0	0	Yes
3123																
3423																
9297	No	DeMalorie-Souder	R. R. Abderhalden*	(W) DeMalorie-Souder (Harris Unit)	Warrenburg, Kipfer "A", "B", "C", "D"	12-22S-10E 13-22S-10E	200	0	Bartl	2,150	25	6	1	0	0	Yes
3103	No	DeMalorie-Souder	L. B. Campbell	(D) Clopton Lse.	---	18-22S-11E	160	100	Bartl	2,100	30	2	-	-	-	No
3103	No	DeMalorie-Souder	L. B. Campbell	(D) Derbyshire Lse.	Derbyshire	13-22S-10E	85	20	Bartl	2,100	30	4	-	-	-	Yes
13779	--	DeMalorie-Souder	H. G. Forbes	(D) Clopton	Clopton	13-22S-10E	40	0	Bartl	2,100	20	2	0	0	0	Yes
2309	--	DeMalorie-Souder	R. & G. Oil Company	(-) Harris	Harris	19-22S-11E	--	--	Bartl	2,060	40	2	0	0	0	---
3124	--	DeMalorie-Souder	R. & G. Oil Company	(-) DeMalorie-Sowder	Clopton	18-22S-11E	160	--	Bartl	2,100	40	3	0	0	2*	
5619	--	Dunaway	Ale Oil Company	(W) ---	Sauder Heirs	3-23S-13E	480	0	Miss	1,850	15	12	0	0	0	Yes
2252	--	Dunaway	BBL Oil Producers	(W) ---	Miller, Norris	27-22S-13E	60	--	Burg	1,800	10	3	-	-	-	Yes
9459	--	Dunaway	Herbert H. Hart	(P) ---	Koenig, Hessler	27-22S-13E 34-22S-13E	220	--	Miss lm	1,850	20	12	0	2	0	Yes
10543	Yes	Dunaway	Larry Moore Ranch, Inc.	(W) R. W. Young	R. W. Young	22-22S-13E	20	30	Burg	1,800+	12	2	-	0	1	Yes
5312	--	Dunlap	Tom Grooms	(-) ---	Dunlap	9-25S-9E	160	0	Bartl	2,000	10	-	-	-	-	Yes
2492	No	Fankhauser	George A. Barnard	(P) Swanson	Swanson	10-22S-12E	160	120	Bartl	1,800	15	2	0	0	0	Yes
15037																

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
14964	3	1	0	0	Line	Vac	287	Prod + Dak + Chey	1,200 800	100	M	1969	S Gas	59/64	41.1	4	314,129	2,286,379	9,131	444,853	9,131	132,957	
8553	4	-	-	-	Peri	200	415	Prod + Cedar Hills	1,850	--	T	1961	---	5997/ 8865	41	--	565,945	7,605,171	8,193	415,516	8,193	89,282	
9396	1	0	0	0	Irreg	150	350	Prod	--	--	U	1961	S Gas	1/13	40	--	146,000	1,920,745	4,380	357,100	4,380	357,100	
17324	1	0	0	0	Irreg	0	5	Prod	--	--	U	1974	S Gas	1/1	40	--	1,600	3,500	1,480	43,899	--	--	
9397	1	0	0	0	Irreg	0	800	Prod	--	--	U	1962	S Gas	3/1	38	--	292,000	2,008,774	3,600	137,221	3,600	137,221	
7334	0	1	0	0	Irreg	--	0	---	--	--	-	1959	Gas Exp	1/0.5	31.2	--	0	1,188,753	4,309	552,594	4,309	102,215	
10328	1	0	0	1	Irreg	Vac	297	Prod	--	--	T	1963	S Gas	1/0	36.6†	--	108,330	2,604,532	4,759	209,031	4,759	114,988	*Converted †@60
10172	6	4	0	0	Line	97	477	Prod + Chey + Dak	800 1,200	100	M	1963	S Gas	2850/ 1568	41.7	4	1,045,241	13,066,108	23,774	1,694,212	23,774	621,281	
	104	47	0	14													11,010,365	148,528,254	730,618	25,231,894	690,343	12,378,717	
15006	1	0	0	0	Peri	Vac	538	Prod	--	--	U	1969	S Gas	120/35	36	--	196,908	1,423,626	40,021	788,608	40,021	213,644	
6808	2	2	0	5	Irreg	120	609	Prod + Cedar Hills	1,500	--	T	1958	S Gas	--	40	--	416,542	8,245,868	7,689	2,087,305	7,689	750,428	*Was Imperial Oil Co. (Purchased as W.F. 4/1/1965)
8384	-	-	-	-	---	--	--	Prod	--	--	T	1960	Grav	--	40	--	--	--	682	--	--	--	
17019	1	0	0	0	---	Grav	--	Prod	--	--	U	1973	Wat	--	35	--	1,600	6,590	5,315	18,020	--	--	
17096	1	0	0	0	Line	0	82	Prod	--	--	U	--	Gas Exp	27/73	37	--	29,930	97,586	8,126	71,779	--	--	
10680	1	0	0	0	Irreg	0	24	Prod	--	--	T	1963	Grav	--	35	--	8,441	88,290	6,091	268,859	--	--	
12117	1	0	0	0	Irreg	0	248	Prod	--	--	T	1974	Wat	--	33	--	90,880	221,740	11,851	1,327,141	--	--	
17590 8755	2	0	0	0	Irreg	450	354	Prod + Doug	1,421	50	U	1965	S Gas	1/5	--	--	258,550	2,265,946	6,460	581,343	6,460	109,397	*Was El Dorado Refg. Co.
14909	1	1	0	0	Peri	400	141	Prod + Doug	1,421	50	U	1966	S Gas	1/1	40	--	51,580	1,091,822	1,421	252,173	1,421	79,825	*Was El Dorado Refg Co.
8109	9	-	-	-	Irreg	1,000	200	Prod + Doug	1,100	100	T	--	S Gas	9/1	40	--	360,000	--	8,501	--	--	--	*Was R. R. Riss
2072 3123 3423	6	6	0	0	Irreg	600	80	Prod + Arb	2,730	700	T	1949	S Gas	--	40	2.8	175,200	37,852,951	6,144	3,311,474	6,144	3,311,474	*Was Richard Soule
9297	7	0	0	0	5-spot	500	85	Prod + Arb	2,730	700	T	1962	S Gas	--	40	4.1	219,000	9,600,427	2,897	466,788	2,897	466,788	*Was Richard Soule
3103	1	-	-	-	Irreg	100	300	Prod*	--	--	T	--	---	--	40	--	100,000	--	2,090	--	--	--	*Return wat only wat used
3103	2	-	-	-	Irreg	100	300	Prod	--	--	T	1952	Wat	--	41	--	63,875	2,104,625	1,560	153,567	--	--	
13779	1	0	0	0	5-spot	50	20	Prod	--	--	U	1965	Grav	3/40	40	--	7,000	17,000	700	7,300	--	--	
2309	-	0	0	0	Irreg	0	0	---	--	--	-	--	---	--	39	--	0	--	2,531	--	--	--	
3124	1	0	0	7*	---	500	200	---	--	--	-	--	---	--	41	--	73,200	--	2,391	--	--	--	*Temp. Abd.
5619	3	0	0	0	Irreg	300	50	Prod + Doug	750	--	T	1957	Grav + Wat	1/1	34	--	48,000	961,400	12,000	116,700	3,000	--	
2252	1	-	-	-	Irreg	200	60	Prod	--	--	T	--	Grav	--	36	--	--	--	9,290	--	--	--	
9459	4	0	0	0	Irreg	250	250	Prod	--	--	U	1962	Grav	3/2	38 29	--	91,250	5,604,575	17,740	370,584	--	--	
10543	1	3	0	3	Irreg	225	300	Prod*	--	--	U	1963	Grav	4/1	37	--	109,500	2,098,750	4,121	213,385	4,121	213,385	*Returned produced water
5312	-	-	-	-	Line	50	30	Prod	--	--	U	--	Grav	2/98	39	--	--	--	--	--	--	--	
2492 15037	1	0	0	0	Irreg	600	200	Prod + Doug	750	20	T	1969	S Gas	--	39	--	73,000	791,312	2,555	59,385	2,555	59,385	

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S – T – R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
GREENWOOD COUNTY (cont.)																
5200	--	Fankhauser	George A. Barnard	(P) Bales	Bales	10-22S-12E	80	10	Bartl	1,750	25	2	0	0	1	Yes
15638	No	Fankhauser	George A. Barnard	(P) Norton	Norton	22-22S-12E	40	40	Bartl	1,706	30	1	0	0	0	Yes
5968	No	Fankhauser	H. L. Ellis	(-) Kipfer B Lse.	Kipfer B	5-22S-12E	160	100	Bartl	1,894	17	3	4	0	0	Yes
11800	No	Fankhauser	H. L. Ellis*	(W) Ames Lse.	Ames	5-22S-12E	80	--	Bartl	1,896	27	0	1	0	1	No†
7362	--	Fankhauser	Jackman & Jackman	(-) Fankhauser	Fankhauser	23-22S-12E	160	80	Bartl	1,660	20	4	1	-	-	Yes
883	--	Fankhauser	R & G Oil Company	(-) ---	Fankhauser	4-22S-12E	80	400	Bartl	1,900	25	4	1	0	0	Yes
2065																
6079	--	Gaffney	Greenwood Petr. & Ranch Mgmt., Inc.	(P) Kipfer	---	6-24S-11E	160	--	Bartl Up. (Wiggins)	1,800	20	10	0	0	0	Yes
17687	--	Gaffney	H.G.Forbes	(D) Lindamood	Lindamood	18-24S-11E	160	0	Peru	1,680	10	1	0	1	0	Yes
16051	--	Gaffney	George A. Sauder	(P) Smith Unit	Smith & Smith A & C, Barnes	7-24S-11E 12-24S-10E	400	0	Squir	1,850	12	9	0	0	0	Yes
3340	--	Gaffney	Roy A. Wilson*	(D) Geo. Gaffney Lse.	Gaffney	7-24S-11E	240	--	Cattle	1,870	17	5	0	0	0	Yes
4711	No	Hamilton	George Sheehan Interests	(W) Ellis Unit	---	26,27-23S-11E	640	--	Bartl	1,900	20	39	-	-	-	Yes
16546	--	Lamont	R & G Oil Company	(-) Lamont Unit D.	Peter Fankhauser	23-22S-12E	--	--	Bartl	1,670	50	3	0	0	0	---
2676	No	Quincy	Bird & Hanley	(W) Quincy	Dinius, King, Gilroy, Shaw, Hollister, Johnson, Hoggatt	31-24S-13E 6-25S-13E 5-25S-13E 8-25S-13E 9-25S-13E	1,120	0	Bartl	1,500	40	26	20	12	3	Yes
4497																
12234																
18220	--	Reece	H. G. Forbes	(D) Life Unit	---	13-26S-9E	640	0	Miss	2,100	10	6	0	2	0	Yes
3565	No	Sallyards	R. R. Abderhalden	(W) Blankenship Sallyards Unit	F. H. Hull "A" & "B", A. L. Stevenson	35-25S-8E 2-26S-8E 2,11-26S-8E	520	0	Bartl	2,425	39	20	2	0	0	Yes
3482	No	Sallyards	Beard, English & Martin*	(W) Bryden-Ladd	Bryden Acct 1 & 2, L. Ladd, Moss, Hoffman,†	36-25S-8E 30-25S-9E	600	300	Bartl	2,470	50	16	0	2	0	Yes
5052	No	Sallyards	Jackson Bros.	(D) Ladd "C"	Ladd	26-25S-8E 35-25S-8E	320	40	Bartl	2,450-2,465	15	4	0	0	0	Yes
12717	No	Sallyards	Hank Martell Oil Company	(P) Bates	Bates	30-25S-9E	64	0	Bartl	--	--	2	-	0	0	Yes
11096	No	Sallyards	Nadel and Gussman	(W) Jackson Heirs	Jackson Heirs	23,25-25S-8E	80	20	Bartl	2,400	15	3	8	0	0	Yes
14001																
18193	--	Sallyards	R. K. Teichgraeber	(P) Hendrickson	---	17,18-25S-8E	240	0	Bartl	2,289	47	3	1	1	1	Yes
11806	--	Virgil North	C. R. McClelland	(-) Schindler	Schindler	23-23S-13E	240	0	Arb	1,680 1,780 2,200	20 10 5	6	0	0	0	Yes
1264	No	Scott	The Maurice L. Brown Co.*	(W) Scott	---	24,25-23S-8E 19,30-23S-9E	378	--	Bartl	2,600	40	11	0	0	1	No
12627	No	Seeley-Wick	Theodora M. Barnard	(D) Schaeffer-Jones	---	9-23S-11E	60	20	Bartl	1,900	15	3	0	0	0	Yes
17648	No	Seeley-Wick	George A. Barnard	(D) Rickabaugh	Rickabaugh	4-23S-11E	80	40	Bartl	1,940	9	2	0	0	0	Yes
10083	No	Seeley-Wick	H. L. Ellis	(W) Roy & Pearl Kipfer Lse.	Roy & Pearl Kipfer	12-22S-11E	40	30	Bartl	1,770	41	2	0	0	0	Yes
3342	--	Seeley-Wick	H. G. Forbes	(D) Freeburg	---	22-22S-11E	80	0	Bartl	1,892	21	2	0	0	0	Yes
17131	--	Seeley-Wick	Glacier Petr. Co., Inc.	(P) Jones	Jones	6-22S-12E	20	--	Bartl	1,884	10	2	-	-	-	No*
16739	No	Seeley-Wick	Warren G. Godfrey*	(W) Lyke Lease	Lyke	8-24S-12E	80	0	Bartl	1,700	20	4	0	1	0	Yes
16338	--	Seeley-Wick	W. F. Harmon	(-) Harmon	Harmon	31-23S-12E	160	--	KC	1,853	4	3	0	0	0	Yes
13360	--	Seeley-Wick	Cloide J. Hensley	(P) Hensley Lse.	Hensley	6-22S-12E	30	--	Bartl	1,775	30	3	1	0	0	Yes
2664	No	Virgil	Howard Johnson*	(-) Johnson	Johnson	16-24S-12E	160	0	Bartl	1,600	15	-	-	-	-	No†
734	Yes	Seeley-Wick	The J's Oil Company	(P) Seeley-Wick	---	5,6-23S-11E	660	--	Bartl	1,925	50	3	0	0	0	Yes
8952	No	Seeley-Wick	Hank Martell Oil Company	(P) Humes	Humes	29,30-22S-11E	240	0	Bartl	2,100	15	1	-	0	0	---
12172	--	Seeley-Wick	E. C. Murphy	(-) Gardner & Winkler	Gardner, Winkler	1-22S-11E	160	--	Bartl	1,900	16	2	1	0	0	Yes
11538	--	Seeley-Wick	George Sage	(W) ---	Ulrich	7-24S-12E	--	--	Cattle	1,600	10	4	0	0	0	Yes
11539	--	Seeley-Wick	George Sage	(W) ---	Fry	7-24S-12E	--	--	Cattle	1,588	10	4	0	0	0	Yes
10954	--	Seeley-Wick	George E. Sauder	(W) ---	Wilson-Lewis	8,9-24S-12E	120	20	Bartl	1,700	18	8	-	-	-	Yes
11213	--	Seeley-Wick	George E. Sauder	(W) Thornton-Huber-Curtis	Thornton-Huber-Curtis	7,8-22S-12E	70	20	Bartl	1,720	20	5	-	-	-	Yes
5095	--	Seeley-Wick	Schankie Well Serv., Inc.*	(W) B.E.C. Unit	C.G. Beal, Tom Edwards, Carson, D.A. Edwards	28,32-23S-11E 29-23S-11E 33-23S-11E	490	200	Bartl	1,950	12	6	-	1	-	Yes
14908																
11615	--	Seeley-Wick	K. E. Snyder	(D) Shaefer Flood Project	Shaefer	27-23S-11E	40	0	Bartl	1,920	22	9	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head pres. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
5200	1	0	0	0	Irreg	300	150	Prod	--	--	T	1975	S Gas	--	39	--	9,000	18,000	400	460	400	460	
15638	1	1	0	0	Irreg	100	75	Prod	--	--	T	1975	S Gas	--	38	--	9,150	18,300	400	430	400	430	
5968	1	0	0	0	Irreg	250	85	Prod	--	--	T	1958	Wat	3/7	39	--	30,750	--	993	--	300	--	
11800	0	1	0	0	Irreg	--	--	---	--	--	-	--	---	--	--	--	0	--	0	--	--	--	*Was Harold G. Forbes †Lse. has been shut down
7362	2	2	0	0	Irreg	200	220	Prod + Bartl	1,600	20	T	--	Grav	--	38	--	80,520	--	2,504	--	2,504	--	
883	1	0	0	0	5-spot	200	230	Prod	--	--	U	--	Grav	--	40	--	0	--	1,790	--	--	--	
2065 5079	7	0	0	Peri		*	350	Prod + Doug	900	100	T	1957	Grav	--	40	--	180,000	3,630,000	7,092	458,925	7,092	--	*300MCF
17687	1	0	0	0	Irreg	Vac	1,000	Prod	--	--	U	1973	Grav	1/10	30	--	500	8,000	75	440	40	440	
16051	4	0	0	0	Irreg	50	50	Prod + Doug	950	100	T	1971	Grav	1/1	39	--	73,000	163,000	2,930	83,457	300	600	*Was Dimick & Dimick
3340	-	0	0	0	Irreg	Grav	--	Prod	--	--	T	--	Grav	--	39	--	91,000 Est.	--	4,509	--	--	--	*Was Sinclair Oil & Gas
4711	23	-	-	-	5-spot	1,000	185	Prod	--	--	T	1959	Wat	--	40	--	18,375	--	16,357	--	16,357	--	
16546	1	0	0	0	Irreg	50	175	---	--	--	-	--	Grav	--	40	--	64,050	--	1,764	--	--	--	
2676 4497 12234	7	7	0	1	Irreg	700	103	Prod	--	--	T	1950	Gas Exp	1/0	40	5cp	264,215	9,278,909	37,161	573,767	37,161	573,767	
18220	1	0	0	0	4-spot	100	100	Prod	--	--	U	1975	Grav	1/5	36	--	18,000	18,000	1,800	20,000	500	500	
3565	7	4	0	0	Irreg	700	110	Prod + Doug	1,400	60	T	1953	S Gas	2/1	37	--	281,000	27,964,744	10,255	3,153,420	10,255	3,153,420	
3482	4	0	0	0	5-spot	750	1,500	Prod + Doug	1,290	--	T	1952	S Gas	--	40	--	--	--	22,006	142,459	12,000 Est.	--	*Was Marathon Oil Co. †Bryden Ac. 1&3,31-25S-9E
5052	1	0	0	0	Peri	0	2	Prod	--	--	U	1958	S Gas	5/1	39	--	750	--	1,519	--	721	--	
12717	1	0	0	0	Irreg	800	200	Prod	--	--	U	1966	S Gas	3/1	40	--	73,000	613,200	1,691	--	--	--	
11096 14001	2	4	0	0	Irreg	1,200	16	Prod + Dak	1,400	80	T	1964	S Gas	1/0	39	--	11,356	1,008,456	2,381	--	2,381	48,901	
18193	1	-	0	-	4-spot	0	90	Prod	--	--	U	1976	S Gas	1/1	39	--	27,540	27,540	6,991	6,991	--	--	
11806	1	0	0	0	---	190	520	Prod	--	--	T	--	Grav	15/85	36	--	190,320	--	8,851	--	--	--	
1264	1	0	0	4	5-spot	0	192	Prod	--	--	T	1975	Limited Wat	--	42	4.5	5,175	32,828,524	1,247	1,337,175	1,247	1,337,175	*Sold to C. S. Ritchie
12627	1	1	0	0	Irreg	600	300	Prod	--	--	U	--	---	--	40	--	100,000	1,000,000	2,700	30,000	2,000	30,000	
17648	1	0	0	0	Irreg	0	75	Prod	--	--	T	1974	Wat	--	40	--	4,500	13,500	2,400	7,053	2,400	7,053	
10083	1	0	0	0	Irreg	300	75	Prod	--	--	T	1962	Wat	4/1	38	--	26,250	--	1,192	--	500	--	
3342	1	0	0	0	4-spot	100	75	Prod	--	--	U	1965	Grav	1/20	40	--	18,000	218,000	1,800	21,800	800	10,800	
17131	1	-	-	-	Irreg	0	32	Prod	--	--	U	--	Grav	--	37	--	9,920	--	--	--	--	--	*Trouble with inj. well.
16739	2	0	0	0	5-spot	350	150	Prod	--	--	T	--	---	--	41	--	292,000	--	4,371	--	--	--	*Was Glenn Supply Co.
16338	1	0	-	0	Irreg	100	100	Prod	--	--	T	1970	---	4/100	38	--	--	--	--	--	--	--	
13360	1	-	0	-	Irreg	100	20	Prod	--	--	U	1968	Grav	10/1	40	--	7,000	--	930	--	--	--	
2664	-	-	-	-	Irreg	--	--	Prod + Doug	650	30	T	--	---	--	39	--	0	--	0	--	0	--	*Was George Barnard †Lack of water supply
734	2	2	0	0	5-spot	500	750	Prod	--	--	U	--	---	2/98	39	--	180,000	--	3,000	--	3,000	--	
8952	-	-	-	-	Irreg	0	20	Prod + Doug	1,200	100	-	1961	---	7/3	36	--	7,300	244,510	319	--	--	--	
12172	2	1	0	0	Irreg	Vac	250	Prod + Bartl	1,900	16	T	--	---	--	39	--	91,500	--	1,525	--	1,525	--	
11538	1	-	-	-	Irreg	150	200	Prod	--	--	U	1965	---	--	--	--	73,000	--	2,920	--	--	--	
11539	1	0	0	0	Irreg	120	40	Prod	--	--	U	1964	---	--	--	--	14,600	--	2,190	--	--	--	
10954	5	-	-	-	Irreg	300	750	Prod + Doug	600	100	T	1951	Grav	1/4	41	--	275,000	3,185,000	6,140	132,170	6,140	132,170	
11213	2	-	-	-	Irreg	400	250	Prod + Doug	600	100	T	1959	Grav	1/9	38		92,000	1,265,000	2,940	197,870	2,940	197,870	
5095 14908	3	-	0	-	Irreg	600	330	Prod + Doug	850	75	T	1959	Wat	1/1	38	--	104,000	--	4,854	--	940	--	*Was Letha Dimick
11615	2	0	0	0	5-spot	0	40	Prod + Doug	1,090	80	U	1972	S Gas	55/110	41	--	14,600	254,950	7,769	368,938	7,769	31,073	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
GREENWOOD COUNTY (cont.)																
14151	--	Seeley-Wick	R. K. Teichgraeber	(D) Greenwood	Greenwood	6-23S-11E	240	0	Bartl	2,100	12	4	0	0	0	Yes
1362	--	Seeley-Wick	Tesoro Petroleum Corp.	(W) Clopton	Clopton	8-23S-11E	320	--	Bartl	1,750	15	3	4	0	0	Yes
5552	--	Seeley-Wick	Tesoro Petroleum Corp.	(W) Hamilton	F. Nisbet, Schultz, W. Nisbet, Ratcliff, Smith	31-23S-12E 6-24S-12E	560	400	Bartl	1,800	15	21	2	0	0	Yes
11091																
10368	--	Seeley-Wick	White & Ellis Drlg., Inc.	(W) Kipfer	Kipfer	1,12-22S-11E	320	0	Bartl	1,760	17	9	0	0	0	Yes
17991	--	Seeley-Wick	E. L. Williams*	(D) Galbraith	Galbraith	31-22S-11E	160	160	Bartl	1,971	26	1	-	0	-	Yes
18599	--	Seeley-Wick	E. L. Williams*	(D) Greenwood	Greenwood	21-22S-11E	80	80	Cattle	1,926	4	1	-	0	-	Yes
9902	No	Severy	Wilbur Craig*	(D) Wingrave	Wingrave	16-28S-11E	80	0	KC	1,164	11	2	5	0	-	No†
2737	No	Teeter-Scott	The Maurice L. Brown Co.	(W) Morris	---	20,21-23S-9E	320	320	Bartl	2,500	40	12	1	0	0	Yes
10430	--	Teeter-Scott	Glacier Petroleum Co., Inc.	(P) Noller "A"	Noller "A"	9,10-23S-9E	25	--	Bartl	2,450	35	6	-	-	-	Yes
14306	--	Teeter-Scott	Glacier Petroleum Co., Inc.	(P) Noller	Noller	3-23S-9E	10	--	Bartl	2,430	35	1	1	-	-	Yes
14901	--	Teeter-Scott	Glacier Petroleum Co., Inc.	(P) Hartley B	Hartley B	2-23S-9E	60	--	Bartl	2,450	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	2,410	45	8	0	0	0	Yes
10170	No	Teeter-Scott	Richard A. Soule*	(P) Green A	Green A	2,11-23S-9E	360	--	Bartl	2,333	37	4	5	0	0	Yes
10170	No	Teeter-Scott	The Maurice L. Brown Co.*	(P) Green "A" Unit	Green "A"	2,11-23S-9E	360	0	Bartl	2,333	37	5	4	0	0	Yes
12236	No	Teichgraeber	King Oil Company	(P) Spencer Lse.	Spencer	18-25S-9E	80	0	Bartl	2,375	23	5	0	0	0	Yes
11737	No	Teichgraeber	Nadel and Gussman	(W) Welsh-Birkett	Birkett, Welsh, Welsh	12-25S-8E 13-25S-8E 14-25S-8E	300	0	Bartl	2,350	15	47	4	0	-	Yes
13198	No	Teichgraeber	Nadel and Gussman	(W) Spencer	Spencer	18-25S-9E	40	0	Bartl	2,400	15	3	1	0	0	Yes
2226	Yes	Thrall-Aagard	The Maurice L. Brown Co.	(W) Thrall-McKee Consolidated	Louisa Thrall, Ernestine Thrall, Thrall McKee Consolidated	29-23S-10E 28,29,32, 33-23S-10E	640	560	Bartl	2,300	31	1	0	0	0	Yes
2743	Yes	Thrall-Aagard	The Maurice L. Brown Co.	(W) Cartwright	---	36-23S-9E 1-24S-9E*	325	--	Bartl	2,200	35	8	4	0	2	Yes
10734	No	Thrall-Aagard	The Maurice L. Brown Co.	(W) Moore-Holverson	Moore, Aagard, Hill, Holverson	23-24S-9E 25,26-24S-9E 26-24S-9E	275	0	Bartl	2,120	20	6	0	0	8	No
15438	Yes	Thrall-Aagard	The Maurice L. Brown Co.	(W) George I. Miller	George I. Miller	28-23S-10E	40	0	Bartl	2,385	25	4	0	1	0	Yes
14342	--	Thrall-Aagard	J & T Cooper*	(-) Zimmerman	Zimmerman	13-24S-9E	50	0	Bartl	2,350	15	4	0	1	0	Yes
16865*	--	Thrall-Aagard	Glacier Petroleum Co., Inc.	(-) Eide-Hill	Eide, Hill	26,27-24S-9E	--	--	Bartl	--	--	-	-	-	-	---
17510	--	Thrall-Aagard	Glacier Petroleum Co., Inc.	(P) Bratton	Bratton	14-24S-9E	10	--	Bartl	2,110	91	2	1	-	-	Yes
13474	No	Thrall-Aagard	Kenneth C. McKee*	(D) Boone-Moore	Moore, Boone	24-24S-9E 25-24S-9E	160	--	Bartl	2,160	13	3	0	0	0	Yes
1908	No	Thrall-Aagard	Richard A. Soule*	(W) J.W. Martindell	J. W. Martindell	31-23S-10E	640	--	Bartl	2,300	50	1	1	1	-	No†
1908	Yes	Thrall-Aagard	The Maurice L. Brown Co.*	(W) J.W. Martindell	J. W. Martindell	31-23S-10E	--	--	Bartl	2,300	50	1	0	0	0	No†
7558	Yes	Virgil	R. R. Abderhalden*	(W) West Virgil Unit	Geist, Sullivan & Wayham	13-24S-12E 14-24S-12E	539	0	Miss	1,730	70	33	6	0	0	Yes
9922	--	Virgil	Brunson-Spines, Inc.	(W) Johnson	Johnson	23-24S-12E	450	0	Miss	1,700	15	14	5	0	0	Yes
192	--	Virgil	French & Winterscheid, Inc.	(P) Hout-Meyers	Meyers, Hout	10-24S-12E 11-24S-12E	50	70	Miss lm	1,700	5	3	0	0	0	Yes
221	--	Virgil	French & Winterscheid, Inc.	(P) Shadel	Shadel	15-22S-13E	120	60	Miss lm	1,800	6	6	0	0	0	Yes
3259	--	Virgil	French & Winterscheid, Inc.	(P) L. Young	L. Young	10-23S-13E	40	40	Miss lm	1,800	6	4	0	0	0	Yes
3915	--	Virgil	French & Winterscheid, Inc.	(P) Lovett & Shambaugh	Lovett, Shambaugh	22-23S-13E	100	--	Miss lm	1,700	6	7	0	0	0	Yes
12482	--	Virgil	French & Winterscheid, Inc.	(P) Dame	Dame	12-24S-12E	80	40	Miss lm	1,700	6	8	0	0	0	Yes
12408	No	Virgil	Lewis C. Long	(P) Barnes	Barnes, Sharp	7-24S-13E	139	--	Miss lm	1,664	16	2	0	0	0	Yes
15502	No	Virgil North	Ale Oil Company	(D) ---	Gruber, Imthurn	33-22S-13E 4-23S-13E	200	0	Miss Viola	1,850 2,200	15 5	5	0	2	0	Yes
18152	No	Virgil North	Barnett Oil, Inc.	(D) Demler Waterflood	Demler	21-23S-13E	160	0	Miss	1,726	26	5	-	-	-	No*
15851	No	Virgil North	Kewanee Oil Company*	(W) Schneider	Schneider	10-23S-13E	40	0	Miss	1,770	15	8	1	0	0	Yes
1057																
5838	--	Virgil North	Sun Production Company	(-) Shadel	Shadel	15-23S-13E	160	95	Bartl	1,540	50	3	0	0	2	Yes
6126	--	Virgil North	Sun Production Company	(-) Olinger "A"	Olinger "A"	15-23S-13E	10	1	Miss lm	1,720	30	4	0	0	0	Yes
6135	--	Virgil North	Sun Production Company	(-) Jones "A"	Jones "A", Dehlinger "A"	21-23S-13E 28-23S-13E	80	12	Miss lm	1,670	55	7	2	0	3	Yes
8090	--	Virgil North	Sun Production Company	(-) Griblin "B"	Griblin "B"	21-23S-13E	160	10	Miss lm	1,750	30	6	0	0	2	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
14151	-	-	-	-	5-spot	0	50	Prod	--	--	U	--	S Gas	1/1	39	--	7,300	98,690	2,107	39,372	--	--	
1362	2	6	0	0	5-spot	400	268	Prod + Doug	650	50-75	U	1946	Gas Exp	--	43	--	195,640	3,869,013	2,891	1,292,154	--	--	
5552	9	2	1	0	5-spot	470	170	Prod + Doug	725	50	M	--	S Gas	--	40	--	689,904	8,266,660	15,320	647,269	--	--	
11091																							
10368	2	0	0	0	Irreg	150	85	Prod + Doug	700	100	T	1963	S Gas	3/1	41	--	30,000	824,200	3,725	290,995	--	--	
17991	1	-	0	-	Irreg	Grav	24	Prod	--	--	U	1975	Grav	1½/24	36.5	--	8,760	--	800	--	--	--	*Was Chet Thompson
18599	1	-	0	-	Irreg	50	54	Prod	--	--	U	1975	Grav	1½/54	34.1	--	19,710	--	489	--	--	--	*Was Letha Dimick
9902	2	-	0	-	5-spot	150	50	Prod	--	--	U	1974	Grav	1/1	34	--	18,250	--	740	--	--	--	*Was Georing-Hedrick
																							†Inadequate funds
2737	8	0	0	1	5-spot	260	477	Prod + Doug + L-KC	1,200	75	T+ S	1951	Limited Wat	--	40	3.8	132,985	3,656,466	3,453	181,386	3,453	151,693	*Sold to C.S. Ritchie, Feb., 1976.
10430	1	-	-	-	---	600	250	Prod	--	--	U	--	S Gas	--	39	--	75,500	--	--	--	--	--	
14306	-	-	-	-	Irreg	140	20	Prod	--	--	U	--	S Gas	--	40	--	6,010	--	--	--	--	--	
14901	2	-	-	-	Irreg	300	296	Prod	--	--	U	--	Grav	--	39	--	88,800	--	--	--	--	--	
11169	1	0	0	0	Irreg	0	240	Prod	--	--	U	1967	S Gas	48/130	39	--	87,600	690,775	6,641	307,562	6,641	122,331	
10170	2	1	0	0	Irreg	400	200	Prod	--	--	U	1963	Limited Wat	--	41	3.0	144,000	2,245,269	5,500	402,920	5,500	136,197	*Was Maurice L. Brown Co.
10170	-	-	-	-	Irreg	258	337	Prod	--	--	T	1963	Lim. Wat	--	41	3.0	9,760	2,111,029	1,344	398,764	1,344	132,041	*Sold to Dick Soule
12236	3	0	0	0	Irreg	740	63	Prod + Doug	1,290	90	U	1965	S Gas	1/1	40	--	68,611	816,737	4,992	135,673	4,600	39,445	
11737	8	0	1	0	Irreg	1,500	200	Prod + Doug	1,000	50	T	1967	S Gas	95/5	41	--	585,600	5,137,600	71,046	--	71,046	592,160	
13198	2	1	0	0	Irreg	700	133	Prod + Doug	1,000	50	T	1967	S Gas	9/1	39	--	97,154	899,154	4,570	--	4,570	30,454	
2226	1	0	0	0	5-spot	401	255	Prod + Doug	1,200	--	T	1949	S Gas	--	40	3.4	90,075	58,119,347	85	6,256,649	85	3,981,185	
2743	8	12	0	0	5-spot	885	356	Prod + Doug	1,200	40	T	1952	S Gas	--	40	5	1,010,010	29,609,154	12,283	1,290,512	12,283	1,290,512	*6-24S-10E
10734	0	21	0	0	Irreg	0	0	Prod + Doug	1,000	50	T	1963	S Gas	--	40	3.2	0	8,170,632	3,513	494,604	3,513	494,604	
15438	1	0	0	0	Irreg	440	515	Prod + Doug	1,200	140	T	--	S Gas	--	40	3.4	179,835	892,349	7,373	118,114	7,373	113,987	
14342	1	0	6	0	Irreg	1,000	175	Prod + Doug	1,200	100	T	--	S Gas	98/2	40	--	63,000	--	5,115	--	5,115	--	*Was R. R. Riss
16865	-	-	-	-	---	--	--	---	--	--	-	--	---	--	--	--	--	--	--	--	--	--	*Disposal into Douglas
17510	1	-	-	-	Irreg	50	76	Prod	--	--	U	--	Grav	--	39	--	23,560	--	--	--	--	--	
13474	1	0	0	0	Irreg	--	2	Prod	--	--	M	1967	Grav	5/1-3	37-38	--	500	5,400	1,596	23,562	200	5,075	*Was Bedell-Catt
1908	0	0	0	0	5-spot	0	0	Prod	--	--	-	1948	S Gas	--	40	4.0	0	23,032,364	1,460	2,536,647	1,460	2,536,647	*Was Maurice L. Brown Co.
																							†Flood depleted
1908	0	0	0	0	5-spot	0	0	---	--	--	-	1948	S Gas	--	40	4.0	0	23,032,364	169	2,535,356	169	2,535,356	*Sold to Dick Soule
																							†Flood depleted
7558	10	9	0	0	Irreg	150	40	Prod + Arb	2,200	150	T	1958	S Gas	2/1	38	3.4	146,000	6,279,875	14,337	770,435	14,337	770,435	*Was Sun Oil Company
9922	3	11	0	0	5-spot	800	--	Prod + Arb	2,100	--	U	1962	S Gas	38/70	38	--	40,768	16,085,827	8,969	349,357	8,969	--	
192	1	0	0	0	Irreg	130	125	Prod	--	--	T	1964	Wat	2/3	39	--	30,000	306,000	5,132	--	2,566	37,908	
221	1	0	0	0	Irreg	150	300	Prod	--	--	T	1955	Wat	1/1	--	--	900,000	8,121,000	5,401	--	2,701	44,913	
3259	1	0	0	0	Irreg	80	120	Prod	--	--	T	1955	Wat	55/45	36	--	30,000	598,000	1,526	--	763	23,592	
3915	1	0	0	0	Irreg	50	230	Prod	--	--	T	1956	Wat	55/45	36	--	900,000	9,000,000	4,641	--	2,321	50,163	
12482	1	0	0	0	Irreg	300	300	---	--	--	T	1966	Wat	1/1	38	--	79,000	711,000	4,146	--	4,146	42,703	
12408	1	-	-	-	Irreg	Grav	50	Prod	--	--	U	1966	Grav	--	38	--	18,225	--	982	--	65	--	
15502	1	0	0	0	Irreg	Grav	35	Prod	--	--	-	1970	Grav	1/4	26*	--	12,000	81,000	3,000	29,080	500	1,000	*Drilled well to Viola, hence lower gravity.
18152	1	-	-	-	Irreg	Vac	100	Prod	--	--	U	1976	S Gas	15/100	39	--	8,600	8,600	1,240	1,240	--	--	*Started 10/6/76
15851	3	1	0	0	Irreg	1,000	133	Prod	--	--	U	1944	S Gas	5/47	39	--	145,695	910,658	6,753	1,253,636	6,753	53,759	*Was Barbara Oil Company
1057																							
5838	1	0	0	4	Irreg	150	400	---	--	--	U	1938	S Gas	--	36.2	4.5	167,746	17,661,825	3,544	189,096	3,544	189,096	
6126	1	0	0	0	---	--	35	Prod	--	--	U	1959	S Gas	--	38.8	3.5	12,791	328,260	2,651	67,216	2,651	67,216	
6135	2	0	0	4	---	--	220	Prod	--	--	U	1958	S Gas	--	39.4	3.5	160,007	2,975,341	13,523	269,539	13,523	269,539	
8090	3	0	0	5	---	--	160	Prod	--	--	U	1961	---	1/4	34.3	3.4	173,517	8,757,037	6,059	145,129	6,059	145,129	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S – T – R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
GREENWOOD COUNTY (concl.)																
16111	--	Virgil North	Sun Production Co.	(-) Dehlinger "B"	Dehlinger "B"	29-23S-13E	160	20	Miss lm	1,700	10	6	0	0	0	Yes
16617	No	Wiggins	George A. Barnard	(P) Wiggins	Nixon, Wiggins	25-24S-10E 30-24S-11E	400	320	Cattle	1,830	15	5	0	0	0	Yes
17508	No	Wiggins	George A. Barnard	(P) Lindamood	Lindamood	19-24S-11E	80	40	Cattle	1,800	25	1	0	0	0	Yes
11036	--	Wilkerson	George E. Sauder	(D) Wilkinson and Carrington	Carrington, Wilkinson	6-25S-9E 7-25S-9E	40	20	Cattle	2,100	30	4	-	-	-	Yes
11069	No	Wilkerson	E. W. Sauder	(P) Olsen Lse.	Olsen	6-25S-9E	20	30	Cattle	2,100	20	2	1	0	0	Yes
15095	--	Willow Creek	Oscar Koepke	(-) Feltner & Feltner B	Feltner	31-22S-11E	100	0	Bartl	2,000	30	1	0	0	0	---
		GREENWOOD COUNTY TOTALS (Reported)					21650	4108				656	99	27	27	
HARPER COUNTY																
17631	--	Runnymede	Texaco Inc.	(P) Maude Wene	Springer Unit, Litsey Unit	23,24-31S-6W 25,26-31S-6W	320	--	Lans	3,613	--	11	1	0	0	Yes
16914	--	Spring Valley	Keener Oil Company*	(P) Schenck Lse.	Schenck	34-31S-5W	80	0	Simp	4,654	8	2	0	0	0	Yes
		HARPER COUNTY TOTALS (Reported)					400	0				13	1	0	0	
HARVEY COUNTY																
13454	--	Burrton	Drillers Production Co.	(W) Bott Unit	Bott Unit	6,7,8, 18-23S-3W	1,580	0	Miss	3,350	20	50	0	0	0	No*
10087	No	Burrton	Home-Stake Production Co.	(W) Burrton Waterflood	Martindale, LeClere, Howell, Frederick "A", Morton, Cunningham, Day A & B, Dick A & B, Gouldner, Krebiel, Short, Nelson, Norris, Schrag "A", Murphy "A"	17,18,20-23S-3W 19-23S-3W 30-23S-3W	1,452	528	Miss Chat	3,400	35	38	1	0	0	Yes
17963	No	Halstead	Oil Property Management, Inc.*	(P) Haury-Cohen Lses.	Haury, Haury Cohen	11-23S-2W	480	0	Miss	2,950	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	Hunton	3,352	37	5	0	0	0	Yes
11005 Yes 11876		Hollow-Nikkel	Kewanee Oil Company*	(W) Hollow-Nikkel W.F.	Dyck, Duerkson, Hiebert, Neufeldt, Nikkel, Schroder & Siemens	5-22S-3W 8-22S-3W	200	160	Miss Hunton	3,200 3,500	10 22	11	0	0	0	Yes
		HARVEY COUNTY TOTALS (Reported)					4032	848				108	1	0	0	
HARVEY-MCPHERSON COUNTIES																
10729	--	Hollow-Nikkel	Brunson-Spines, Inc.	(W) Hollow-Nikkel Waterflood Proj.	Schroeder Unit, Hollow-Nikkel Unit,	32-21S-3W 33-21S-3W 4-22S-3W	960	320	Hunton	3,500	20	8	4	0	0	No*
6889	--	Harmac	Brunson-Spines, Inc.	(P) Harmac Unit	Harmac Unit, Kaufman & Stucky Unit	35-21S-3W 36-21S-3W 1,2-22S-3W	590	300	Hunton	3,550	8	4	0	0	0	No*
		HARVEY-MCPHERSON COUNTIES TOTALS (Reported)					1550	620				12	4	0	0	
HASKELL COUNTY																
17988	--	Eubank	Helmerich & Payne, Inc.	(P) Eubank	Eubank	28-28S-34W	640	--	Ches	5,494	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	4,325	15	2	0	0	0	Yes
16699	--	Goebel East	Pickrell Drilling Co.	(P) Goebel East Unit	Goebel East Unit	13,24-21S-24W	560	0	Miss	4,460	10	5	0	0	1	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
16111	2	0	0	1	--	--	285	Prod	--	--	T	1971	Wat + S Gas	1/21	39.3	4	206,744	1,399,731	8,205	53,822	8,205	53,822	
16617	2	0	0	0	Irreg	500	250	Prod	--	--	T	1966	S Gas	--	38	--	182,500	919,215	3,650	39,744	3,650	39,744	
17508	1	0	0	0	Irreg	500	300	Prod	--	--	T	1974	S Gas	--	38	--	109,500	220,800	500	1,322	500	1,322	
11036	1	--	--	--	Irreg	450	75	Prod + Doug	1000	100	U	1964	Grav	7/3	38	--	27,000	344,500	3,125	26,025	3,125	26,025	
11069	1	1	0	0	--	350	100	Prod	--	--	T	1964	Grav	1/4	37	--	35,000	645,500	1,860	118,830	1,000	29,200	
15095	1	0	0	0	Irreg	20	100	Prod + Doug	900	100	T	--	--	59/50	39	--	36,600	253,600	4,000	24,317	2,000	10,040	
	235	98	8	30													11,552,634	366,502,226	548,688	31,110,060	361,000	21,114,809	
17631	1	0	0	0	Irreg	Vac	726	Prod	--	--	U	1974	--	93/244	--	--	265,098	584,276	30,672	111,713	--	--	
16914	1	0	0	0	Irreg	Vac	209	Prod	--	--	U	1973	Wat	57/-	45	--	76,400	163,895	1,085	74,142	--	--	*Was Oasis Petroleum.
	2	0	0	0													341,498	748,171	31,757	185,855	--	--	
13454	3	4	0	0	Irreg	Vac	394	Prod	--	--	U	1967	Wat + Gas Cap	155/1200	38	--	999,465	9,210,793	75,563	2,704,586	4,000	--	*Four injection wells temporarily abandoned.
10087	18	10	0	0	5-spot	Vac	711	Prod + Equus Beds Region	75	40	M	1963	S Gas	--	36	--	4,677,522	102,904,141	65,708	2,081,225	65,708	2,081,225	
17963	1	0	0	0	Irreg	0	124	Prod	--	--	T	1975	Gas Exp	5/95	35	--	223,560	284,424	6,175	13,257	--	--	*Was Max Cohen.
17678	1	1	0	0	Irreg	15	1000	Prod	--	--	U	1967	Grav	--	40	--	366,000	3,816,000	14,109	--	9,106	--	*Project inactive. Permit being cancelled.
11005 11876	3	1	0	0	Irreg	450	1345	Prod + Equus Beds	35	--	U& F	1964	Wat + S Gas	1/3	42	--	1,473,797	18,370,656	34,629	1,349,349	34,629	694,131	*Was Kantor Oil Co.
	26	16	0	0													7,740,344	134,586,014	196,184	6,148,417	113,443	2,775,356	
10729	0	2	0	0	Peri	0	0	Equus	25	140	F	1963	S Gas + Grav	14/20 Corrected	40	-- 1975 data:	0	16,012,265	22,732 (23,258)	932,491 (909,759)	22,732 (23,258)	932,491 (909,759)	*Temporarily shut down. High water cuts experienced.
6889	0	2	0	--	Peri	0	0	Prod	--	--	U	1959	Wat + S Gas	2/5	40	--	0	6,200,639	12,146	581,573	--	--	*Temporarily shut down. High water cuts experienced.
	0	4	0	0													0	22,212,904	34,878	1,514,064	22,732	932,491	
17988	1	0	0	0	Irreg	550	184	Prod	--	--	U	1975	S Gas	786/186	38	--	67,169	80,884	6,450	597,615	--	--	
14869	1	0	0	0	Line	0-Vac	39	Prod	--	--	U	1969	Wat	1/1	37.5	--	14,058	65,861	3,476	62,771	--	--	*Was Imperial Oil Co.
11855	1	0	0	0	Irreg	750	565	Prod + Ced H	900	200	T	1965	Wat	--	35	--	206,371	1,653,119	18,172	391,373	10,014	98,283	*Was Beardmore Oil Co.
16699	1	0	0	0	Irreg	0	295	Prod	--	--	U	1972	S Gas	54/21	36	2.5	107,970	320,890	11,548	471,435	--	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
HODGEMAN COUNTY (concl.)																
7630	Yes	Hallet	Kewanee Oil Co.	(P) Hallet Waterflood	Hallet Waterflood	15,22-22S-25W	640	320	Miss	4597	64	12	0	1	0	Yes
16343	--	Hanston-Oppy	Kaiser Francis*	(D) Sipes	Sipes	22-22S-22W	160	0	Top	3472	--	2	0	0	0	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
13232	No	Hanston-Oppy	Sun Production Co.	(P) South Bamberger Repressuring	South Bamberger	20-22S-22W	640	0	Miss	4258	22	4	0	0	4	Yes
17767	No	Krankenberg	Donald C.Slawson	(P) Krankenberg "B"	Krankenberg "B"	9-24S-23W	160	0	Miss	4730	8	2	0	0	0	Yes
17586	--	Lippoldt	Texaco Inc.	(-) 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 Co.	(W) Gleason B	Hall K Gleason B	31-23S-21W 32-23S-21W	280	0	Marm	4377	20	5	0	0	0	Yes
		HODGEMAN COUNTY TOTALS (Reported)					3120	480				48	1	1	5	
JACKSON COUNTY																
12576	No	Leach	Hank Martell Oil Co.	(D) Leach	Leach Beightel Hladky	15-7S-13W 21-7S-13W 22-7S-13W	400	600	Hunt	--	6	7	--	0	0	Yes
		JACKSON COUNTY TOTALS (Reported)					400	600				7	0	0	0	
JOHNSON COUNTY																
11601	No	Gardner	Mo-Kan Oil Group	(P) MKB Flood	Griffin, Bigelow, Knabe, McCann	15-14S-22E	560	0	Bartl	825	10	11	0	0	0	Yes
18460*	No	Gardner	Rader Oil Co.	(P) Knabe-A, Roberts & Andrews	Knabe-A, Andrews Roberts	10-14S-22E 11-14S-22E	400	0	Squir	700	10	10	0	0	0	No†
18461*	No	Gardner	Rader Oil Co.	(D) McCann-A,B,C,D & Leeker	McCann-A&D McCann-B, Leeker, McCann-C	14-14S-22E 15-14S-22E 22-14S-22E 23-14S-22E	460	0	Bartl	825	10	16	0	2	0	Yes
		JOHNSON COUNTY TOTALS (Reported)					1360	0				37	0	2	0	
KEARNY COUNTY																
16958	--	Pleasant Prairie	Helmerich & Payne, Inc.	(P) Pleasant Prairie	White "O", CB&L "A"-1 USA "B"	13-26S-35W 14-26S-35W	--	--	Morr-Miss	4966	24	2	0	1	0	Yes
		KEARNY COUNTY TOTALS (Reported)					0	0				2	0	1	0	
KINGMAN COUNTY																
13079 14912	--	Alameda	Texaco Inc.	(-) Alameda	Marteney, G.Richardson, J.S.Gurtner Nunnemaker H.Krehbiel, G.W.Richardson, T.Lecklider, T.Lecklider "B", J.Flickner, Jr. L.Lord, T.Lecklider "C" W.A.Robinson J.P.Krehbiel "C", D.Flickner	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	2	1	5	Yes
18070	--	Belmont Center	Texaco Inc.	(P) G.P.Wallace	D.E.Bertholf, I.Young G.P.Wallace, C.Wells, A.Duckworth	23-29S-8W 27-29S-8W	900	80	Miss	4200	25	7	0	0	0	Yes
16295	No	Broadway West	Lario Oil & Gas Co.	(P) Clouse	Clouse	18-28S-5W	0	0	Miss	3850	50	1	0	0	0	Yes
5422	No	Casley	Martin Oil Co.	(D) Casley	Casley	11-28S-5W	160	0	Miss Dolomite	3770	32	2	1	0	1	Yes
7702 8651	--	Cunningham	Skelly Oil Co.	(W) Cunningham Field	Miles "B" Miles "A"	19-27S-10W 30-27S-10W	320	0	LKC	3400	8	6	3	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
7630	4	0	0	0	Peri	1475	494	Gravel Water Well	405	20	F	1960	Wat	552/180	38	--	721,460	10,657,798	44,205	2,001,404	26,227	1,024,478	
16343	1	0	0	0	Irreg	Vac	800	Prod	--	--	U	1972	Gas Exp	--	34	--	292,000	1,162,525	3,832	388,586	--	--	*Was Shell Oil.
14233	1	0	0	0	Line	Vac	485	Prod	--	--	T	1968	Wat + S Gas	8/22	30	16	177,025	919,668	14,901	209,691	--	--	
16441	1	0	0	0	Line	Vac	210	Prod	--	--	T	1972	Wat + S Gas	--	--	--	76,650	353,982	0	0	0	0	
13232	1	0	0	1	Irreg	300	1235	Prod	--	--	U	1966	Wat	1/10.8	36	--	450,597	4,709,472	14,916	734,841	1,490	11,025	
17767	1	0	0	0	Irreg	0	39	Prod	--	--	U	1975	Wat*	6/1	36	3.5	14,375	24,190	23,209	47,575	--	--	* + S Gas.
17586	1	0	0	0	--	500	1264	Prod	--	--	U	1974	--	--	35.8	--	461,238	943,804	44,833	105,941	--	--	
12365	1	0	0	0	Irreg	580	791	Prod + -	70	15	M	1966	Wat	--	36	--	288,775	2,258,141	5,879	187,467	4,435	51,833	*Was Beardmore Oil Co.
16908	1	0	0	0	Irreg	0	92	Prod	--	--	U	1973	S Gas	23/39	24	3.0	33,672	118,017	6,999	198,874	--	--	
	15	0	0	1													2,844,191	23,187,467	191,970	4,799,958	42,166	1,185,619	
12576	1	--	0	--	Irreg	0	2000	Prod	--	--	U	1966	Wat	1/1	26	--	300,000	1,600,000	13,119	--	--	--	
	1	0	0	0													300,000	1,600,000	13,119	0	0	0	
11601	4	0	0	0	Irreg	280	10	Prod	--	--	U	1963	Grav	9/1	22	--	14,200	374,228	7,000	--	2,200	--	
18460	1	0	0	0	Irreg	0	5	Prod + Pond	--	--	M	1973	S Gas	25/1	29	--	1,775	5,620	1,240	--	--	--	*Was 11,600. †Insufficient water supply.
18461	4	0	0	0	Irreg	40	30	Prod	--	--	U	1964	Grav	9/1	22	--	43,800	257,025	5,000	--	1,250	--	*Was 11,601
	9	0	0	0													59,775	636,873	13,240	0	3,450	0	
16958	1	0	0	0	Irreg	Vac	22.5	Prod	--	--	U	1973	S Gas	2/3	35.2	--	8,234	30,844	26,424	64,153	--	--	
	1	0	0	0													8,234	30,844	26,424	64,153	0	0	
13079 14912	8	0	0	0	Peri	600	346	Prod	--	--	U	1970	Wat	8655/2913	43	.71	1,009,577	6,757,740	187,221	6,073,008	50,491	356,672	
18070	1	0	0	0	Irreg	Vac	627	Prod	--	--	--	--	--	--	--	--	228,894	228,894	62,423	62,423	--	--	
16295	1	0	0	0	Irreg	Grav	3	Prod	--	--	U	1971	S Gas + Gas Exp	0/5	--	--	996	5,981	0	0	0	0	
5422	1	1	0	1	Irreg	0	--	Prod	--	--	U	1956	Wat	11/115	28.3	--	90	32,850	7	2,555	0	0	
7702 8651	4	0	0	0	Irreg	0	595	--	--	--	M	1961	S Gas	--	34	--	871,385	6,011,788	26,396	1,858,820	26,396	546,694	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
KINGMAN COUNTY (Concl.)																
12870	--	Orsemus	Texaco Inc.	(P) Orsemus	J.Graber, B.J.Stucky, O.W.Tanner	30-29S-5W	160	320	Simp	4,472	--	1	1	0	1	Yes
16625	--	Spivey-Grabs-Basil	Pickrell Drilling Co.	(P) Maple G	Maple G	30-29S-5W	40	0	Miss	4,116	36	1	0	0	0	Yes
5576	--	Spivey-Grabs-Basil	Sun Production Co.	(D) Higgins	Higgins	9-30S-8W	80	0	Miss Ch	4,185	45	2	0	0	0	Yes
KINGMAN COUNTY TOTALS (Reported)							3580	400				38	7	1	7	
KINGMAN-PRATT COUNTY																
6106	Yes	Cunningham	Skelly Oil Co.	(W) Cunningham "B" Unit	North Ratcliff J.M.Ratcliff, Interurban Realty John Miller Krehbiel "A" Krehbiel "A", East Maxedon, South Maxedon, West Maxedon, J.A.Hoagland, C.J.Moore C.H.Lakin, G.D.Miller	19-27S-10W 30-27S-10W 31-27S-10W 24-27S-11W 25-27S-11W 36-27S-11W	800	575	LKC	3,400	16	12	1	0	0	Yes
KINGMAN-SEDGWICK COUNTY																
5288	Yes	Bartholomew	Maurice L.Brown Co.	(W) Bartholomew Unit	Bartholomew Unit	29,30,31-27S-4W 6-28S-4W 36-27S-5W 1-28S-5W	0	0	Miss	3,700	11	10	0	0	1	No
KIOWA COUNTY																
14550	No	Fruit	J.Mark Richardson	(P) Isham Unit	White Woodard, Fankhouser	27-27S-16W 32-27S-16E*	640	0	Kind	4,630	20	6	0	--	2	Yes
14366	Yes	Nichols	MISCO Industries, Inc.*	(W) Nichols Unit	Beal, Pardoe, Unruh, Janson, Thorn, Yohn, Schmidt, Greenwood, McGary, Lewis, Brown, Willems, Dunn, Geo. Parkins, J.C.Parkins	20,21,22,27,28,29, 31,32,33,34-29S-18W 5,6-30S-18W	5,800	--	Miss Ch	4,904	5-50	6	0	0	0	No
KIOWA COUNTY TOTALS (Reported)							6440	0				12	0	0	2	
LABETTE COUNTY																
14677	--	Coffeyville-Cherryvale	John T.Davis	(P) Coleman	Coleman	2-33S-17E	40	0	Bartl	750	20	2	0	0	0	Yes
7845	No	Coffeyville-Cherryvale	Dodson Production Co.	(P) Utter	Utter	23-32S-17E	40	--	Bartl	660	15	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	--	Bartl	700	15	1	0	0	0	Yes
6323	No	Mound Valley	Vot Oil Co.	(-) Merrick	Merrick	33-32S-18E	80	--	Bartl	579	23	12	--	15	2	Yes
LABETTE COUNTY TOTALS (Reported)							185	0				27	0	15	2	
LABETTE-MONTGOMERY COUNTY																
14745	--	Coffeyville-Cherryvale	Wayne Gregory	(D) Gregory Lease	Gregory Marchant	34,35-32S-17E 3-33S-17E	240	100	Bartl	670	15	10	11	0	10	No*
LANE COUNTY																
16555	--	Pendennis South	Helmerich & Payne, Inc.	(P) Leighton "A"	Anderson, Jones "D" Leighton "A"	33-16S-27W 4-17S-27W	--	--	LKC	4,120	20	5	0	0	0	Yes
18114	No	White Rock South	Beren Corp.	(W) Harlamert Lease	Harlamert	30-17S-27W 25-17S-28W	120	0	LKC	4,220	8	3	0	3	0	Yes
LANE COUNTY TOTALS (Reported)							120	0				8	0	3	0	

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
12870	1	0	0	0	Irreg	Vac	382	Prod	--	--	U	1966	--	144/171	36.8	--	139,340	2,396,508	2,233	33,950	--	--	
16625	1	0	0	0	Irreg	0	6	Prod	--	--	U	1972	S Gas	7/13	33	2.5	2,196	15,036	2,429	35,567	--	--	
5576	1	0	0	0	--	500	128	Prod	--	--	-	1957	S Gas	2.3/1	36	3.1	46,600	716,004	3,819	353,652	380	2,830	
	18	1	0	1													2,299,078	16,164,801	284,528	8,419,975	77,267	906,196	
6106	7	8	0	0	Irreg	150	396	Prod + Sh Sd	80	--	M	1958	S Gas	--	36	--	1,015,089	23,040,785	18,676	3,803,832	18,676	749,277	
5288	0	0	0	0	Peri	0	0	No	--	--	U	1957	Wat + S Gas	--	36	--	0	9,369,243	10,635	3,350,968	0	269,371	
14550	1	--	--	--	Irreg	Vac	--	Prod	--	--	U	1968	Wat + S Gas	4/1	35	--	35,000	461,150	11,565	136,021	--	--	*Davis, 33-27S-16W
14366	0	0	0	0	--	--	--	--	--	--	-	--	--	--	--	--	0	--	14,350	--	0	--	*Was Gulf Oil Co.
	1	0	0	0													35,000	461,150	25,915	136,021	0	0	
14677	2	0	0	0	Irreg	0	10	Prod	--	--	U	1960	S Gas	4/1	31	--	3,500	37,500	392	--	250	2,720	
7845	1	0	0	0	Irreg	--	--	Prod	--	--	U	1959	Gas Exp	--	33	--	--	--	160	--	--	--	
9843	2	0	0	0	Irreg	250	35	Prod	--	--	U	1962	Gas Exp	2/3	22	--	--	--	850	--	--	--	
16032	1	0	0	0	Irreg	Grav	5	Prod	--	--	U	1971	Grav	2/3	22	--	--	--	320	--	--	--	
6323	1	--	--	--	Irreg	200	160	Prod + Pond	--	--	-	1958	Fr + Return	1/5	31.7	--	58,400	--	3,707	116,877	2,511	6,429	
	7	0	0	0													61,900	37,500	5,429	116,877	2,761	9,149	
14745	7	4	0	0	5-spot	300	--	Prod	--	--	U	1974	Frac + Pump	1/4	31	--	--	--	969	--	--	--	*Equipment trouble.
16555	1	0	0	0	Irreg	250	237	Prod	--	--	U	1972	--	172/120	38	--	88,610	327,877	51,802	284,751	--	--	
18114	1	0	1	0	Irreg	Vac	175	Prod	--	--	U	1975	S Gas	45/180	36	--	64,050	66,750	11,232	39,355	--	--	
	2	0	1	0													152,660	394,627	63,034	324,106	0	0	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location $-T-R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
LINN COUNTY																
18443	No	Centerville Shoestring	Hastert Oil Co.	(P) --	McGrew	24-21S-22E	40	0	Squir	500	20-30	6	0	1	0	No*
18581	No	Centerville Shoestring	Chris Hastert	(P) --	Hill	10-21S-22E	80	0	Squir	460	20-30	5	0	5	0	No*
9576	--	Goodrich-Parker	Kent Drilling Co.*	(-) Linn Flood	Bertha Nolin	23-19S-22E	25	0	Bartl	650	15	4	0	0	0	No†
3165	--	Goodrich-Parker	Ulses' Oil Co.	(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	0	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	Burnett, Stroup, Baldwin, Snyder Baker, Light, Harvey Croxton, Crisler,	21,31,33-19S-23E 4,5,8,9-20S-23E	2104	0	Peru	260	18	102	126	--	--	No*
454	Yes	LaCygne-Cadmus	J & J Oil Co.*	(-) J & J Oil Co.	Teagarden	2-20S-23E	160	0	Peru	160	7	4	0	--	--	Yes
12025	Yes	LaCygne-Cadmus	J & J Oil Co.*	(W) J & J Oil Co.	Persons	10,11-20S-23E	240	80	Peru	160	7	26	2	3	--	Yes
		LINN COUNTY TOTALS (Reported)					3029	80				281	157	9	0	
LINN-MIAMI COUNTY																
13055	--	Beagle	Robert A. Mason	(W) --	Cook-Day	15,22-19S-22E	40	0	Squir	480	15	11	0	0	0	Yes
LYON COUNTY																
5671	--	Murphy	C.E.Murphy	(P) --	Murphy	29,32-21S-11E	240	--	Bartl	1,920	14	6	--	--	--	Yes
5004	No	Rock Creek Field	Schankie Well Service,Inc.*	(D) R.B.Byrd	R.B.Byrd	32-21S-11E	110	0	Bartl	1,900	17	3	0	0	0	Yes
		LYON COUNTY TOTALS (Reported)					350	0				9	0	0	0	
MCPHERSON COUNTY																
5631	--	Chindberg	George R. Hess	(P) Swanson	Swanson	13-19S-3W	340	0	Miss	2,990	36	5	0	0	0	Yes
18528	No	Chindberg	George R. Hess	(P) Ek A&B	Ek A&B	24-19S-3W	160	0	Miss	2,995	30	5	0	0	0	Yes
7365	--	Georob	Colorado Oil Co.	(-) Robinson	Robinson	1-18S-2W	40	0	Miss Ch	2,790	7	3	0	0	0	Yes
3017	--	Graber	George R. Hess *	(W) Graber	Jones B Jones A	31-21S-1W 32-21S-1W	200	40	Hunt Lime	3,285	25	2	0	0	0	Yes
2434 1911	--	Graber	George R. Hess*	(D) Graber Waterflood	J.P.Huxman, J.C.Goering, J.A.Hetzke A.K.Graber, J.M.Boekner, D.B. & Carrie Jones D.B. & Carrie Jones, A.Hetzke, Kindblade D.B. & Carrie Jones C.C.Graber	29-21S-1W 30-21S-1W 31-21S-1W 32-21S-1W	980	640	Hunt Lime	3,280	30	15	0	0	0	Yes
17397	--	Graber North	George R. Hess	(P) Boesker	Chavez & Boesker Arnold B.Lagree & Goering	8-21S-1W 16-21S-1W 17-21S-1W	560	0	Hunt	3,364	4	5	0	0	0	Yes
4038	--	Gypsum Creek	George R. Hess	(P) Buckeye "C"	Bukey D Van Meter A & B	5-17S-1W 32-16S-1W	240	0	Miss	2,622	20	4	0	0	0	Yes
13798	--	Hollow-Nikkel	George R. Hess	(P) Schroeder	Schroeder	28-21S-3W	80	0	Hunt Lime	3,418	20	2	0	0	0	Yes
1295	--	Jenday	Alfred Koehn *	(D) Wedel B,S.W.D.	Wedel B Wedel A, Susie Wedel	7-19S-1W 8-19S-1W	160	--	Miss Ch	2,940	20	6	0	0	0	Yes
5715	No	Jenday	Alfred Koehn *	(D) Ryno S.W.D.	Russell	6-19S-1W	160	0	Miss Ch	2,935	30	2	0	0	0	Yes
15232	No	Johnson	David Litan*	(P) Kasey-Colburn	Kasey "A" & "B", Colburn, Johnson	35-19S-3W	240	--	Miss	2,990	110	5	1	1	--	Yes
15946	--	Lindsborg	Tenneco Oil Co.	(W) Community "B"	Community "B"	8-17S-3W	--	--	Viola-Maq	3,300	--	2	0	0	0	Yes
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 Lime	2,300	10	15	2	1	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
18443	0	0	0	0	--	0	0	Prod	--	--	U	--	Grav	9/1	31	--	0	0	0	0	0	0	*Production not yet started.
18581	0	0	0	0	--	0	0	Prod	--	--	U	--	Grav	7/1	32	--	0	0	0	0	0	0	*Production not yet started.
9576	4	0	0	0	Irreg	300	8	Prod + Hertha	170	6	M	1962	Grav	--	29	--	700	258,000	600	358,000	600	132,000	*Was Buddrus & Woods. †Not enough water.
3165	87	0	0	0	5-spot	600	6	Prod + Arb	1400	50	M	--	Wat	--	29	--	190,530	15,311,679	5,200	656,430	--	--	
3150	20	26	--	--	5-spot	270	24	Prod + Miss	1068	--	M &T	1940	S Gas	3/1	29	20	175,200	6,307,200	2,481	272,899	2,481	272,899	
15486	94	127	--	--	5-spot	270	22	Prod + Lake	--	--	F	1974	S Gas	3/1	28	20	500,522	1,094,498 108,035 MCF	4,388	27,137	4,388	27,137	*Expanded the number of injection wells.
454	1	--	0	--	5-spot	150	15	Prod + Pond	--	--	M	1955	Grav	3/1	29	28	7,950	--	731	--	--	--	*Was Roxbury Oil Co.
12025	31	--	1	--	5-spot	150	15	Pond	--	--	M	1955	Grav	3/1	28	27.5	26,975	--	4,360	--	--	--	*Was Roxbury Oil Co.
	237	153	1	0													901,877	22,971,377	17,760	1,314,466	7,469	432,036	
13055	10	0	0	0	5-spot	450	8	Prod + Pond	--	--	F	1968	S Gas	5/1	31	20	25,833	747,628	1,719	68,331	1,719	68,331	
5671	2	--	--	--	Irreg	150	75	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	
5004	1	0	0	0	Irreg	250	50	Prod	--	--	U	1973	Grav	1/9	37	--	9,050	35,195	1,050	--	0	--	*Was Leland Dreyer
	3	0	0	0													9,050	35,195	1,050	0	0	0	
5631	1	0	0	0	Irreg	0	415	Prod + Ch	3000	4	T	1957	Wat	3/7	35	--	151,475	1,484,025	160	82,450	160	2,858	
18528	1	0	0	0	Irreg	0	462	Prod	--	--	T	1976	Gas Exp	1/4	37	--	41,580	41,580	5,874	165,874	1,468	1,468	
7635	1	0	0	0	Irreg	--	--	Prod	--	--	U	1959	Wat	15/121	35	--	0	--	--	--	--	--	
3017	1	0	0	0	Irreg	0	255	Prod	--	--	T	1952	Wat	26/0	40	--	93,075	1,663,847	960	1,681,994	960	447,691	*Was Cities Service Oil Co.
2434 1911	6	0	0	0	Irreg	0	700	Prod	--	--	T	--	S Gas	9/1	44	--	262,100	42,772,600	29,930	15,663,946	29,930	5,143,930	*Was Continental Oil Co.
17397	1	0	0	0	Irreg	0	40	Prod	--	--	T	1974	S Gas	9/1	40	--	15,400	37,000	2,100	71,645	2,100	6,845	
4038	1	0	0	0	Irreg	0	425	Prod	--	--	T	1954	Wat	1/1	35	--	155,125	2,065,410	6,345	282,857	6,345	32,357	
13798	1	0	0	0	Irreg	0	200	Prod	--	--	T	1967	Wat	9/1	40	--	73,000	533,570	3,450	117,147	3,450	76,267	
1295	1	0	0	0	Irreg	Vac	400	Prod	--	--	T	--	--	--	35	--	--	--	--	--	--	--	*Was Barbara Oil Co.
5715	1	0	0	0	Irreg	Vac	600	Prod	--	--	T	--	Grav	--	36	--	--	--	--	--	--	--	*Was Tenneco Oil Co.
15232	2	0	--	--	Irreg	0	900	Prod	--	--	U	1969	--	1/13	38	--	328,500	2,035,000	15,150	--	5,000	--	*Was Clarence Warner.
15946	1	0	0	0	Irreg	0	300	--	--	--	T	1971	S Gas	3/97	28.5	--	109,500	1,350,500	2,107	368,569	--	--	
10429	4	1	0	0	Irreg	350	218	Prod + Miss Lime	3000	--	U	1959	S Gas	4/1	--	--	318,842	2,993,282	15,241	796,402	15,241	267,532	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
MCPHERSON COUNTY (Concl.)																
7951 --		McPherson	Mead Production Co.	(P) O.T.Bentson	O.T.Bentson	32-18S-2W	80	30	KC Lime	2,350	12	2	--	--	--	Yes
1679 No		McPherson	Jo Ray Rierson	(W) Rolander	Rolander	30-18S-2W	160	--	KC	2,330	10	3	--	--	--	Yes
17480 No		Paden	Rocket Schusterman Oil Account*	(D) Schulz	Schulz	15-18S-1W	150	0	Miss	2,685	25	6	0	12	4	Yes
2158 --		Ritz-Canton	An-Son Corporation	(D) Hull	Hull, Decker, Fleming	11-19S-2W	500	240	Miss	2,889	40	3	3	0	0	Yes
3034 --		Ritz-Canton	An-Son Corporation	(-) Giffen "A"	Meyers	14-19S-2W	160	300	Miss	2,889	--	3	0	0	0	Yes
3476 --		Ritz-Canton	C.H.Casebeer*	(D) --	Unruh	26-19S-2W	80	--	Miss Ch	--	--	3	--	--	--	Yes
18480 No		Ritz-Canton	Hess & Bruce	(P) Hess & Bruce Unit	Hale, Gratton, Miller, Law, Boals	24-19S-2W	560	0	Miss	2,945	11	20	3	0	0	Yes
17665 No		Welch-Bornholdt	Dick Hess	(D) Knackstedt	Knackstedt	30-20S-5W	80	0	Miss	3,300	40	1	1	4	1	Yes
5630 --		Ritz-Canton	George R.Hess	(P) H.P.Unruh	H.P.Unruh, Maude Smith	16-19S-2W	160	0	Miss	2,976	25	4	0	0	0	Yes
5682 --		Ritz-Canton	George R.Hess	(P) Flook	Flook, Johnson	1-20S-2W	320	0	Miss	2,945	8	2	0	0	0	Yes
8148 --		Ritz-Canton	George R.Hess	(P) Thompson B	Thompson A,B	22-19S-2W	240	0	Miss	2,943	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	2,953	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	2,955	8	7	0	0	0	Yes
6975 No		Ritz-Canton	Hillenburg Oil Co.*	(D) Unruh	Unruh	34-19S-2W	160	0	Miss	2,945	11	4	0	0	0	Yes
7969 No		Ritz-Canton	Hillenburg Oil Co.*	(D) Knudson	Knudson	23-19S-2W	80	0	Miss	2,930	30	2	1	0	0	No†
7971 --		Ritz-Canton	Hillenburg Oil Co.*	(D) Eaton	Eaton	26-19S-2W	160	0	Miss	2,930	30	4	0	0	0	No†
9787 --		Ritz-Canton	Hillenburg Oil Co.*	(D) L.A.Lovett	F.A.Lovett	13-19S-2W	160	0	Miss	2,916	60	3	0	0	0	Yes
7617 --		Ritz-Canton	Frank Jones Oil Operations	(P) Ritz-Canton	Finkle	23-19S-2W	160	0	Miss	2,900	8	5	0	0	0	Yes
14280 --		Ritz-Canton	Frank Jones Oil Operations	(P) Ritz-Canton	Opal Russell	23-19S-2W	160	75	Viola Lime	3,362	8	1	0	0	0	Yes
5844 --		Ritz-Canton	Alfred Koehn*	(D) Miller S.W.D.	R.P.Becker	36-19S-2W	120	--	Miss Ch	2,942	40	2	0	0	0	Yes
4067 --		Ritz-Canton	Homer G.Krehbiel Sr.	(D) Koehn B	Koehn B	34-19S-2W	--	--	Miss	2,963	5	2	--	3	--	Yes
8813 --		Ritz-Canton	Homer G.Krehbiel Sr.	(D) Lacquement	Lacquement	20-19S-1W	80	--	Miss	2,980	5	3	--	4	--	--
3387 --		Ritz-Canton	Elmer Unruh	(P) Wiles Lease	Wiles	25-19S-2W	160	--	Miss Ch	2,930	25	4	0	0	6	Yes
14770 No		Round Hill	Leonard L.Bruce	(-) Krehbiel A	Krehbiel A	33-18S-1W	160	0	Miss	2,840	10	1	0	--	--	Yes
3219 --		Roxbury South	Elmer Unruh	(-) Boyd	Boyd Tinkler nos. 1,2	20-17S-1W 29-17S-1W	240	0	Miss Ch	2,650	80	3	0	0	0	Yes
17536*--		Roxbury South	White Hawk Oil Co.†	(D) Bishop-Lilly Unit	Bishop, Lilly	30-17S-1W	60	0	Miss	2,685	5	1	0	0	0	Yes
14203 --		Voshell	Herman J.Schragg	(W) Schrag Flood Project	Schrag, Goering	26-20S-3W	80	60	Miss	3,090	3	3	0	0	0	Yes
MCPHERSON COUNTY TOTALS (Reported)							9150	1385				179	11	25	11	
MCPHERSON-MARION COUNTY																
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	3,400	10	7	4	0	0	Yes
MARION COUNTY																
8119 No		Covert-Sellers	Hillenburg Oil Co.*	(-) D.K.Reamey	D.K.Reamey	17-21S-4E	240	0	LKC	1,750	4	1	2	0	0	No†
18275 --		Edmonds	K.T.Wiedemann Trust	(D) John Liggett	John Liggett, Guy Hawk	31-22S-4E	160	0	Miss	2,445	273	9	0	0	0	Yes
17154 --		Elbing North	American Petrofina Co. of Texas*	(P) DeForrest "E"	J.DeForrest, J.J.Ryan	27-22S-4E	320	0	Miss	2,447	1	4	3	0	0	Yes
17659 --		Fanska	Dick Hess	(D) Law	Law	6-17S-1E	40	0	Miss	2,691	20	2	1	11	7	Yes
13045 No		Lost Springs	Roland Jones	(D) Huna Project	A.Melcher	20-18S-4E	320	320	Miss	2,403	40	2	0	0	0	Yes
MARION COUNTY TOTALS (Reported)							1080	320				18	6	11	7	

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
7951	1	1	--	--	Irreg	30	50	Prod	--	--	U	1960	S Gas	1/9	35	--	20,000	890,719	2,190	81,752	--	--	
6179	1	--	--	--	Irreg	335	300	Prod + Miss Ch	--	--	T	1972	Grav	1/3	34	--	108,000	436,000	1,023	--	--	--	
17480	1	1	0	0	Irreg	0	177	Prod	--	--	T	1975	S Gas	1/4	36	--	64,891	128,687	16,069	1,384,625	--	--	*Was Union Texas
2158	1	0	0	0	--	Grav	6100	Prod	--	--	U	1949	S Gas	--	35	--	2,226,500	83,588,514	18,539	--	18,539	--	
3034	1	0	0	0	--	Grav	6200	Prod	--	--	U	1952	--	--	36	--	2,263,000	66,178,696	16,513	--	16,513	--	
3476	3	--	--	--	Irreg	Vac	850	Prod	--	--	U	--	--	--	33	--	310,250	--	2,284	--	2,284	--	*Was Alfred Koehn.
18480	2	1	0	0	Irreg	0	2460	Prod	--	--	T	1976	Gas Exp	1/4	36	--	221,400	221,400	17,842	6,017,842	4,399	4,399	
17665	1	--	--	--	Irreg	0	1000	Prod	--	--	T	1974	S Gas	2/200	34	--	74,000	157,000	730	--	730	--	
5630	1	0	0	0	Irreg	0	196	Prod	--	--	T	1957	Wat	1/1	35	--	71,540	1,242,840	7,260	164,814	7,260	21,814	
5682	1	0	0	0	Irreg	0	240	Prod	--	--	T	1958	Wat	7/3	35	--	85,500	683,350	5,600	171,574	5,600	13,314	
8148	1	0	0	0	Irreg	0	110	Prod + Ch	2950	--	T	1960	Wat	2/3	35	--	40,150	455,900	4,539	199,140	4,539	10,940	
17373	3	0	0	0	Irreg	0	865	Prod	--	--	T	1974	S Gas	1/9	37	--	315,725	659,925	16,642	593,523	16,642	42,773	
17403	1	0	0	0	Irreg	0	186	Prod	--	--	T	1974	S Gas	1/1	36	--	67,890	71,010	5,260	209,136	5,260	15,136	
6975	1	0	0	0	Irreg	Vac	800	Prod	--	--	U	1959	S Gas	--	35	--	292,000	1,522,000	4,288	--	0	--	*Was C.R.A.
7969	0	1	0	0	Irreg	0	0	--	--	--	-	1960	--	--	35	--	0	--	1,802	--	0	--	*Was C.R.A. †Injection well shut in.
7971	0	1	0	0	Irreg	0	0	--	--	--	-	1960	S Gas	--	35	--	0	--	7,144	--	0	--	*Was C R.A. †Injection well shut in.
9787	1	0	0	0	Irreg	Vac	1500	Prod	--	--	U	1948+ 1962	S Gas	--	34	--	550,000	--	6,096	--	0	--	*Was Schusterman.
7617	1	0	0	0	Irreg	0	200	Prod	--	--	U	1952	Grav	8/92	35	--	73,000	--	7,455	--	1,300	--	
14280	1	0	0	0	Irreg	0	150	Prod	--	--	U	1968	Wat	4/96	36	--	54,750	--	2,300	--	0	--	
5844	3	0	0	0	Irreg	Vac	600	Prod	--	--	T	--	--	--	34	--	--	--	--	--	--	--	*Was S&R Oil Co.
4067	3	--	--	--	Irreg	0	50	Prod	--	--	T	1965	Grav	1/2	36	--	1,750	167,700	--	--	--	--	
8813	1	--	--	--	Line	--	600	Prod	--	--	T	1961	--	2/3	37	--	21,900	526,600	--	--	--	--	
3387	1	0	0	0	Irreg	Vac	--	Prod	--	--	-	--	--	--	36.5	--	100,000	--	3,250	--	325	--	
14770	1	0	0	0	Line	Vac	60	Prod	--	--	U	1975	Wat	4/7	36	--	21,900	51,100	1,660	--	700	2,200	
3219	1	0	0	0	Irreg	Vac	475	Prod	--	--	-	1952	--	--	35	--	170,000	--	2,770	--	277	--	
17536	1	1	0	0	Irreg	0	385	Prod	--	--	U	1958	Wat	--	32	--	140,525	3,556,622	1,521	--	1,521	47,515	*Was C-6463. †Was Natural Gas & Oil.
14203	1	0	0	0	4-spot	100	60	Prod + Sh Sd	80	12	M	1968	S Gas	2.5/22	36	--	21,900	154,800	966	44,029	966	10,122	
	56	7	0	0													8,865,168	215,669,677	235,060	28,097,319	151,509	6,147,161	
13747	5	3	0	0	Peri	700	125	Prod	--	--	U	1968	S Gas	1/1	40	3	229,243	3,970,018	8,439	670,959	8,439	159,449	
8119	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	---	--	--	--	*Was Terra Resources Inc. †No injection started.
18275	1	0	0	0	Irreg	0	65	Prod	--	--	T	1976*	--	--	40	--	23,725	23,725	10,199	10,199	--	--	*Converted-SWD since 1953
17154	1	0	0	0	Irreg	450	896	Prod	--	--	U	1973	Wat	1/7	36.9	--	326,872	1,021,198	2,735	139,551	--	--	*Was El Dorado Refg. Co.
17659	1	--	--	--	Irreg	0	300	Prod	--	--	T	1976	Wat	1/50	35	--	109,500	146,000	2,920	--	2,920	--	
13045	2	0	0	0	7-spot	--	--	Prod	--	--	U	1965	Wat	1/9	34	--	200	73,000	1,315	--	--	--	
	5	0	0	0													460,297	1,263,923	17,169	149,750	2,920	0	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
MEADE COUNTY																
4924	Yes	Novinger	Cities Service Oil Co.	(W) Novinger Field Unit	Novinger Field Unit	22,23,26,27,34, 35-33S-30W 2,3-34S-30W	3240	0	Marm	5,297	--	9.3	1	0	0	Yes
MIAMI COUNTY																
590	--	Black	Robert A.Mason	(W) South New Lancaster	Middaugh, Crume, Fernstrom	3,10-19S-24E	80	--	Peru	200	12	31	0	0	0	Yes
13497																
5762	Yes	Louisburg	Reese Exploration Inc.*	(W) Louisburg	Richmond Briggs, Miller	28-16S-25E 34-16S-25E	75	9	Peru	330	14	22	--	--	--	Yes
18249	--	Louisburg	Reese Exploration Inc.*	(W) Louisburg	McGale, Rogers	9-17S-25E	105	--	Peru	400	11	30	2	--	--	Yes
14695	Yes	Louisburg	Eugene W. Stallings*	(F) Louisburg Unit	Roe Roe, Seaborn	13-17S-24E 18-17S-25E	320	--	Peru	450	27	45	--	--	--	No†
18294	--	Paola-Rantoul	Franz A.Aubry*	(W) --	Hattie Phillips	14-16S-21E	160	--	Squir	650	10	18	0	1	0	Yes
18289	Yes	Paola-Rantoul	Authorized Oil Producers	(P) Wingert	Wingert, Cooper, Halinger	9-17S-22E	--	--	Squir	680	30	12	10	--	--	Yes
4829	No	Paola-Rantoul	Leo Blackstone*	(W) Schmitt	Schmitt	11-17S-22E	160	0	Squir	550	10	4	0	0	0	No†
6337	No	Paola-Rantoul	Carolina Illinois Ventures*	(P) Henning	Henning	23-16S-21E	320	0	Squir	660	12	6	6	0	4	Yes
12704	--	Paola-Rantoul	Herbert Kepple	(D) Kepple	Kepple	17-17S-23E	54	0	Peru	385	28	3	3	8	2	--
18513	No	Paola-Rantoul	Donald L.Johnson	(D) Perdue	Perdue	4-17S-22E	160	--	Squir	610	10	11	1	2	0	Yes
18332	--	Paola-Rantoul	Richard E. Logsdon*	(-) --	Nutt	13-16S-21E	80	0	Squir	---	--	8	--	9	1	†
9128	--	Paola-Rantoul	Bufford McCullom*	(W) Miller Waterflood	Stoltenberg (Miller) Whiteford (Russell)	29-18S-23E 30-18S-23E	80	0	Peru	350	17	24	0	0	0	Yes
2494	Yes	Paola-Rantoul	Reese Exploration Inc.*	(W) KCS	Robert I.Nicholson, F.W.Black	11-17S-22E	480	--	Squir	700	30	30	--	--	--	Yes
471	Yes	Paola-Rantoul	Reese Exploration Inc.*	(W) Miami Flood	Murphy, Schendel, Phillips, Cayot	24-16S-21E	480	--	Squir	670	12	36	2	11	--	Yes
5273																
		MIAMI COUNTY TOTALS (Reported)					2554	9				280	24	31	7	
MONTGOMERY COUNTY																
18143	No	Brewster	Carl D.Wyckoff*	(D) Universal Atlas	Universal Atlas	4,5-33S-16E	584	--	Arb	1,350	2	13	0	0	0	Yes
5236	--	Coffeyville-Cherryvale	Alexander-Seaton	(W) Clark Hudson	Clark Hudson	17-34S-17E	80	0	Bartl	605	20	12	0	0	0	Yes
15114	No	Coffeyville-Cherryvale	BMG, Inc.	(D) Nancy Benson	Nancy Benson	25,36-34S-15E	20	--	Arb	1,200	5	2	--	0	--	Yes
9081	--	Coffeyville-Cherryvale	John T.Davis	(-) Davis, King-Day	Davis King-Day	20-34S-17E 30-34S-17E	140	0	Bartl	600	20	15	0	0	0	Yes
18071	No	Coffeyville-Cherryvale	Hope Oil & Investment Co.*	(W) Beckley-Smith	Jess Beckley, Robert Smith	30-31S-17E	145	0	Bartl	838	16	7	2	4	--	Yes
18129	--	Jefferson-Sycamore	Gaddy-Davis	(W) Tincknell-Swearingen	Tincknell-Swearingen	29-31S-16E	--	0	Bartl	900	--	3	0	--	0	Yes
10093	No	Jefferson-Sycamore	Layton Oil Co.	(W) Bolton Extension	McVey, Stoker Blosser, Hadley, Vineyard Patterson	13-33S-14E 24-33S-14E 18,19-33S-15E	40	0	Bartl	1,170	16	17	11	0	0	Yes
13620																
14651	No	Jefferson-Sycamore	Layton Oil Co.	(W) Bolton Extension	Sewell, Browning	18-33S-15E	25	0	Bartl	1,186	15	6	3	0	0	Yes
2045*	--	Jefferson-Sycamore	Stekoll Petroleum Co.	(-) Fld #3	Smith, Springer, Demott	6-33S-15E	400	--	Bartl	1,160	13	11	--	--	--	Yes
7871	--	Jefferson-Sycamore	Stekoll Petroleum Co.	(-) Fld #2	Hester, Banks, H.F.Adams Fitzgerald, H.F.Adams Weiner	15-34S-15E 16-34S-15E 21-34S-15E	600	--	Way	450	13	53	--	3	--	Yes
7077	No	Jefferson-Sycamore	Carl D.Wyckoff*	(-) Zinser	Zinser	8-33S-14E	180	--	Bartl	1,190	10	3	2	0	2	Yes
4666	No	Sorgum Hollow	BMG, Inc.	(P) Linn	Linn	30,31-32S-14E	160	--	Weiser	850	50	6	0	0	0	Yes
4990	No	Sorgum Hollow	BMG, Inc.	(P) Fowler	Fowler	17,19,20-32S-14E	150	--	Weiser	850	25	12	--	--	--	Yes
17353	No	Tyro	Collins Oil Co.	(W) East Tyro	Collins	4,5-35S-15E	100	--	Bartl	1,220	28	4	0	0	0	Yes
18002	No	Tyro	Collins Oil Co.	(D) Ext. North Canary Waterflood	Vinson	18-35S-15E	60	--	Bartl	1,240	23	2	1	--	1	No*
14036	No	Tyro	Layton Oil Co.	(W) Tyro Unit	Dunbar, Friedline, Grother, Wilson, Krebs Krebs	33-34S-15E 4-35S-15E	30	0	Bartl	1,164	17	16	17	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: In-active	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./ well/ day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection: 1976	Water Injection: Cum. 12-31-1976	Total Oil recovered from project Pri. & sec.: 1976	Total Oil recovered from project Pri. & sec.: Cum. 12-31-1976	Oil recovered by enhanced methods: 1976	Oil recovered by enhanced methods: Cum. 12-31-1976	Remarks
4924	8.8	2	0	0	Line	1299	2378	Prod	400	--	M	1956	S Gas	100/14	45	3.4	794,195	21,873,952	74,121	4,715,343	74,121	2,495,633	
590	15	0	0	0	5-spot	200	10	Prod + Pond	--	--	F	1967	S Gas	3/1	27	20	80,162	756,360	5,026	71,373	5,026	71,373	
13497 5762	--	--	--	--	Line	350	40	Prod	--	--	M	1958	S Gas	95/5	32-34	1005	160,375	4,972,733	3,630	375,500	--	--	*Was E.S & J.M.Cook.
18249	--	--	--	--	Line	295	35	Prod + Hertha	260	5	M	1964	S Gas	95/5	32	--	270,000	3,080,000	6,205	124,562	--	--	*Was E.Buddrus et al.
14695	7	--	7	--	7-spot	400 250 MCF	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Marathon Oil. †Injection interrupted by highway construction.
18294	13	--	0	0	Line	450	20	Prod	--	--	U	--	Gas Exp	--	27	--	72,000	--	8,262	--	5,000	--	*Was Elmer Sieg.
18289	12	10	--	--	Irreg	650	30	Prod + Pond	--	--	M	1950	S Gas*	9/1	29	--	100,000	--	3,900	--	3,900	--	* + Grav.
4829	3	0	0	0	4-spot	600	2	Prod + Hertha	260	20	U	--	Grav	--	32	--	730	--	160	--	0	--	*Was A.B.C.Oil Co. †Returned water only.
6337	4	8	0	0	5-spot	400	20	Prod	--	--	U	1958	Gas Exp†	9/1	32	--	500	300,000	500	125,000	--	80,000	*Was Larry Bogle;†+ Grav
12704	3	--	8	--	Irreg	40	30	Prod	--	--	M+U	--	--	--	32-33	--	600	12,000	500	--	0	--	
18513	1	0	0	0	Irreg	0	8	Prod	--	--	U	1976	Grav	3/2	32	--	660	--	4,981	--	0	--	
18332	--	--	--	--	--	--	--	--	--	--	-	--	--	---	--	--	--	--	1,814	--	--	--	*Was Wellsville Dev.Inc. †Not waterflooding present.
9128	20	0	0	0	--	300	3	Prod + Arb	--	--	T+S	1961	S Gas	1/0	30	22	6,800	699,516	145	59,254	--	--	*Was L.O.Tenk.
2494	24	--	--	--	5-spot	680	18	Prod + Hertha	--	--	M	--	--	95/5	29	--	154,300	--	3,285	--	--	--	*Was Southern Enterprises.
471 5273	17	--	4	--	5-spot	680	97	Prod + Miss	--	5	M	--	S Gas	95/5	31	--	280,350	2,918,695	19,345	144,107	--	--	*Was Richard Moherman.
	119	18	19	0													1,126,477	12,739,304	57,753	899,796	13,926	151,373	
18143	1	1	0	1	Irreg	50	200	Prod	--	--	U	1958	Wat	1/10	22	--	73,000	--	4,201	--	200	--	*Was E.W.Hayes.
5236	6	0	0	0	Irreg	275	75	Prod	--	--	U	1968	Gas Exp	--	31	--	120,000	--	2,500	--	1,500	--	
15114	1	--	--	--	Irreg	100	400	Prod	--	--	U	1970	Wat	--	25	9	146,000	--	2,293	--	2,293	--	
9081	14	0	0	0	5-spot	200	5	Prod	--	--	-	1954	--	9/1	--	--	24,500	2,469,561	1,717	0	--	--	
18071	1	--	--	--	5-spot	100	45	Prod + Oswego	600	30	U	1976	S Gas	99/1	34	--	17,200	17,200	1,920	11,920	1,620	1,620	*Was Richard Von Feldt
18129	3	0	--	0	Line	200	20	Prod	--	--	T	1975	--	--	28	--	--	--	815	--	--	--	
10093 13620	20	2	3	0	5-spot	565	33	Prod + Miss Lime	1322	30	U	1967	S Gas	1/8	35	--	228,305	1,327,918	10,716	71,708	10,716	71,708	
14651	5	1	0	0	Irreg	500	30	Prod + Arb	1370	--	U	1968	S Gas	6/1	33	--	72,496	354,477	3,780	23,456	3,780	23,456	
2045	--	--	--	--	5-spot	354	13	Prod + Fr	--	--	T+S	1959	Grav	9/1	36	--	30,976	--	3,818	--	--	--	*and C-2094
7871	42	--	--	--	5-spot	275	15	Prod + Sh Sd	135	35	T+S	1957	Grav	7/3	32	--	2,168	--	15,108	--	--	--	
7077	1	2	0	2	Irreg	225	20	Prod	--	--	U	1960	Gas Exp	10/1	34	--	7,300	--	464	--	150	--	*Was Hester & Wright.
4666	3	5	0	0	Irreg	300	450	Prod	--	--	U	--	S Gas	--	30	14.6	164,250	--	5,287	--	1,762	--	
4990	3	3	--	--	5-spot	100	50	Prod	--	--	U	--	S Gas	--	30	14.6	18,250	--	1,358	--	1,358	--	
17353	1	0	0	0	5-spot	400	200	Prod	--	--	U	1974	Grav	1/9	33	--	71,000	146,750	635	1,168	400	765	
18002	0	--	--	1	--	Abn	--	Prod + Bart	1240	23	U	1975	Grav	1/9	34	--	0	--	154	--	0	--	*Injection well plugged. May start 1977.
14036	13	0	0	1	5-spot	340	77	Prod + Tuck	1243	23	T	--	S Gas	--	32	--	365,152	1,075,609	6,402	22,197	6,402	22,197	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
MONTGOMERY COUNTY (Concl.)																
11712	25%	Wayside-Havana	H.J.Horton	(-) Mantooth-Dunham	Mantooth-Dunham	28-33S-14E	240	0	Way Sd	700	30	16	0	0	0	Yes
3222	50%	Wayside-Havana	H.J.Horton *	(P) Havener	Havener	33-33S-14E	160	120	Way Sd	700	30	8	0	1	0	No†
15264	No	Wayside-Havana	H.J.Horton*	(P) A.D.Berry	A.D.Berry	33-33S-14E	80	0	Way Sd	735	30	13	0	0	0	No†
17885	50%	Wayside-Havana	H.J Horton	(P) Kellenberger	Kellenberger	15-34S-14E	80	0	Weiser Sd	759	14	5	0	1	0	No*
17993	--	Wayside-Havana	W.H.Kurtis*	(W) Veith	Veith	27-33S-14E	80	20	Way	720	45	5	1	3	0	Yes
326	No	Wayside-Havana	Layton Oil Co.*	(W) Bragg-Riggle	Bragg, Riggle, McKemey Bragg	4-34S-14E 5-34S-14E	480	0	Way	660	30	17	85	0	0	Yes
10442	No	Wayside-Havana	Layton Oil Co.	(W) Schneider	Schneider (Hecht)	16-34S-14E	160	0	Weiser	720	0	4	0	0	0	No*
13823	No	Wayside-Havana	Layton Oil Co.	(W) --	Boan	35-33S-14E	6	0	Way	650	30	2	0	0	0	No*
1439 9034 10447 13726	No	Wayside-Havana	Layton Oil Co.	(W) Wayside	Allen, Dyer-Brewer, Garret-Dyer Dalby Paull, Bowersock Mitchell, Shearhart	5-34S-14E 7-34S-14E 8-34S-14E 32-33S-14E	530	0	Way	700	18	84	0	9	0	Yes
18598	No	Wayside-Havana	Nunneley-Powell-Jones	(P) Kellenberger	Kellenberger	5-34S-14E	50	0	Way	860	25	3	0	3	0	Yes
4513	No	Wayside-Havana	Raygary Oil Co.	(W) Watson	Watson	34-33S-14E	5	0	Way	722	20	5	--	--	--	Yes
18019	No	Wayside-Havana	Raygary Oil Co.	(P) Defenbaugh	--	34-33S-14E	10	0	Way	682	20	8	--	2	--	Yes
18020	No	Wayside-Havana	Raygary Oil Co.	(W) Mantooth	--	32-33S-14E	10	0	Way	692	18	5	--	--	--	Yes
18026	No	Wayside-Havana	Raygary Oil Co.	(P) Davidson	--	30-33S-14E	5	0	Way	660	8	4	--	--	--	Yes
18029	No	Wayside-Havana	Raygary Oil Co.	(W) Circle C	--	20-33S-14E	40	0	Weiser	784	14	6	--	--	--	Yes
16035	No	Wayside	Wheeler & Haddan	(D) Snell Unit	Snell, Blix, Brown	18-34S-15E	560	80	Way	550	30	37	7	4	2	Yes
		MONTGOMERY COUNTY TOTALS (Reported)					5310	140				404	129	30	5	
MORRIS COUNTY																
15416	No	Comisky	Maurice L.Brown Co.	(D) Porter "A"	Porter "A"	13-16S-9E	40	0	Viola	2,930	18	1	0	1	1	--
13263	--	Comisky Northeast	Jones & Co.*	(P) Viar-Porter B	Viar-Porter B	23,24-16S-9E	320	--	Viola	2,947	12	1	0	0	0	Yes
		MORRIS COUNTY TOTALS (Reported)					360	0				2	0	1	1	
MORTON COUNTY																
18039	Yes	Richfield	Ladd Petroleum Corp.*	(W) Berryman-Richfield	--	26,27,34,35-32S-41W 2,3,4,8,9,10,16,17 -33S-41W	4480	0	Up Morr	4,925	20	18	1	0	0	Yes
15918	--	Elkhart	Texaco	(W) Carthage NE Morrow "A"	Pritchett "A" & "B"	23-35S-43W	--	--	Morr "A"	4,300	15	2	0	0	0	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 Morr	4,192	35	30	34	3	0	Yes
15849	Yes	Taloga	Anadarko Production Co.	(W) Taloga Morrow "G" Unit	Cavanaugh, Riley C Riley, Hall, Westerfield, Watson Hall T, O'Dell, Cyr	26-34S-42W 35-34S-42W 2-35S-42W	1280	--	Morr "G"	4,494	11	7	3	0	0	Yes
13899	Yes	Taloga	Cities Service Oil Co.	(W) Taloga S Morrow G Sand Unit	Taloga S. Morrow G Sand Unit	1,10,11,12,13,14-35S-42W	3760	0	Morr "G"	4,553	14	13	0	0	0	Yes
12571	Yes	Wilburton	Cities Service Oil Co.	(P) Wilburton Morrow C Sand Unit	Wilburton Morrow C Sand Unit	28,29,33,32-34S-41W 4,5-35S-41W	3840	0	Morr C	4,900	20	12	4	1	0	Yes
13848	Yes	Wilburton	Cities Service Oil Co.	(W) Wilburton S-3 Lo. Morr Sd Unit	Wilburton S-3 Lower Morrow Sand Unit	5-35S-41W	640	0	S-3 Lo Morr	5,050	.5	1	3	0	0	Yes
		MORTON COUNTY TOTALS (Reported)					17800	0				83	45	4	0	

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
11712	4	0	0	0	5-spot	440	1575	Prod	--	--	U	1965	Grav	1/2	29	--	23,400	96,692	6,682	57,172	2,400	22,500	
3222	--	--	--	--	Peri	200	15	Prod	--	--	U	1954	Grav	1/2	30	--	5,475	2,026,975	1,467	12,882	0	--	*Was Consolidated Oil Co. †Water pumped into well when storage tank full.
15264	1	0	0	0	5-spot	Grav	18	Prod	--	--	-	1969	Grav	1/2	29	--	6,570	27,784	2,057	14,827	480	2,777	*Was Horton Oil Co. †Water pumped into well when storage tank full.
17885	--	--	--	--	Peri	Grav	12	Prod	--	--	U	1975	Grav	1/4	30	--	4,380	7,260	1,040	2,240	0	--	*Water pumped into well when storage tank full.
17993	1	0	1	0	5-spot	425	20	Prod	--	--	U	1975	Grav	1/4	30	--	6,800	9,680	1,800	2,850	--	--	*Was Homer Fox.
326	2	42	0	0	5-spot	150	8	Prod	--	--	U	1970	S Gas	1/2	30	--	5,840	--	2,313	--	0	--	*Was Hawkins Production Co.
10442	0	1	0	0	4-spot	--	--	Prod	--	--	U	1964	S Gas	1/3	31	--	--	26,000	51	5,005	0	--	*Mechanical difficulties. Operated as stripper.
13823	1	0	0	0	Peri	300	35	Prod	--	--	U	1967	S Gas	1/2	30	--	12,780	64,295	318	2,805	318	2,805	*Down part time due to mechanical problems.
1439 9034 10447 13726	75	24	20	0	5-spot	400	14	Prod + Salt Sd	430	30	U	1974	S Gas	1/5	30	--	394,452	668,933	72,082	160,566	72,082	160,566	
18598	1	0	1	0	Irreg	200	30	Prod	--	--	U	1976	Grav	1/2	30	--	1,500	--	1,500	--	--	--	
4513	1	--	--	--	5-spot	200	8	Prod	--	--	T	1976	Wat	2/3	29	--	480	--	600	--	--	--	
18019	2	--	0	--	5-spot	300	12	Prod	--	--	T	1975	Wat	1/2	29	--	5,860	--	3,650	--	300	--	
18020	1	--	1	--	5-spot	250	10	Prod	--	--	T	1975	Wat	6/40	29	--	7,300	--	1,920	--	120	--	
18026	1	--	--	--	5-spot	200	14	Prod	--	--	T	1975	--	4/14	29	--	5,110	--	960	--	160	--	
18029	3	--	1	--	4-spot	250	30	Prod	--	--	T	1975	Wat	12/65	31	--	43,800	--	3,840	--	1,800	--	
16035	2	--	0	--	5-spot	0	20	Prod	--	--	U	1971	Grav	7/3	31	--	5,800	--	10,800	--	900	--	
	209	81	27	5													1,870,144	8,319,134	172,248	388,796	108,741	308,394	
15416	1	0	0	0	Irreg	0	350	Prod	--	--	T	1970	Wat	--	23	--	127,750	1,859,317	2,563	100,452	--	--	
18263	2	--	--	--	Irreg	Vac	300	Prod	--	--	U	1976	Wat	2/98	22.7	--	108,192	108,192	2,208	83,373	2,208	2,208	*Was Cities Service Oil Co.
	3	0	0	0													235,942	1,967,509	4,771	183,825	2,208	2,208	
18039	9	0	0	0	Irreg	250	860	Ground Wat	--	--	F	1976	S Gas	--	38	--	2,836,023	2,836,023	90,868	2,863,465	--	--	*As of 6/1/75.
15918	1	0	0	0	Peri	1150	412	Prod + Ogal	225	400	F	1971	S Gas	--	40.4	2	150,456	742,858	14,062	90,781	14,062	88,452	
11602	10	3	0	0	Peri	674	1794	Prod + Ogal	200	100	M	1965	S Gas	32/249	39	2.49	6,549,751	76,213,876	959,249	13,102,507	959,249	10,969,009	
15849	2	1	0	0	Peri	370	1067	Prod + Ogal	140	80	M	1971	S Gas	30/5	43.5	2	778,889	4,282,081	9,758	52,181	9,758	52,181	
13899	7	0	0	0	Peri	549	439	Prod + Ogal	200	45	M	1969	S Gas	42/1	39	3.15	1,129,098	6,400,134	86,755	626,564	86,755	424,859	
12571	7	0	0	0	Peri	520	911 824*	Prod + Ogal	200	45	M	1966	S Gas + Gas Cap	11.7/1	42	4.51	1,619,516 600,910*	15,319,473 6,193,475*	279,281	5,566,747	279,281	3,065,186	*MCF.
13848	2	--	--	1	Irreg	517	77	Prod + Ogal	200	45	F	1968	S Gas	3499/0	42	4.5	51,107	1,275,786	6,071	205,294	6,071	108,479	
	38	4	0	1													13,114,840	107,070,231	1,446,044	22,507,539	1,355,176	14,708,166	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
NEOSHO COUNTY																
17765	No	Erie	A.H.Alcock	(W) Stegman Waterflood	Mary Stegman	2-29S-20E	80	0	Bartl	505	10-25	6	2	1	0	No*
15113	No	Erie	Forrest Crawford	(W) Ashcraft	Dewane Ashcraft	2-29S-20E	160	0	Way	120	20	--	--	--	--	No*
15249	No	Erie	Graybol-Patton Co.*	(W) Kinne Unit	O.A.Kinne B & M Kinne	13-28S-19E 18-28S-20E	80	0	Bartl	600	10-20	19	0	0	2	Yes
15761	No	Erie	Graybol-Patton Co.*	(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	31	--	1	--	Yes
15675	--	Erie	Jackson Oil Co.	(-) Maphies	Maphies	27-28S-20E	--	--	Bartl	480	20	9	--	--	--	Yes
10686 10687	No	Erie	Richard A.Soule*	(W) Erie Unit	Baker University, Christopher, Knight, Harding, Newell A, Newell C, Waggoner	23,24,25,26-28S-19E	250	50	Bartl	540	15	25	12	0	0	Yes
11382	No	Erie	Graybol-Patton Co.*	(W) Shaw Unit	Luther, Waggoner, McCan	13-28S-19E	40	80	Bartl	600	10-20	8	6	0	2	Yes
17823	No	Humboldt-Chanute	Graybol-Patton Co.*	(W) LaRue	LaRue	33-27S-19E	80	0	Bartl	740	10	4	0	1	0	Yes
4121	--	Humboldt-Chanute	Walter Lacey	(-) --	Raymond Fickel	20-28S-18E	20	--	Bartl	795	20	4	0	0	0	No*
14681	No	Humboldt-Chanute	Layton Oil Co.	(W) Earlton	Kepley	18-28S-18E	30	0	Bartl	800	16	3	2	0	2	No*
17053	No	Humboldt-Chanute	Richard A.Soule* Stanley G.Williams†	(W) South Caddo	Lien, Paulie, Rustman, Wells	11,12,14-28S-18E	90	--	Bartl	730	20	10	31	0	0	No#
11 264 514 290 741	--	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	--	Bartl	700	0-40	355	22	2	0	Yes
4612 8930	--	St.Paul-Walnut	T.P.Dent	(W) T & G Oil Co.	Henry Van Leeuwen, Thomas P.Dent	33-28S-21E	160	0	Bartl	395	416	10	4	0	2	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	500	16	10	9	--	--	Yes
7073	--	St.Paul-Walnut	Kanalta Resources Ltd.	(W) Dagget-Hazen	Roy L.Dagget	23-28S-20E	160	--	Bartl	500	16	12	11	--	--	Yes
8870	No	St.Paul-Walnut	MOCO Oil Co.	(-) Sisters Unit	Sisters Unit	17-29S-21E	160	--	Bartl	426-447	21	9	--	--	--	No*
16629	Yes	Thayer South	Wm.S.Wright-Ross	(P) Wright-Erbe-Ross	Mrs.C.F.Gildorb, Ralph Gildorb	11-30S-17E	30	--	Lo.Bartl	940	3-11	5	--	8	3	No*
10766	--	Trent	Drilex Oil & Gas, Inc.*	(W) Drilex Oil & Gas Inc.	Johnson, Blaine, Cleaver	23-28S-20E	255	0	Bartl	485	6-14	40	10	64	0	No†
8145	--	Trent	Erie Oil Co. Inc.	(W) --	Edward Stanley	22-28S-20E	60	--	Bartl	475	16	10	--	--	--	Yes
8378	--	Trent	Jackson Oil Co.	(W) McDermed	McDermed, Metzger	22-28S-20E	10	--	Bartl	480	20	26	--	--	--	Yes
16939	--	Yarnell	Jackson Oil Co.	(-) Yarnell	Blaine, Cooney, Perry	22-28S-20E	20	--	Bartl	480	20	9	--	--	--	Yes
		NEOSHO COUNTY TOTALS (Reported)					5316	150				652	109	77	11	
NESS COUNTY																
9920	No	Aldrich	Thornton E.Anderson*	(D) Edwards	Edwards	22-18S-26W	40	0	Miss	4,500	10	1	0	0	0	Yes
14618	--	Aldrich	Continental Oil	(W) Aldrich	C.R.Aldrich	7,8-18S-25W	320	0	Miss	4,350	12	4	0	--	--	Yes
2952 4276 7632	--	Aldrich	Hillenburg Oil Co.*	(W) Aldrich	Everett A Lythe, Harkness C Sutton A, Daisy Thompson, Bateman A	22-18S-26W 23-18S-26W 24-18S-26W	100	60	Miss	4,430	8	3	0	0	0	Yes
18583	--	Aldrich	Reed Oil Co.	(-) Palomino-Reed Project	Reed Olson Reed	27-17S-25W 33-17S-25W 34-17S-25W	--	0	Miss	4,303	6	3	0	2	0	Yes
7751	--	Aldrich	Tenneco Oil Co.	(-) Louise Everett	Louise Everett	8-18S-25W	40	20	Miss	4,390	37	1	1	0	0	Yes
13484	--	Aldrich Northeast	Barnett Oil, Inc.	(P) Shearer "B"	Shearer "B"	26-17S-25W	80	--	Miss	4,300	30	2	--	--	--	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
17765	1	2	0	0	Irreg	700	3214	Prod + Fr + Spring Wat + City Wat	60	20	F + P + City	1975	Primary	98/2	32	--	3,214	--	588	--	0	--	*Shut down 79 days due to lack of water.
15113	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Shut down all of 1976.
15249	15	--	0	--	Line	600	36	Prod + Canville Creek	--	--	M	1969	S Gas	1/0	32	--	197,677	1,307,979	14,909	175,239	14,909	175,239	*Was Graybol Oil Corp.
15761	17	--	0	--	Line	600	34	Prod + KC Lime + Surface Wat	150	10	M	1970	S Gas	1/0	32	--	212,193	--	14,744	109,161	14,744	109,161	*Was Graybol Oil Corp.
15675	4	--	--	--	5-spot	600	--	Prod	1200	10	T	1975	Grav	1/1	32	--	31,391	39,750	2,329	3,344	362	582	
10686	46	15	0	0	5-spot	525	25	Prod + River	--	--	M	1964	S Gas	--	31	--	419,750	--	8,870	--	8,870	--	*Was Tesoro Petroleum
10687																							
11382	2	8	0	10	Line	600	72	Prod + Canville Creek	--	--	M	1963	S Gas	1/0	32	--	52,888	646,027	1,589	21,218	1,589	21,218	*Was Graybol Oil Corp.
17823	2	--	0	--	Line	600	22	Prod + Big Creek	--	--	M	1975	S Gas	1/0	32	--	15,692	22,015	553	593	553	593	*Was Graybol Oil Corp.
4121	1	0	0	0	Irreg	550	40	Prod	795	20	U	1963	Grav	1/20	33.6	--	1,940	--	720	--	0	--	*Disposal well.
14681	0	11	0	0	5-spot	--	0	Prod + Sd	400	60	U	1968	S Gas	1/8	33	--	0	300,347	138	16,455	0	16,284	*Mechanical problems.
17053	3	12	0	0	5-spot	460	30	Prod	--	--	U	1965	Grav	--	33	--	23,000	--	1,500	--	1,500	--	*1/76 - 8/76 †8/76 - #Not enough water.
11	99	0	0	0	5-spot	800	39	Prod + Arb	1500	--	M	1974	S Gas	--	32	--	1,399,432	3,186,539	20,955	46,563	20,955	46,563	*Was Ross Keas Oil Inc.
264																							
514																							
290																							
741																							
4612	15	3	0	5	Irreg	370	8	Prod + Miss	550	--	-	--	Wat	4/1	32	32	32,950	--	1,460	--	--	--	
8930																							
9986	--	--	--	--	Line	500	424	Prod + Arb	1280	20	T	1963	Grav	10/1	31	--	155,078	1,715,198	20,425	316,699	6,342	107,544	
6713	13	--	--	--	Line	500	17	Prod + Miss	--	--	T	1958	Grav	2/1	29	--	80,000	--	291	--	291	--	
7073	4	--	--	--	5-spot	350	17	Prod	--	--	F	--	--	--	29	--	25,000	--	971	--	971	--	
8870	3	--	--	--	Irreg	Grav	--	Prod	--	--	U	--	Wat	--	30	--	--	--	519	--	519	--	*Injection intermittent.
16629	1	--	1	--	5-spot	300	12	Prod + Oswego	620	20	U	1972	Grav	1/0	27	--	--	--	--	--	--	--	*Weather.
10766	0	16	24	--	Line	--	--	Prod + Miss	1200	10	-	--	S Gas	9/1	28	--	0	--	12,000	--	0	--	*Was Polumbus Corp. †Preparing to inject on Blaine and Cleaver leases.
8145	9	--	--	--	5-spot	--	--	Prod	--	--	M	--	--	9/1	29	--	1,700	185,500	1,800	52,925	1,700	--	
8378	4	--	--	--	5-spot	550	86	Arb	1200	10	T	1968	Grav	1/1	30	--	31,250	220,658	4,506	26,626	1,602	9,590	
16939	4	--	--	--	--	550	365	--	1200	10	T	1976	Grav	1/0	26	--	55,082	55,082	4,252	4,252	2,160	2,160	
	243	67	25	15													2,738,237	7,679,095	113,119	773,075	77,067	488,934	
9920	1	0	0	0	Irreg	0	50	Prod	--	--	U	1963	Partial Wat Dr	1/4	37	--	18,000	210,500	1,535	65,572	--	--	*Was High Plains Prod. Co.
14618	1	0	--	--	Line	650	554	Prod	--	--	U	1968	Wat	--	36.1	--	202,766	1,514,618	10,402	82,194	7,158	32,194	
2952	1	2	0	0	5-spot	52	1210	Prod	--	--	T	1956	Wat	44/56	36	--	441,650	--	17,141	--	17,141	--	*Was Terra Resources Inc.
4276																							
7632																							
18583	1	0	0	0	Irreg	550	129	Prod + Miss Lime + Dak Sd	4310	10	T	1976	Wat	43/57	36	--	15,809*	15,809*	14,400*	14,400*	0	--	*Reed lease only.
7751	1	0	0	0	Irreg	80	210	Prod	--	--	T	1955	--	7/13	36	--	76,650	471,807	1,670	299,034	--	--	
13484	1	--	--	--	Irreg	380	650	Prod	--	--	U	1967	S Gas	1/4	37	--	237,900	1,628,750	21,577	479,529	6,000	42,900	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
NESS COUNTY (Concl.)																
14896	No	Bellesprit Cherokee	Walters Drilling Co.	(P) Ryan	Ryan, Irvin*	22-16S-21W	80	80	Cher Sd	4,260	15	3	0	4	1	Yes
10347	No	Dickman	Walters Drilling Co.	(P) Dickman (Miss)	Tilley Dickman, Elmore Humphrey	8-17S-24W 17-17S-24W 18-17S-24W	--	--	Miss	4,500	40	7	1	11	3	Yes
16010	--	Dumler	Pickrell Drilling Co.	(W) Dumler Unit	Dumler Unit	2,11-17S-26W	120	80	Miss	4,500	15	3	2	0	0	Yes
16067	--	Nirvana	Leben Oil Corp.	(-) Debes	Debes	23-18S-24W	160	--	Miss	4,310	2	1	--	--	--	Yes
10676	No	Petersilie	Kewanee Oil Co.	(P) Petersilie	Petersilie	14-20S-24W	80	0	Miss	4,388	22	2	1	0	0	Yes
17321	--	Petersilie	Meltzer Oil Co.*	(D) Petersilie	Petersilie "A" & "B"	14-20S-24W	320	--	Miss	4,406	4	3	--	--	--	Yes
17417	--	Prairie Ridge	Empire Drilling Co.	(P) Armstrong	Armstrong	7-16S-26W	120	0	Miss	4,520	--	1	--	--	--	Yes
17407	No	Stutz East	Patrick Petroleum Corp.	(P) Rupp "F" Lease	Stutz Rupp "B" & "E" Rupp "A" Ryan "C" & "E"	8-17S-25W 9-17S-25W 10-17S-25W 16-17S-25W	--	0	Miss	4,440	20	10	0	3	1	Yes
		NESS COUNTY TOTALS (Reported)					1460	240				44	5	20	5	
NORTON COUNTY																
15718	--	Hansen Estate	Leben Oil Corp.*	(-) Stenger	Stenger	2-5S-22W	160	--	Gorham Sd	3,575	2	1	--	--	--	--
17985	No	Harting	Robert E.Davis*	(W) Harting	Harting	2-4S-23W	120	0	Reagen	3,701	10	4	0	0	0	Yes
		NORTON COUNTY TOTALS (Reported)					280	0				5	0	0	0	
PAWNEE COUNTY																
16981	No	Badger-Hill	Walters Drilling Co.	(P) Zugg	Zugg	7-23S-18W	120	0	LKC	4,200	10	3	0	3	0	Yes
6115	--	Benson Southeast	Cities Service Oil Co.	(W) Benson Unit Southeast	Benson Southeast Unit	31,32-23S-15W	77	35	LKC	3,700	35	4	1	0	3	Yes
18063	--	Dunes North	Kaiser Francis	(D) Fertig B	Fertig B	15-22S-15W	80	0	LKC	3,512	231	1	0	0	0	Yes
8878	No	Garfield	A.L.Abercrombie, Inc.	(D) Hutchinson "D"	Hutchinson "D"	9-23S-17W	20	280	Miss-Congl	4,228	26	2	0	0	0	Yes
13723	No	Garfield	A.L.Abercrombie, Inc.	(-) Fertig	Fertig	15-23S-17W	20	140	Miss-Congl	4,220	30	2	0	0	0	Yes
12708 10116	No	Garfield	Maurice L.Brown Co.	(P) Garfield	Fergus A & C Hutchinson B-C & D Spence Wilson	16-23S-17W 17-23S-17W 18-23S-17W 20,21-23S-17W	480	960	Mise Miss	4,300 4,200	15	1	0	0	0	--
17322	No	Hurray	A.Scott Ritchie	(P) Compton	Compton, Stan Compton	3-22S-15W	180	0	Arb	3,947	103	4	0	5	1	Yes
17123	--	Lovette	Leben Oil Corp.	(-) Guffy	Guffy	35-22S-15W	320	--	LKC	3,686	6	1	--	--	--	Yes
4616	--	Lovette	Rine Drilling Co.*	(D) Lovette FWD	Lovette	35-22S-15W	40	--	LKC	3,685	8	2	0	0	0	Yes
13114 14134	--	Oro	NCRA	(W) Hagerman-Matoush	Matoush Hagerman	9-20S-19W 10-20S-19W	60	10	Cher	4,184	22	--	--	--	--	No*
14971	--	Oro Northwest	NCRA	(W) Van Rensselaer	Van Rensselaer	5-20S-19W	160	0	Pawnee Sd	4,194	7	2	1	0	0	Yes
18538	No	Point View	F & M Oil Co., Inc.	(P) Point View	Barstow	25-22S-15W	320	0	Lans	3,570	5	1	0	0	0	Yes
14328	No	Rutherford	Murfin Drilling Co.*	(P) Almquist WF	Almquist	5-20S-16W	160	125	Arb	3,795	5	2	0	0	0	Yes
12417 8460	--	Shiley	Cities Service Oil Co.	(W) Shiley Waterflood	Jennings "C" & "D" Risse "A"	13-20S-20W 14-20S-20W	70	130	B Penn Sd	4,170	7	2	0	0	4	Yes
		PAWNEE COUNTY TOTALS (Reported)					2107	1680				27	2	8	8	
PHILLIPS COUNTY																
16225	--	Beckman South	Petroleum Management Inc.	(W) Beckman South Project	Roeder Beckman, Flanigan, Clark, Roeder	9-4S-19W 10-4S-19W	680	0	LKC	3,248	116	10	1	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
14896	1	--	1	--	Irreg	200	107	Prod	--	--	U	--	Partial Wat Dr	95/5	38	--	116,738	--	13,357	281,983	6,679	66,000	*Irvin lse plugged 12/76
10347	1	0	1	0	Irreg	250	--	Prod	--	--	U	1963	Partial Wat Dr	95/5	35	--	388,000	--	27,812	681,243	13,906	--	
16010	0	0	0	0	Line	270	787	Chey Sandstone	1075	20	U	1971	S Gas	68/73	36	2.5	76,110	1,205,325	12,071	301,357	0	3,147	
16067	1	--	--	--	Irreg	Vac	23	Prod	--	--	T	1971	S Gas	--	--	--	8,395	46,805	1,000	20,611	--	--	
10676	1	0	0	0	Irreg	0	277	Prod	--	--	U	1964	Wat	80/81	38	--	101,092	1,258,220	6,882	395,015	--	--	
17321	--	--	--	--	Irreg	0	200	Prod	--	--	U	1974	--	1/9	36	--	73,000	--	4,602	--	0	--	*Was Artnell Co.
17417	1	--	--	--	Peri	800	51	Prod	--	--	T	1974	S Gas	78/22	37.8	--	18,615	42,997	10,249	210,892	--	--	
17407	1	0	0	0	Irreg	180	54	Prod	--	--	T	1974	Grav	1/1	37	--	193,320	378,120	68,377	223,417	--	--	
	12	2	2	0													1,968,045	6,772,951	211,075	3,055,247	50,884	144,241	
15718	--	--	--	--	Irreg	0	--	Prod	--	--	T	1970	S Gas	60/5	36	--	1,825	11,550	2,190	20,400	--	--	*Was T.I.Leben et al.
17985	1	0	0	0	Peri	Vac	217	Prod	--	--	U	1975	S Gas	10/1	28	--	79,401	120,561	9,296	113,998	2,900	5,300	*Was A.Ainsworth.
	1	0	0	0													81,226	132,111	11,486	134,398	2,900	5,300	
16981	1	0	1	0	Peri	Vac	86	Prod	--	--	U	--	S Gas	95/5	41	--	93,705	--	42,618	391,325	14,000	122,500	
6115	3	1	0	1	Peri	507	286	Prod + Wat Sd	67	--	M	1958	S Gas	68/160	41	--	494,170	7,719,674	8,732	870,050	8,732	354,918	
18063	1	0	0	0	Irreg	Vac	30	Prod	--	--	U	1975	Gas Exp	--	26	--	10,000	10,350	2,920	--	--	--	
8878	1	0	0	0	Irreg	Vac	17	Prod	--	--	U	1965	S Gas	1/1	35	--	5,508	1,408,163	1,810	603,851	--	--	
13723	1	0	0	0	Irreg	Vac	--	Prod	--	--	U	1967	S Gas	1/3	35	--	50,400	430,402	3,874	330,571	1,000	3,682	
12708 11016	--	--	--	--	Irreg	0	114	Prod	--	--	T	1963	Limited Wat	--	37	5.61*	37,400	1,364,179	6,188	1,370,969	1,547	42,809	*@100.
17322	1	1	1	1	Irreg	0	500	Prod	--	--	U	1974	S Gas*	1/4	62	--	180,000	180,000	17,622	104,964	--	--	*+ Partial water drive.
17123	1	--	--	--	Irreg	Vac	11	Prod	--	--	T	1973	S Gas	--	36	--	4,014	13,034	2,170	48,256	--	--	
4616	1	0	0	0	Irreg	Vac	12	Prod	0	0	T	1964	Wat	10/8	23	--	4,380	50,972	3,876	131,644	584	1,501	*Was C.H.Todd Inc.
13114 14134	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	33,777	1,824,300	1,962	118,856	1,962	85,807	*Project ended 5/76.
14971	1	0	0	0	Irreg	550	339	Prod	--	--	U	1969	S Gas	1/0	45.4*	--	123,609	537,710	22,512	354,961	--	--	*@ 60.
18538	1	0	0	0	Peri	Vac	30	Prod	--	--	U	1975	S Gas	1/1	24	--	10,950	17,340	6,694	11,510	--	--	
14328	1	0	0	0	Irreg	1200	171	Prod	--	--	T	1968	S Gas	---	42	--	62,415	628,306	2,480	345,856	2,480	51,980	*Was Sun Oil Co.
12417 8460	1	0	0	2	Line	775	280	Prod + Dak	362	--	M	1961	S Gas	1/1	36	5	326,576	2,299,891	6,702	529,460	6,702	307,080	
	14	2	2	4													1,436,904	16,484,321	130,160	5,212,273	37,007	970,277	
16225	5	0	0	0	Irreg	600	126	Prod + Dak Sd	--	--	T	1971	--	2.2/1	36	--	191,357	936,430	22,161	294,454	22,161	117,702	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
PHILLIPS COUNTY (Concl.)																
8011 --		Dayton	Sierra Petroleum Co.,Inc.	(W) Dayton Unit	Schluntz Kaiser R.L.Dusin, C.G Eltiste E.C.Garber	25-25S-19W 26-25S-19W 35-25S-19W 36-25S-19W	640	0	KC	3,200	23	7	0	0	0	Yes
15367 --		Della	Petroleum Management, Inc.	(W) Slinker	White, Merklein, Slinker Slinker Lutz Boethin, Lutz	19-4S-19W 24-4S-20W 17-4S-19W 18-4S-19W	40	20	LKC	3,180	152	2	0	0	1	Yes
15214 Yes		Fredricksburg	Ladd Petroleum Corp.	(-) Seyler	Imm, Seyler "A", "B", & "C"	9-1S-18W	160	0	LKC	3,050	450	3	0	0	0	Yes
17919 --		Hansen	Cities Service Oil Co.	(W) Hansen LKC Waterflood	Templeton "A", Lappin "A" Brown "B", Hansen "C" Reese "F"	14-5S-20W 14-23-5S-20W 22-5S-20W	960	0	LKC	2,926	30	22	0	0	0	Yes
17918 --		Hansen	Skelly Oil Co.	(W) B.O.Graham	B.O.Graham	22,23-5S-20W	160	0	Lans-Arb	3,232	32	10	0	0	0	Yes
17599 --		Huffstutter	Leland R.Baird	(W) Wolf	Wolf	15-1S-18W	--	0	KC Lime	3,286	46	4	0	1	0	Yes
15283 No		Huffstutter	Good & Phillips Oil Co.	(P) O'Neill Pressure Maintenance	O'Neill	22-1S-18W	80	20	LKC	3,327	20	1	0	0	0	Yes
6746 --		Huffstutter	Ladd Petroleum Corp.	(W) North Huffstutter Unit	--	16,17,20,29-1S-18W	3,240	--	LKC	3,400	254	30	2	0	0	Yes
8461 --		Huffstutter	Petroleum Management Inc.	(W) Center Huffstutter Unit	--	31-1S-18W 5,6,7-2S-18W	1,220	280	LKC	3,365	235	38	8	--	--	Yes
13834 --		Huffstutter	Petroleum Management Inc.	(W) Huffstutter NW	Huffstutter "C", W.A.Jackson, Rakestraw	31-1S-18W	130	0	LKC	3,350	235	4	1	0	0	Yes
8141 Yes		Huffstutter	Phillips Petroleum Co.	(-) Huffstutter Coop Unit	Huffstutter Coop Unit	13-2S-19W	345	0	LKC	3,400	50	5	0	0	0	Yes
9984 Yes		Huffstutter	Phillips Petroleum Co.	(W) Huffstutter	Huffstutter Unit	7-2S-18W 12-2S-19W	520	0	LKC	3,400	50	13	0	0	0	Yes
8195 --		Huffstutter	Sierra Petroleum Co.Inc.	(W) Kelly Unit	Hopper, Kelly	23-2S-19W	80	160	LKC	3,280	176	2	0	0	0	Yes
13887 --		Logan	Dane G.Hansen Trust	(D) Stephens-Ross	Stephens Ross	34-4S-20W 35-4S-20W	200	0	LKC	3,200	220	2	0	0	0	Yes
6898 --		Mont Sol	Petroleum Management Inc.	(W) Mont Sol LKC Unit	Krause "B"	6-4S-18W	100	--	LKC	3,200	28	2	0	0	0	Yes
15215					Krause "A" Krause "A" Sophia Meyers	7-4S-18W 1-4S-19W 12-4S-19W										
13967 --		Slinker	Cities Service Oil Co.*	(W) Slinker Toronto & Lansing-K.C.	Donahey, Lynch "B", Slinker, Fox, Radloff, Lynch "A"	25-4S-20W 30-4S-19W 36-4S-20W	425	--	Tor-LKC	3,098 3,118	20	6	4	0	0	Yes
16645 --		Slinker	Petroleum Management Inc.	(W) Adee Unit	Schneider B Schneider A & B Schneider A & B, Adee	19-4S-19W 29-4S-19W 30-4S-19W	--	0	Lans	3,162	150	5	0	0	0	Yes
14227 --		Stoneman	T.W.Jackson	(-) T.W.Jackson	Elsie #5, Jackson #3	20-4S-18W	400	--	Lans	--	--	--	--	--	--	Yes
14228																
12731 --		Stoneman	Santa-Fe Pipe & Supply Inc.*	(W) Bredemeier	Bredemeier	28-4S-18W	80	40	KC	3,050	18	2	0	0	0	Yes
1631 --		Stuttgart	Petroleum Management Inc.	(W) Stuttgart	--	13,14,23-3S-19W	165	--	LKC	3,200	35	2	2	0	0	Yes
12729 --		Stoneman	Petroleum Management Inc.	(-) Stoneman Field Waterflood	Stoneman Morgan Sutley, Quanz, Van Der Wege	20-4S-18W 21-4S-18W 29-4S-18W	1140	0	LKC	3,105	235	12	4	0	0	Yes
12730																
16728 --		Veeh	Petroleum Management Inc.	(W) Grau	Grau, Emma	35-3S-19W	160	--	Lans	3,208	223	3	--	--	--	Yes
		PHILLIPS COUNTY TOTALS(Reported)					10925	520				185	22	I	I	
PRATT COUNTY																
14279 No		Barnes Southwest	Bowers Drilling Co.,Inc.	(D) Barker	Barker, Bergner, Bergner A	35-27S-12W	320	160	KC	3,626	8	7	1	9	1	--
4080 --		Chitwood	Raymond Oil Company, Inc.*	(W) Chitwood	--	14,22,23,26,27-28S-12W	1200	--	Simp	4,390	23	4	--	--	--	Yes
16091 Yes		Cunningham	Braden-Deem Inc.	(W) Cunningham Waterflood	--	3-28S-11W	400	--	LKC	3,430	15	5	0	0	0	Yes
16624 --		Frisbie	Energy Reserves Group Inc.	(W) A.E.Frisbie	A.E.Frisbie	5-26S-13W	80	0	LKC	3,948	50	2	0	0	0	Yes
5215 --		Frisbie	Range Oil Co. Inc.	(P) F.Smith	F.Smith	6-26S-13W	160	--	Lans	--	15	4	--	--	--	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp @ 60 F	Production and injection statistics (bbls): Water Injection: 1976	Water Injection: Cum. 12-31-1976	Total Oil recovered from project Pri. & sec.: 1976	Total Oil recovered from project Pri. & sec.: Cum. 12-31-1976	Oil recovered by enhanced methods: 1976	Oil recovered by enhanced methods: Cum. 12-31-1976	Remarks
8011	6	0	0	O	Line	840	130	Prod + Chey	1060	--	T	1960	S Gas	--	36	6	286,830	3,988,115	24,464	568,602	24,464	568,602	
15367	1	0	0	O	Irreg	575	162	Prod	--	--	U	1970	S Gas	99/1	35	--	59,039	332,856	2,731	16,276	2,731	10,260	
15214	1	0	0	O	Irreg	600	142	Dak	1055	75	T	1969	S Gas	3.5/1	35	--	51,880	315,021	6,592	166,390	6,592	75,821	
17919	9	0	0	O	Peri	80	242	Prod	--	--	T	1976	S Gas	--	36	--	445,491	445,491	24,619	1,606,938	61,515	61,515	
17918	3	0	0	O	Irreg	0	194	Prod	--	--	U	1976	S Gas	77/175	34	--	146,835	146,835	33,341	1,628,401	7,041	7,041	
17599	1	0	0	O	Irreg	660	120	Prod	--	--	T	1974	Grav	25/15	36	--	40,032	69,267	16,193	113,752	--	--	
15283	1	0	0	O	Irreg	375	63	Prod	--	--	T	1969	S Gas	--	34	--	22,995	189,410	2,337	20,475	2,000	10,690	
6746	19	4	0	0	Irreg	480	84	Prod + Dak	1055	75	T	1956	S Gas	--	36	--	584,505	11,382,927	69,095	3,458,658	69,095	1,258,658	
8461	13	--	--	--	--	425	128	Dak Sd	1050	--	T	1961	S Gas	1/0	37.3	--	606,214	8,205,495	90,414	2,174,333	90,414	2,174,333	
13834	2	1	0	0	Irreg	300	146	Dak Sd	--	--	T	1967	--	1/0	37	--	116,516	1,292,969	6,607	231,390	6,607	231,390	
8141	2	1	0	1	Irreg	35	429	Prod + Dak	871	30	U	1972	S Gas	3/2	35	--	313,245	2,489,557	18,399	858,200	16,131	278,782	
9984	6	0	0	0	Irreg	275	208	Prod + Dak	1000	--	U	1963	S Gas	1/1.7	36	9	456,612	4,158,311	33,503	910,155	30,410	480,439	
8195	2	0	0	0	Irreg	--	120	Prod	--	--	T	1961	S Gas	--	32	--	43,710	1,232,722	2,250	113,193	2,250	113,193	
13887	1	0	0	0	Irreg	Vac	66	Prod	--	--	T	1967	S Gas	1/1	28-31*	--	24,190	190,555	3,644	41,310	--	--	*Also 33-36.
6898 15215	2	--	--	--	Line	550	123	Prod + Dak	1130	50	T	1960	S Gas	10/3	36	--	65,142	1,426,284	3,595	326,753	3,595	326,753	
13967	5	0	0	0	Peri	696	401	Prod + Dak Sd	740	220	M	1967	S Gas	1/1.09	37	3.6	110,106	4,931,008	4,933	1,233,772	4,933	386,117	*Was C.H.Todd Inc.
16645	1	0	0	0	Irreg	250	235	Prod	--	--	U	1972	Wat	2/1	36	--	85,625	285,207	9,075	94,899	8,582	24,734	
14227 14228	2	0	0	0	--	550	135	--	--	--	-	--	--	--	--	--	47,942	181,864	--	--	--	--	
12731	1	0	0	0	--	550	20	Prod + Ced H	950	150	U	1966	S Gas	3/2	38.4	--	19,427	256,698	1,800	33,050	1,800	--	*Was Hershberger Exp.
1631	2	5	0	0	Irreg	400	257	Prod	--	--	U	1952	S Gas	2/1	35.3	--	182,822	6,414,630	2,551	59,841	2,551	59,841	
12729 12730	4	2	--	--	Irreg	425	45	Prod + Dak Sd	960	100	T	1966	S Gas	1/1	38	--	64,691	2,837,811	31,738	916,618	31,738	331,928	
16728	1	--	--	--	Irreg	700	87	Prod	--	--	U	1973	--	--	--	--	31,752	202,354	6,043	73,256	4,451	32,582	
	90	13	0	1													3,996,958	51,911,817	416,085	14,940,716	399,061	6,550,381	
14279	1	0	1	0	Peri	1000	800	Fr	200	50	M	1972	Grav	7/3	38	--	200,000	450,000	23,048	424,880	8,000	18,000	
4080	3	--	--	1	Irreg	Vac	448	Prod	--	--	U	1955	S Gas	--	38	--	725,000	39,371,411	10,264	3,817,113	10,264	3,817,113	*Was Lion Oil Co.
16091	4	0	0	0	Irreg	800	1092	Prod + Ground	40	60	M	1971	S Gas	1/1	36	--	398,478	3,257,555	8,650	55,006	2,300	6,800	
16624	1	0	0	0	Irreg	Vac	64	Prod	--	--	U	1972	S Gas	8/9	31.5	--	23,352	100,761	4,446	21,769	4,446	19,656	
5215	2	--	--	--	Peri	0	300	--	--	--	U	--	S Gas	1/4	30	--	109,500	--	4,389	29,834	1,097	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
PRATT COUNTY (Concl.)																
15235 --		Gereke West	Phillips Petroleum Co.*	(W) Gereke Unit	Neelly D Curtis #6, Curtis F Neelly C, Curtis C, Curtis, Neelly #1 & #2, Piland	2-26S-15W 10-26S-15W 11-26S-15W	420	0	LKC	3,980	6	5	0	0	0	Yes
15321*--		Haskins	Leben Oil Corp.	(-) Berry-Haskins	Berry-Haskins	32-26S-14W	--	--	--	--	--	--	--	--	--	--
13600 --		Iuka-Carmi	Getty Oil Company	(W) Miskimen-Simpson	V.E.Miskimen L.R.Freymiller	32-26S-12W 5-27S-12W	160	0	Simp	4,214	30	5	0	0	0	--
11041 No		Iuka-Carmi	Ronald Russ Praten Inc.	(W) C.J.Binger	C.J.Binger	31-26S-12W	144	--	Simp	4,175	30	3	--	--	--	No
4827 No		Iuka-Carmi	Rine Drilling Co.*	(P) --	Briggeman A Briggeman B, Hoener B	34-26S-13W 35-26S-13W	30	0	KC	3,992	7	3	0	0	0	Yes
6895 --		Iuka-Carmi	Skelly Oil Company	(W) Iuka-Carmi Helmke Unit	Helmke "H" & "J" Helmke "B", Beck "A", Luders "B", F.B.Wagner	6-27S-12W 7-27S-12W	680	100	Simp Sd	4,230	18	7	10	0	0	Yes
8202 --		Iuka-Carmi	Skelly Oil Company	(W) South Iuka-Carmi Unit	Luders "B", F.B.Wagner J.E.Brown, M.D.Burkner, M.A.Justice Beck	7-27S-12W 18-27S-12W 12-27S-13W	680	0	Simp	4,270	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	4,200	25	4	0	0	0	Yes
11392 No		Iuka-Carmi	Terra Resources, Inc.	(D) Iuka-Carmi-No.Sector	McFadden "C" Calbeck "A"	6-27S-12W 1-27S-13W	160	130	Simp Sd	4,236	33	4	0	0	0	Yes
16490 No		Moore West	Thornton E.Anderson*	(P) Henderson Lease	Collins Henderson	3-26S-14W 4-26S-14W	80	--	LKC	3,804	8	1	0	0	0	Yes
13954 Yes		Rollingson	Beren*	(W) North Rollingson 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	4,310	7	6	4	0	0	Yes
		PRATT COUNTY TOTALS (Reported)					5174	600				68	21	9	1	
RAWLINS COUNTY																
16643 Yes		Cahoj	Getty Oil Co.	(W) Cahoj LKC Waterflood	Cahoj Unit	3,4,8,9,10,16, 17,18,20-1S-34W	2880	0	LKC	4,062	156	29	7	0	0	Yes
15518 Yes		Cahoj	Halliburton Oil Producing Co.	(P) S.E.Cahoj	Thieler, Fikan, Rosa Dozbaba Cahoj "H" Micek, Richard Dozbaba	15-1S-34W 16-1S-34W 21,22-1S-34W	1120	10	LKC	4,047	20	9	0	0	0	Yes
17253 No		Cahoj	Kern Co.	(W) A.Sramek	A.Sramek	18-1S-34W	40	--	LKC	4,045	10	2	--	--	1	No*
11929 --		Cahoj West	Burch Exploration Inc.	(D) Cahoj	Sis Chadderdon Savage	12-1S-35W 13-1S-35W 14-1S-35W*	400	200	LKC	4,154-4,249	24	2	0	0	1	Yes
18265 --		Cahoj West	Empire Drilling Co.	(P) Ruda Waterflood	Horinek B Ruda	11,12-1S-34W 13,14-1S-34W	640	--	LKC	4,400	--	5	--	--	--	Yes
14615 --		R.H.P.	Empire Drilling Co.	(P) R.H.Palmer Waterflood	R.H.Palmer Cora Graves	6-1S-33W 7-1S-33W	100	40	LKC	4,078	6	7	--	--	--	Yes
15426 --		R.H.P.	Petroleum Management Inc.	(W) Palmer	Palmer "B" Palmer "C", Bucy	5-1S-33W 8-1S-33W	160	10	Oread	3,825	8	4	0	0	0	Yes
16115 No		Waterman	John O.Farmer, Inc.*	(-) Ruda-Waterman	Ruda, Waterman	15-4S-33W	320	--	Marm	4,146	8	1	--	--	--	No†
17213 Yes		Wilhelm	Getty Oil Co.	(W) Wilhelm Unit	Wicke "C", W.J.Wicke E.W.Wicke Meyer "B", Wilhelm Meyer, E.H.Wicke, Meyer "A"& "C" Wicke "A" & "B", Harrison Wicke "B" Harrison E.H.Wicke Harrison R.A.Rueber D.Leseberg, Harrison Rueber	16-1S-32W 17-1S-32W 20-1S-32W 21-1S-32W 28-1S-32W 29-1S-32W	1440	0	LKC	3,900	13	13	2	3	0	Yes
16985 No		Wilheim	Donald C.Slawson	(W) Wicke "C"	Wicke "C"	17,18-1S-32W	240	0	LKC	3,900	6	2	0	0	0	Yes
		RAWLINS COUNTY TOTALS (Reported)					7340	260				74	9	3	2	

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
15235	6	0	0	0	Peri	300	314	Prod + Meade	50	100	M	1969	S Gas	4/1	38	--	687,767	4,185,417	10,948	76,090	7,280	47,899	*Was Petrominerals Corp.
15321	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	---	--	--	*No longer operative.
13600	1	0	0	0	Irreg	360	470	Prod + Sh Sd	90	--	M	1967	S Gas	1.71/1	39	--	162,161	547,632	26,437	428,122	26,437	428,122	
11041	1	3	0	0	Peri	0	82	Sd	150	--	U	1964	S Gas	--	38	--	29,900	2,973,780	7,400	115,548	7,400	115,548	
4827	1	0	0	0	Peri	520	283	Prod	--	--	T	1965	S Gas	4/7	36	--	103,295	1,212,970	3,097	46,803	2,652	31,036	*Was C.H.Todd, Inc.
6895	6	3	0	0	Irreg	300	743	Prod + Sh Sd	90	--	M	1961	S Gas	3,314/347	38	--	1,631,190	19,951,215	17,379	3,800,252	17,379	1,663,452	
8202	5	3	0	0	Irreg	200	471	Prod + Sh Sd	90	--	M	1961	S Gas	3,929/2,792	38	--	861,992	10,776,396	18,415	2,459,615	18,415	1,079,403	
11297	3	0	0	0	Irreg	0	408	Sh Sd	90	--	F	1964	S Gas	236/334	40	--	448,237	4,215,520	18,517	854,947	18,517	261,878	
11392	1	0	0	0	Irreg	Vac	1198	Prod + Pleist Gr	117	55	T	1959	S Gas	34/66	37.8	--	426,017	10,284,824	12,739	2,029,349	12,739	1,057,154	
16490	1	0	0	0	Irreg	0	70	Prod	--	--	U	1972	S Gas	1/4	36	--	24,000	114,000	5,140	180,195	2,100	2,100	*Was Dunne-Gardner.
13954	1	2	0	0	Peri	150	171	Prod	--	--	U	1968	S Gas	40/33	38	--	62,586	--	10,584	781,133	8,467	--	*Was Amerada-Hess.
	37	11	1	1													5,893,475	97,441,481	181,453	15,120,656	147,493	8,548,161	
16643	16	2	0	0	5-spot	250	471	Prod + Dak	2312	78	U	1973	S Gas	7,104/8,664	34.2	--	2,761,074	8,593,453	149,945	4,426,391	149,945	203,289	
15518	7	1	0	0	Peri	800	1075	Prod + Dak	2215	335	T+S	1970	S Gas	3.5/1	36	--	392,473	1,156,946	36,682	764,304	13,926	21,926	
17253	0	0	0	0	Line	--	--	Prod	--	--	U	--	S Gas	16.5/8.5	35.4	14	0	0	4,919	53,087	0	0	*Project has not been started.
11929	1	0	0	0	Irreg	0	240	Prod + Ced H	2500	70	T	1964	--	1/1	36	6	2,920	637,471	4,548	54,928	2,920	637,471	*Plugged.
18265	1	--	--	--	Irreg	800	23	Prod	--	--	T	1976	Grav	65/35	34	--	6,358	6,358	11,346	354,253	2,000	2,000	
14615	1	1	--	--	Irreg	750	203	Prod	--	--	T	1968	Grav	67/33	38	--	74,337	703,591	17,818	412,729	9,000	148,000	
15426	2	0	0	0	Irreg	150	114	Prod	--	--	T	1970	S Gas	8/24	25	--	83,647	445,278	12,677	204,531	12,677	80,860	
16115	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Sam Pack.
17213	4	0	0	0	Irreg	350	283	Prod + Dak	1660	50	T	1974	S Gas	1/1	34	--	414,773	883,227	77,770	1,029,761	41,770	89,818	†Injection not started.
16985	1	0	0	0	Irreg	0	128	Prod	--	--	U	1973	S Gas	1.5/1	32	6	46,080	58,112	8,230	47,861	4,115	6,115	
	33	4	0	0													3,781,662	12,484,436	323,935	7,347,845	236,353	1,189,479	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
RENO COUNTY																
10925	No	Albion North	Harry A.Sprague	(P) Graber Pressure Maintenance Project	H.D.Graber, Martin Graber, Krehbiel "A" & "B"	11-26S-6W	240	0	Viola-Simp	3,990	10	3	2	0	0	Yes
13754	--	Beck West	Santa-Fe Pipe & Supply, Inc.*	(W) Roach	Roach	14-23S-9W	40	80	B Penn Sd	3,720	7	1	0	1	1	Yes
15881	No	Burrton	J.A.Allison	(P) Seedle "A"	Collins "A", Seedle "A"	16-24S-4W	--	--	Hunt	3,318	30	2	1	0	0	Yes
13167	No	Burrton	R.L.Evans Trust	(D) Evans "B"	Evans "B"	23-23S-4W	160	80	Miss	3,285	10	4	0	0	0	Yes
10414	No	Burrton	Harold J.Milburn	(D) Haury	Haury White	1-23S-4W 2-23S-4W	100	40	Miss	3,243	40	2	0	0	0	Yes
11618	No	Burrton	Okmar*	(P) Evans & Base W.F.	Evans, Base	36-23S-4W	80	0	Miss	3,258	40	8	0	0	0	Yes
18191	No	Burrton	A.Scott Ritchie	(P) Bethel College	Bethel College Grandon, Hoffman	33-23S-4W 4-24S-4W	320	0	Miss	3,310	85	7	0	7	0	Yes
5368	--	Burrton	S & K Oil Co. (Louis Kahan)*	(D) Teten	Teten	12-23S-4W	20	60	Miss	3,400	15	6	0	0	1	Yes
12044	--	Burrton	S & K Oil Co. (Louis Kahan)*	(D) Fast-Smith	Fast, Roberts Smith	25-23S-4W 36-23S-4W	640	0	Miss	3,308	52	6	0	0	0	Yes
12204	--	Burrton	S & K Oil Co. (Louis Kahan)*	(D) Sabin B	Sabin B	11-23S-4W	30	30	Miss	3,260	80	2	0	0	0	Yes
6044	No	Chase-Silica	A.Scott Ritchie*	(P) Bernstorf "B"	Bernstorf "B"	23-19S-10W	80	0	LKC	2,930	280	4	0	4	0	Yes
15373	No	Hilger S.W.	Woodman-Iannitti Oil Co.	(P) C.J.Genbelle	C.J.Genbelle A.J.Genbelle	20-26S-4W 29-26S-4W	320	--	Mise	3,970	5	3	0	0	0	Yes
5139	No	Nicklaus	Phillips Petroleum Co.	(P) Prough	Prough	3-26S-4W	40	--	LKC	2,880	20	2	0	0	0	Yes
4456	--	Zenith-Peace Creek	Cities Service Oil Co.	(W) Peace Creek Unit	Peace Creek Unit	30,31-22S-9W 6-23S-9W 35,36-23S-10W 1,2,11,12-24S-10W	380	1840	Viola	3,750	16	5	2	0	28	Yes
		RENO COUNTY TOTALS (Reported)					2450	2130				55	5	12	30	
RENO-RICE COUNTY																
6188	--	Sterling	Phillips Petroleum Co.*	(P) Stubbs Mayer Unit	Stubbs Mayer Unit†	4,9-22S-8W	400	--	Miss	3,420	10	8	0	0	0	Yes
RENO-STAFFORD COUNTY																
12893	Yes	Zenith-Peace Creek	Braden-Zenith Inc.	(W) Zenith Waterflood Unit	Zenith Waterflood Unit	6,7,18-24S-10W 1,2,3,10,11,12, 13,14,15,23,24- 24S-11W	800	5435	Mise-Viola	3,760 3,780	20 40	5	4	0	0	Yes
13339	Yes	Zenith-Peace Creek	Stelbar Oil Corp.	(W) Zenith Waterflood	--	29,30,31,32-23S-10W 5,6-24S-10W 25,36-23S-11W	--	--	Viola	3,700	10	3	3	0	0	No*
		RENO-STAFFORD COUNTY TOTALS (Reported)					800	5435				8	7	0	0	
RICE COUNTY																
12968	--	Bull Creek	Isern Petroleum Co.*	(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	3,400	4	2	0	0	0	Yes
16326	--	Calf Creek	Range Oil Co.Inc.	(P) Buehler "B"	Buehler "B"	33-18S-10W	90	---	Lans	2,850	7	4	--	--	--	Yes
18065	No	Car Southwest	Malone Oil Co.	(W) C.Malone & H.Malone	Clara Malone Harold Malone	29-20S-9W 30-20S-9W	160	--	Simp Congl	1,548	4	2	0	0	0	No*
13524	No	Chase Silica	Icer Addis	(W) Schubert	Schubert	9-20S-10W	160	--	Simp	3,400	5	1	1	0	0	Yes
15792	No	Chase Silica	Icer Addis	(W) Merrill J.Behnke	Brandenstein Ott Appleton Behnke	10-19S-10W 11-19S-10W 14-19S-10W 15-19S-10W	480	--	Doug	2,842	7	9	1	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
10925	1	0	0	0	Peri	0	800	Prod	--	--	U	1964	Wat	--	42	--	292,800	3,536,300	8,664	281,921	300	77,600	
13754	1	0	1	1	--	Vac	50	Prod	--	--	U	1967	Wat	19/31	34	--	18,250	259,711	1,209	51,596	1,209	--	*Was Shenandoah Oil Corp.
15881	--	--	--	--	Irreg	Vac	600	Prod	0	0	T	1970	Wat	3/2	40	--	215,000	1,076,000	--	--	--	--	
13167	1	0	0	0	Irreg	0	900	Prod	--	--	U	1967	S Gas	1/9	32	--	306,000	3,575,000	2,140	--	--	--	
10414	1	0	0	0	Irreg	0	160	--	--	--	U	1968	S Gas	1/9	36	--	54,400	420,000	2,016	20,000	1,000	12,000	
11618	1	0	0	0	Peri	0	700	Prod	--	--	U	1965	S Gas	--	34	--	271,542	1,733,253	40,016	535,246	37,748	262,206	*Was Sarobee.
18191	1	0	1	0	Irreg	0	1400	Prod	--	--	U	1976	S Gas + Wat	1/9	38	--	500,000	500,000	20,186	194,755	5,000	5,000	
5368	1	0	0	0	Irreg	0	884	Prod	--	--	U	1961	Wat	1/26	38	--	322,660	3,889,039	2,594	1,012,346	2,594	1,012,346	*Was General American.
12044	1	0	0	0	Irreg	0	2434	Prod	--	--	U	1966	Wat	1/11	38	--	852,873	4,540,077	26,801	108,011	804	3,352	*Was General American.
12204	1	0	0	0	Irreg	0	2394	Prod	--	--	U	1965	Wat	--	37	--	916,515	4,132,208	9,123	51,612	9,123	51,612	*Was Sun Oil Co.
6044	1	0	1	0	Irreg	0	200	Prod	--	--	U	1958	S Gas	--	36	--	72,500	580,000	2,589	452,627	2,589	--	*Was Skelly Oil Co.
15373	1	0	0	0	7-spot	0	32	Prod	--	--	T	1967	S Gas	98/2	36	--	12,000	58,370	10,850	42,700	8,000	15,300	
5139	1	0	0	0	Irreg	15	75	Prod	--	--	U	1956	S Gas	1/0.8	35	10	27,329	856,461	1,779	305,200	--	--	
4456	8	0	0	1	Line	14	485	Prod + Wat Sd	185	--	F+U	1951	S Gas	175/950	39	--	5,403,952	49,239,318	40,061	8,097,192	40,061	1,703,969	
	20	0	3	2													9,265,821	74,395,737	168,028	11,153,206	108,428	3,143,385	
6188	1	0	0	0	Peri	0	15	Surface Sd	50	20	M	1958	S Gas	9/1	35	--	5,614	1,002,431	5,615	466,080	4,928	122,793	†Was Mayer B, Sylvia Mayer U-A, Stubbs F. *Was Thomas H. Allan
12893	6	5	0	0	Line	60	1468	Prod + Meade Sd	40	60	M	1966	S Gas + Grav	7/93	41	5	3,214,010	53,774,525	27,783	370,710	27,783	344,689	
13339	0	4	0	0	Peri	Grav	350	Prod	--	--	T	1967	S Gas	--	36	--	147,600	12,996,500	1,069	--	1,069	40,158	*Shut down for repairs.
	6	9	0	0													3,361,610	66,771,025	28,852	370,710	28,852	384,847	
12968	1	0	0	0	Irreg	100	126	Prod	--	--	U	1967	Gas Exp	19/31	36	--	45,885	1,710,762	3,866	62,824	--	--	*Was Union Oil of California.
16326	1	--	--	--	Irreg	--	200	Prod	--	--	U	1971	S Gas	2/3	30	--	73,000	--	2,607	15,566	652	--	
18065	1	0	0	0	Peri	500	35	Fr	40	20	F	1976	S Gas	1/0	45	--	3,000	4,000	5,300	5,300	2,000	3,000	*Equipment troubles.
13524	1	0	0	0	Irreg	0	285	Prod	--	--	U	1967	Gas Exp	1/9	52	--	104,351	740,761	1,793	13,476*	1,000	21,760	*Since 1973.
15792	2	0	0	0	Irreg	300	425	Prod	--	--	U	1970	Gas Exp	7/3	28	--	155,705	904,492	10,708	220,015*	4,000	36,185	*Since 1967.

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
RICE COUNTY (Cont.)																
7885	--	Chase-Silica	Bergman Oil Co.	(W) Eatinger	Eatinger	20-19S-10W	80	20	LKC	2,975	50	2	0	0	0	Yes
9634	--	Chase-Silica	Bergman Oil Co.	(W) Soeken	--	11-19S-9W	40	--	Simp	3,305	12	1	0	0	0	Yes
11507	--	Chase-Silica	Ralph G.Bowen	(D) Specht A & B	Specht A & B	16-20S-10W	120	0	LKC-Arb	3,300	20	2	0	0	0	Yes
16251	--	Chase-Silica	Cities Service Oil Co.	(W) DeWitt	DeWitt	33-19S-9W	105	40	Arb	3,195	31	3	1	0	0	Yes
7692	--	Chase-Silica	Energy Reserves Group,Inc.*	(W) Heinrich Roth	Heinrich Roth	29-19S-10W	160	0	LKC	2,957	107	2	0	0	0	Yes
16477	No	Chase-Silica	Fell & Wolfe Oil Co.*	(D) Tatlock Unit	H.Drews, Steuder A.J.Bayer	5-20S-10W 7-20S-10W	490	--	Arb	3,264	8	3	0	0	0	Yes
7836	--	Chase-Silica	Don Fox*	(D) Wolf	John Wolf	20-19S-10W	80	--	KC	2,900	20	2	--	--	--	Yes
12543	No	Chase-Silica	F.G.Holl	(W) Wenke	Wenke, Hirsch	18,19-20S-10W	60	0	LKC	3,106	8	1	--	1	--	Yes
15526	No	Chase-Silica	Meltzer Oil Co. *	(P) Layton Project	Layton	29-19S-9W	80	--	KC	2,937	4	1	0	1	0	Yes
15609	No	Chase-Silica	Phillips Petroleum Co.	(P) Kate	Kate	18-19S-8W	40	0	Arb	3,270	10	2	0	0	0	Yes
6043	--	Chase-Silica	Range Oil Co., Inc.*	(W) Bernstorf "D"	Bernstorf "D"	23-19S-10W	80	--	LKC	3,140	12	3	--	--	--	Yes
16354	No	Chase-Silica	Rocket Schusterman Oil Account*	(D) Houston Community	Houston Community	19-20S-10W	0	--	Lans	3,020	6	0	0	0	0	Yes
11993	--	Chase-Silica	Southern States Oil Co.	(P) Altenbaumer	Brandenstein Altenbaumer	11-19S-10W 12-19S-10W	160	--	LKC	2,956	50	9	8	0	1	Yes
14299	--	Chase-Silica	Southern States Oil Co.	(P) Feldman	Feldman	15-19S-10W	160	--	LKC-Doug	2,870	18	5	2	0	0	Yes
9916	--	Chase-Silica	Ira Stephens Jr.	(D) --	Keller	5-19S-9W	80	80	Arb	3,235	--	2	0	0	0	Yes
10600	--	Chase-Silica	Everett Swander	(W) B.G.Proffitt	B.G.Proffitt	25-19S-10W	0	0	LKC	3,020	18	1	0	0	0	No*
18413	No	Chase-Silica	Carl Todd	(P) Murphy A-5	C. Petrey, Murphy A, C. Todd,* Charles Petrey, Six	22-19S-9W 27-19S-9W	320	240	Arb	3,200	30	4	0	0	0	Yes
11795	--	Frederick	National Cooperative Refinery Association*	(P) Staatz-Schroeder Unit	Schroeder Staatz, Staatz "A"	10-18S-9W 11-18S-9W	320	0	Simp Sd	3,252	12	6	1	0	0	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 Sd	3,170	16	10	8	--	--	Yes
12620	--	Geneseo-Edwards	Continental Oil	(P) Geneseo Jt.LKC Repr.	S.Ainsworth, J.R.Lansing*	25-18S-8W	260	0	LKC	2,875	50	4	20	--	--	Yes
15998	--	Geneseo-Edwards	Continental Oil	(P) Gray-Hamilton "A"	B.C.Gray, Wm.Hamilton "A"	19-18S-7W	320	0	LKC	2,850	8	5	4	--	--	Yes
17026	--	Geneseo-Edwards	Energy Reserves Group, Inc.	(W) Geneseo Field WFS (Congl.)	C.Wood, A.H.Johnson, R.Michells J.A.Williams J.A.Lewis	12-18S-8W 13-18S-8W 14-18S-8W	480	0	Penn-Congl	3,150	10	12	8	0	0	Yes
9585	--	Geneseo-Edwards	Fell & Wolfe Oil Co.*	(D) Bolton	Ira O.Bolton	31-18S-7W	80	40	Simp	3,216	8	2	0	0	0	Yes
11875	--	Geneseo-Edwards	Kaiser Francis*	(-) Zajic	Zajic	13-18S-8W	--	--	Lans	2,789	250	5	0	0	6	Yes
12712	No	Geneseo-Edwards	Murfin Drilling	(W) Geneseo Unit Waterflood	Geneseo Unit	3,4,9,10-18S-8W	720	550	B.Penn Congl	3,200	9	8	2	0	1	Yes
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	3,320	15	12	39	0	0	Yes
12960	Yes	Mary Ida South	Pioneer Operations Co.Inc.	(W) Mooney-Manke Unit	Mooney-Manke Unit	6,7,8-19S-10W	640	0	LKC	2,950	160	17	0	0	0	Yes
4823	No	Odessa	Atlantic Richfield Co.	(W) Odessa Unit	Odessa Field Unit	28,29,32,33-18S-6W 4-19S-6W	800	220	Marm	3,090	8	9	0	0	0	Yes
3953	No	Orth	Getty Oil Co.	(W) Volkland "A"	Volkland "A"	27-18S-10W	60	0	Top Lime	2,670	16	3	0	0	0	Yes
3875	--	Orth	Meltzer Oil Co.*	(D) Habiger	Habiger	27-18S-10W	80	--	Top	2,434	250	3	--	--	--	Yes
14317	No	Orth West	J.A.Allison	(P) Feist #2	Feist, Manke	20-18S-10W	110	30	Lans	3,218	10	5	1	0	0	Yes*
18258	--	Ponce	Sterling Drilling Co.	(P) Arbuckle	--	28-21S-7W	160	--	Miss	3,420	22	1	0	0	0	Yes
14300	No	Ringwald	Rocket Schusterman Oil Account*	(W) Ringwald WF	Gemeinhardt Ringwald	29-18S-10W 32-18S-10W	140	40	Lans G	2,930	39	3	1	0	0	Yes
10813	--	Rino	NCRA *	(W) Rino Pressure Maintenance	Wellman "G" & "I"	33-21S-9W	40	0	Simp Sd	3,499	10	4	0	0	0	No†
16771	Yes	Tobias	Aspen Drilling Co.	(W) Southwest Tobias Lansing Unit	Shuyler, Mosher, Werner Werner	3-21S-9W 4-21S-9W	476	0	LKC	2,958	4	4	0	0	0	Yes
10096	Yes	Tobias	Thunderbird Drilling Inc.	(W) Tobias Simpson Unit	Tobias Fair "B" Schafer, Fair "C", Pulliam Koons, Cuskey, Fair "A" Faler, Gillen, Harrison	25-20S-9W 26-20S-9W 35-20S-9W 36-20S-9W 2-21S-9W	830	695	Simp	3,300	16	17	17	38	4	Yes
17667	No	Welch-Bornholdt	Dick Hess	(D) G.W.Carlson	G.W.Carlson	36-20S-6W	160	0	Miss	3,286	60	2	0	5	2	No*
9071	No	Welch-Bornholdt	Phillips Petroleum Co.*	(P) Welch-Bornholdt	Unit A, Unit B Bengston Fry "G" Fry "C". Fry "E"	11-20S-6W 13-20S-6W 15-20S-6W 22-20S-6W	1400	840	Miss	3,300	--	33	4	0	0	Yes
10733																
10740																
12187																
12367																

(Continued on pp.73.)

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
7885	--	--	--	--	Irreg	0	50	Prod	--	--	T	1960	S Gas	1/0	38	--	18,000	231,000	8,500	295,350	4,250	35,275	
9634	1	--	--	--	Irreg	500	50	Prod	--	--	T	1962	--	1/0	38	--	0	346,650	0	123,727	0	49,510	
11507	1	0	0	0	Irreg	Vac	345	Prod	--	--	U	1965	S Gas	3/97	40	--	126,300	1,615,018	3,593	30,127	2,700	26,053	
16251	2	0	0	0	Irreg	200	163	Prod	--	--	U	1971	S Gas	46/279	47.7	--	108,147	517,893	11,731	2,448,079	1,397	21,449	
7692	1	0	0	0	Irreg	0	174	Prod	--	--	U	1960	S Gas	1/1	44.9	--	63,434	789,966	6,839	673,457	6,839	99,495	*Was Pan American.
16477	1	0	0	0	Irreg	Vac	600	Prod + Arb	3325	--	U	--	--	--	36.8	--	--	--	2,261	--	--	--	*Was Herman Geo. Kaiser.
7836	1	--	--	--	Irreg	0	200	Prod	--	--	T	1960	S Gas	1/9	40	--	7,300	--	3,216	--	2,200	--	*Was Clinton Oil Co.
12543	1	--	--	--	Peri	0	250	Prod	--	--	T	1966	S Gas	6/30	38.9	--	91,250	1,064,500	2,391	197,064	1,600	3,400	
15526	0	0	0	0	Irreg	550	200	Prod + Arb	3300	--	U	1969	--	7/3	46	--	3,600	--	4,110	--	0	--	*Was Siegrist Oil Co.
15609	1	0	0	0	Irreg	0	242	Prod	--	--	U	1970	Wat	1/34	47	--	88,226	588,735	1,908	410,688	--	--	
6043	--	--	--	--	Irreg	0	253	Prod	--	--	U	1958	S Gas	--	37	--	92,345	--	1,448	5,559	362	--	*Was Skelly Oil Co.
16354	1	0	0	0	Irreg	0	73	Prod	--	--	T	1972	Wat	1/50	39	--	26,831	191,258	7,515	429,337	--	--	*Was Union Texas.
11993	1	0	0	0	Irreg	1600	418	Prod	--	--	T	1965	Grav	--	36	--	152,580	1,065,153	6,842	86,691	6,842	86,691	
14299	2	1	0	0	Irreg	1200	653	Prod	--	--	F	1967	Grav	--	27	--	238,550	1,463,405	8,736	122,429	8,736	122,429	
9916	--	--	0	--	Irreg	--	--	Prod	3235	--	T	1963	Wat	--	43	--	0	--	1,859	228,864	--	--	
10600	1	0	0	0	--	180	250	Prod	--	--	U	1963	S Gas	5/95	45	--	18,580	--	978	--	--	--	*Injection irregular.
18413	1	0	0	0	Irreg	100	350	None	--	--	U	1976	Wat	7/93	47	--	1,400	1,400	2,700	2,700	--	--	*+ Long
11795	2	1	0	0	Irreg	400	213	Prod	--	--	T	1963	Limited Wat	6/13	46†	2.4	155,535	728,686	16,194	874,511	2,935	5,675	*Was Maurice L.Brown. †@60.
7243	5	8	--	--	Line	2000	100	Prod + Arb + Lans	3200	50	T	1960	S Gas	--	36.2	--	366,624	10,070,543	11,084	1,301,441	11,084	1,117,657	
12620	3	2	--	--	Irreg	1000	263	Prod	--	--	U	1966	Wat	--	36.2	--	266,418	5,805,965	0	--	0	--	*+ J.R. Lansing "A"
15998	2	0	--	--	Irreg	0	503	Prod	--	--	U	1971	S Gas	--	32.9	--	368,170	1,718,601	0	--	0	--	
17026	2	0	0	0	Irreg	1857	292	Prod	--	--	U	1973	S Gas	1/2.5	36.2	--	213,085	563,886	26,571	5,956,792	26,571	83,277	
9585	2	0	0	0	--	400	300	Prod + Simp	3230	11	U	--	--	--	32	--	--	--	770	--	--	--	*Was Sinclair Oil & Gas.
11875	1	0	0	0	Irreg	380	1000	Prod	--	--	T+S	1965	Gas Exp	--	32	--	365,000	3,598,615	7,300	3,481,299	2,000	20,800	*Was Shell Oil Co.
12712	4	3	--	1	Peri	1200	242	Prod + Arb	3400	15	T	--	S Gas	25/5	40	10	353,950	3,945,019	12,527	--	12,527	171,266	
13839	10	5	0	0	9-spot	1200	463	City Wells	--	--	F	1968	S Gas	1363/475	40	--	1,689,470	17,035,234	93,140	4,956,738	93,140	746,243	
12960	5	0	0	0	Irreg	989	225	Prod + Arb	3200	30	T	1966	S Gas	2/3	38	--	410,625	4,183,101	18,830	--	17,500	--	
4823	7	0	0	0	Irreg	236	175	LKC	2290	90	U	1959	S Gas	70/36	29	--	445,520	8,395,114	23,236	1,301,808	23,236	956,723	
3953	1	0	0	0	Irreg	400	590	Prod	--	--	U	1954	S Gas	442/882	30	--	215,848	3,221,942	6,114	301,334	6,114	217,368	
3875	0	0	0	0	Peri	Vac	330	Prod + Top	24	250	U	1954	Wat	--	29	--	94,000	--	6,803	--	--	--	*Was Artnell.
14317	5	1	0	0	Peri	1000	50	Prod	3266	20	T	1968	Gas Exp	99/1	39	--	18,250	346,200	9,846	320,550	9,846	161,608	*One well changed to Arbuckle Disposal.
18258	1	--	--	--	Irreg	900	240	Prod	--	--	U	1976	S Gas	1/4	35	--	36,240	36,240	845	845	--	--	
14300	2	0	0	0	Irreg	1050	413	Prod	--	--	T	1961	S Gas	1/4	40	--	151,012	2,681,938	14,819	958,579	12,935	231,252	*Was Union Texas.
10813	0	1	0	0	Irreg	1150	145	Prod	--	--	T	1973	S Gas	19/463	39#	--	52,806	254,010	2,907	21,950	0	2,103	*Was Thunderbird Drlg.Inc. †Inactive since 8/76 #@60
16771	1	0	0	0	Irreg	500	360	Prod + Fr Wat Sd	46	--	M	1972	S Gas	1/0	41.5	3.6	131,000	423,828	8,502	158,837	5,418	9,513	
10096	5	--	6	1	Peri	--	--	Prod + Arb	3350	200	T	1968	S Gas	698/11	45	1.88	1,049,830	9,440,805	136,531	4,726,156	136,531	3,006,966	
17667	--	1	0	0	Irreg	0	300	Prod	--	--	T	1975	S Gas	5/30	34	--	27,000	54,000	1,460	--	1,460	--	*Started up and stopped.
9071 10733 10740 12187 12367	6	7	0	0	Irreg	500	190	Prod	--	--	U	1958	S Gas + Grav	--	36	--	415,159	12,668,148	39,685	1,629,720	21,845	276,914	*Was Cardinal Petroleum.

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
RICE COUNTY (Concl.)																
					Fry "J", Hubenett	23-20S-6W										
9071		(Lease names and locations continued from pp.71.)			Johannsen, Lindholm "C"	26-20S-6W										
10733					Lee, Lindholm "B", Wernett	27-20S-6W										
10740					Johnson "D"	28-20S-6W										
12187					Belden, Fair "B"	33-20S-6W										
12367					Duvall "A", Duvall "B", Moll, Libby	34-20S-6W										
					Eklhom, Hokr, Malm Unit	24-20S-6W										
					Malm "D", Mattson	25-20S-6W										
6848	--	Welch-Bornholdt	Shade & Berry	(D) --	Mattson, Anderson, Mattson Estate	25-19S-6W	--	--	Miss Ch	3,435	14	11	0	0	0	Yes
16994	--	Wherry	Kaiser Francis*	(D) Gossman	Gossman	8-21S-7W	80	50	Miss	3,352	18	2	0	0	3	Yes
		RICE COUNTY TOTALS (Reported)					12851	4385				239	118	45	17	
ROOKS COUNTY																
14067	Yes	Andreson	Davis Bros. Oil Producers Inc.	(W) Andreson Waterflood	Andreson C, Gasaway D,E,F	31-10S-18W	110	75	LKC	3,500	75	2	0	0	0	Yes
13518	Yes	Barry	Continental Oil	(W) Barry LKC	Barry LKC Unit	35-8S-19W 1,2,3,10,11, 12-9S-19W	1540	0	LKC	3,200	12	18	4	--	--	Yes
16976	--	Barry	Continental Oil	(-) Barry "C" No.4	D.Barry "C"	10-9S-19W	--	--	LKC	3,236	68	--	--	--	--	*
16334	No	Barry Southeast	Rocket Schusterman Oil Account*	(D) Bedard WI	Cabbage	7-9S-18W	0	0	Arb	3,495	0	0	0	0	0	Yes
16521	No	Baumgarten	Thomason Oil Co.*	(D) Sollenberger	Sollenberger	30-9S-18W	160	--	LKC	---	--	1	--	0	--	Yes
9977	--	Chesney	Kaiser Francis*	(P) Chesney	Chesney	12-8S-17W	60	0	LKC	3,060	13	3	1	0	0	Yes
12545	--	Dopita	Cities Service Oil Co.	(W) Reeder	Reeder	19-8S-17W	40	0	Tor-LKC	3,090	20	4	0	0	0	Yes
16960					McMillen "B"	25-8S-18W										
4089	--	Dopita	Energy Reserves Group, Inc.*	(W) Pearl McMillen	Pearl McMillen	24-8S-18W	80	0	Tor-Lans	3,136	197	3	0	0	0	Yes
8544																
1665	No	Dopita	K & G Oil Co.	(P) Disposal	Russ	31-8S-17W	240	0	Arb-Neva-Top	3,495 2,322	1173	5	0	0	0	No
16100	No	Dopita	Murfin Drilling*	(W) Thompson WF	Thompson	5-9S-17W	160	0	Tor-LKC	3,150	60	3	0	0	0	Yes
15831	No	Dopita	Okmar Oil Co.	(W) Moos	Moos	6-9S-17W	40	--	Arb	3,370	3	2	0	0	0	Yes
11324	No	Dopita	Samson Resources Co.*	(W) Krug WF	Krug	19-8S-17W	150	0	Tor-Lans	3,100	6	5	0	0	0	Yes
2957	--	Dorr	Cities Service Oil Co.	(W) Dorr Unit	Dorr Unit	16,17,20,21-9S-16W	601	19	Dodge + LKC	3,141	45	20	2	0	2	Yes
9161																
13728	--	Dorr	Theodore Gore	(P) Casey	Meyers	16-9S-16W	240	--	LKC	3,445	251	2	--	--	--	Yes
					Casey	21-9S-16W										
15586	--	Dorr	Harold Krueger	(P) Overholser	Overholser	20-9S-16W	20	0	KC Lime	3,350	4	1	1	0	0	Yes
					Andreson	21-9S-16W										
15048	No	Eilers	Davis Bros. Oil Producers, Inc.	(P) Eilers A	Eilers B & C, Shepard I	22-10S-18W	100	60	LKC	3,500	75	3	0	0	0	Yes
					Eilers	27-10S-18W										
7789	Yes	Finnesy South	Davis Bros. Oil Producers, Inc.	(W) South Finnesy Waterflood	Shepard A	23-10S-18W	190	90	LKC	3,500	75	4	0	0	0	Yes
					Shepard A & C	24-10S-18W										
14007	No	Finnesy South	Davis Bros. Oil Producers, Inc.	(P) Shepard B	Shepard B	23-10S-18W	80	55	LKC	3,376	22	1	0	0	0	Yes
12595	No	Grover	A.L.Abercrombie, Inc.	(D) Roy "B"	Roy, Roy "B", Grover	22-7S-19W	100	320	LKC	3,085	10	5	1	0	0	Yes
10258	--	Kruse	Cities Service Oil Co.	(W) Kruse Unit	Kruse Unit	2-11-10S-16W	93	12	Dodge-LKC	3,050	34	4	0	0	0	Yes
3504	--	Laton	Cities Service Oil Co.	(W) Laton Pool Coop Waterflood	Adams "A", "B", "C"	33-8S-16W	370	0	Dodge-LKC	3,070	53	15	2	0	2	Yes
					Dennis and Hodson	34-8S-16W										
					Adams "D" & Holy Cross	4-9S-16W										
6619	No	Laton	Co-Co, Inc.*	(W) Doane-Swisher Cooperative W.F.	Doane, Swisher	34-8S-16W	320	240	Tor-LKC	3,020	52	6	0	0	0	Yes
7166	No	Laton	Co-Co, Inc.*	(W) Gamble-McFadden "E" Cooperative W.F.	Gamble, McFadden "E"	3-9S-16W	320	290	Tor-LKC	3,070	52	6	1	0	0	Yes
12140																
7831	No	Laton	Co-Co, Inc.*	(W) Luhman Cooperative W.F.	Co-Co,Inc.-Luhman	11-9S-16W	160	80	Tor-LKC	3,180	34	2	0	0	1	Yes
					Jones-Campbell-Sarver	12-9S-16W										
12702	No	Laton	Co-Co, Inc.*	(W) Blank Cooperative W.F.	Blank	14-9S-16W	100	80	Tor-LKC	3,190	45	2	0	0	0	Yes
10499	--	Laton	Harold Krueger	(W) Laton Flood Project	Beardmore, Luhman-Johnson,Buell, Tatkenhorst B, E	10-9S-16W	420	0	KC Lime	3,240	3-6	15	1	0	0	Yes
					Tatkenhorst C, Home	11-9S-16W										

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
9071																							
10733																							
10740																							
12187																							
12367																							
6848	1	0	0	0	--	Vac	180	Prod	--	--	U	1959	S Gas	--	33.6	--	66,000	1,050,000	16,400	180,400	5,400	86,400	
16994	1	0	0	0	Irreg	Vac	6	Prod	--	--	T+S	1973	Gas Exp	3/6	35	--	2,190	9,475	3,588	66,984	--	--	*Was Grace Oil Co.
	87	30	6	2													8,312,216	97,466,343	556,053	31,609,197	431,120	7,599,012	
14067	2	0	0	0	Peri	480	219	Prod	--	--	T	1968	Grav	3/2	34	5.0	160,000	1,105,894	13,106	212,498	--	--	
13518	8	18	--	--	Peri	475	492	Prod	--	--	U	1968	S Gas	--	35.3	--	1,441,925	14,362,393	52,776	692,132	52,776	517,132	
16976	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Injection not started.
16334	0	0	0	0	Irreg	0	2566	Prod	--	--	U	1972	Wat	1/50	28	--	939,091	4,268,182	17,022	1,169,324	--	--	*Was Union Texas.
16521	1	--	0	--	--	0	15	Prod	--	--	-	1974	--	3.5/15	32	39	--	5,475	--	--	--	--	*Was A.L.Abercrombie Inc.
9977	--	--	--	--	--	210	410	Prod	--	--	T	1963	S Gas	1/1	36	--	149,650	2,822,243	5,110	143,696	5,110	--	*Was Cities Service Oil.
12545	2	0	0	0	Irreg	13	40	Prod	0	0	T	1966	S Gas	21/23	27	--	8,087	164,064	14,618	283,268	11,243	58,870	
16960																							
4089	1	0	0	0	Irreg	0	209	Prod	--	--	U	1965	S Gas	1/8.6	29.5	--	76,307	1,096,852	6,879	314,692	6,879	106,410	*Was Pan American.
8544																							
1665*	0	0	0	0	--	250	275	Prod	--	--	T	1947	--	--	--	--	66,000	--	1,054	--	0	--	*Temp. Abd. Sept. 1, 1976
16100	1	0	0	0	Irreg	Vac	614	Prod	--	--	T	1971	S Gas	1/4	36	--	223,977	759,563	5,060	--	2,180	17,380	*Was Sun Oil Co.
15831	1	0	0	0	Line	350	258	Prod	--	--	U	1974	S Gas	--	30	--	94,428	243,348	2,808	123,699	772	1,889	
11324	3	0	0	0	Irreg	80	410	Prod	--	--	T	1965	S Gas	1/3	29	--	149,683	2,624,890	8,405	752,362	8,405	178,269	*Was Shell Oil Co.
2957	15	0	0	0	5-spot	88	297	Prod + Dak	800	--	T	1962	S Gas	148/209	38	--	2,291,390	20,923,989	52,357	2,992,652	52,357	1,201,744	
9161																							
13728	1	--	--	--	Irreg	200	468	Prod	--	--	T	1962	Wat	--	39	--	186,808	2,536,729	4,133	277,440	1,377	64,167	
15586	1	0	0	0	Line	Vac	50	Prod	--	--	T	1970	S Gas	1/2	37	--	18,250	121,500	1,802	64,861	--	--	
15048	1	0	0	0	Irreg	70	146	Prod	--	--	T	1969	Grav	3/7	32	15	53,259	508,952	10,468	573,324	--	--	
7789	2	0	0	0	Peri	610	604	Prod + Dak	450	300	T	1960	Grav	9/1	34	6.0	440,898	6,940,437	10,065	390,177	--	--	
14007	0	1	0	0	Peri	0	144	Prod	--	--	T	1967	Grav	1/2	34.5	--	52,445	1,712,539	2,361	85,864	--	--	
12595	1	0	0	0	Irreg	50	205	Prod	--	--	U	1966	S Gas	--	33	--	73,720	710,195	11,086	259,949	5,000	93,912	
10258	2	2	0	1	Peri	775	376	Prod + Dak	730	--	T	1963	S Gas	2/3	37	--	263,673	2,491,922	11,143	567,842	11,143	204,467	
3504	7	0	0	1	Irreg	190	373	Prod + Dak	850	--	T	1953	S Gas	124/55	33	--	875,824	10,174,758	49,013	2,138,072	49,013	1,231,787	
6619	2	1	0	0	Irreg	650	253	Prod + Dak	800	50	M	1962	S Gas +Grav	3/7	39-40	--	245,839	2,530,389	14,456	599,819	14,456	599,819	*Was Max Cohen.
7166	3	2	0	0	Irreg	250	236	Prod + Dak	870	50	M	1963	S Gas +Grav	3/7	39-40	--	259,560	4,614,525	21,196	385,427	21,196	385,427	*Was Max Cohen.
12140																							
7831	2	0	0	0	Irreg	225	279	Prod + Dak	950	50	M	1965	S Gas +Grav	--	39-40	--	204,272	1,322,180	2,637	53,606	2,637	53,606	*Was Max Cohen.
12702	2	0	0	0	Irreg	250	258	Prod + Dak	950	50	M	1966	S Gas +Grav	35/65	39	--	188,856	1,152,750	5,215	80,212	5,215	80,212	*Was Max Cohen.
10499	3	1	0	0	Irreg	Vac	130	Prod	--	--	T	1965	S Gas +Grav	1/1	38-40	--	143,010	1,987,809	36,366	1,287,694	24,244	448,445	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
ROOKS COUNTY (Concl.)																
6050	No	Laton	Murfin Drilling*	(W) Li-Be-Bax Waterflood	Baxter A & B, Beardmore	2-9S-16W	800	--	LKC	3,100	30	14	0	0	0	Yes
9350					Baxter D & E	3-9S-16W										
11184					Livingood	11-9S-16W										
11185																
11333																
13043	Yes	Laton	Murfin Drilling Co.*	(W) North Laton Unit	North Laton Unit	27,28-8S-16W	400	300	LKC	3,060	50	6	0	0	0	Yes
14469	No	Lone Star	Okmar Oil Co.	(W) Luther-Arndts Coop	Luther	8-8S-17W	40	0	LKC	3,037	5	2	0	0	0	Yes
					Arndts	9-8S-17W										
15529	No	McClellan	Robert E.Davis*	(W) McClellan Flood	Bayard, McClellan, Stull, Whisman	8-9S-19W	320	0	LKC	3,500	5	13	0	0	0	Yes
15302	--	McClellan Southwest	Energy Reserves Group,Inc.	(D) McClellan	Velma McClellan	9-9S-19W	80	0	LKC	3,267	180	3	0	0	0	Yes
9412	--	Marcotte	B-J Oil Co.	(W) Trible	Trible	28-10S-20W	--	--	--	--	--	--	--	--	--	--
12517	No	Marcotte	Nadel and Gussman	(W) Stithem-Eliza	Stithem & Eliza	14-10S-20W	60	30	LKC	3,693	17	17	13	0	--	Yes
15992	No	Marcotte	Nadel and Gussman	(W) Gish	Gish	6-10S-19W	0	0	LKC	3,480	10	2	4	0	0	No*
10570	No	Marcotte	Okmar	(W) Marcotte	Marcotte A	18-10S-19W	74	30	LKC	3,500	5	1	1	0	0	Yes
18410	--	Marcotte	Phillips Petroleum Co.	(P) Earl C	Earl C	13-10S-20W	160	130	LKC	3,460	92	3	5	0	0	Yes
16483	--	Natoma	Cities Service Oil Co.	(W) Natoma LKC Unit	Natoma LKC Unit	14,15-10S-16W	92	0	LKC	3,250	8	4	0	0	0	Yes
15354	--	Nettie	Leben Oil Corp.*	(-) Nettie East	Nettie East	2-10S-17W	1120	--	Tor-LKC	3,181	269	7	1	0	0	Yes
									Marm							
11849	--	Nettie	Phillips Petroleum Co.	(W) Nettie Unit	Nettie Unit	33,34-9S-17W	560	0	Top-Tor-LKC-Arb	3,225-3,525	5-60	27	3	0	0	Yes
						3,4-10S-17W										
15389	No	Nettie Northwest	Davis Bros.Oil Producers Inc.	(D) Rempe A & B	Rempe A & B	28,29-9S-17W	75	50	LKC	3,289	30	2	0	0	0	Yes
11302	--	Nyra	Southern States Oil Co.	(P) Thompson	Thompson	9-9S-17W	160	--	Arb-KC	3,194	10	3	1	0	0	Yes
15129																
15855	--	Paradise Creek	Paul H.Williams*	(-) South Paradise Creek	South Paradise Creek	27,28-9S-18W	80	--	LKC	3,324	5	1	--	--	--	Yes
12384	Yes	Plainville	Davis Bros. Oil Producers Inc.	(W) Plainville Waterflood Unit	Bice Unit, Collins E	6-10S-17W	790	450	LKC	3,500	75	17	0	0	0	Yes
					Kleinschmidt B, Ross C,D	7-10S-17W										
13187	Yes	Plainville	Davis Bros. Oil Producers Inc.	(W) Winters Plante No.2	Plante B, Winters C, White A,B	8-10S-17W	550	265	LKC	3,500	75	8	0	0	0	Yes
14009	Yes	Plainville	Davis Bros. Oil Producers Inc.	(P) So.Plainville Unit No.3	Plante A, Vohs E, Ganoung A	17-10S-17W	380	250	LKC	3,500	75	9	0	0	0	Yes
					Garvert O, Hoffman D	18-10S-17W										
16341	--	Riffe	Sierra Petroleum Co.,Inc.	(W) Riffe Unit	Riffe	4-7S-19W	460	0	LKC-Tor	3,180	7	9	0	0	0	Yes
					Dryden	5-7S-19W										
					Dryden	8-7S-19W										
					Desmarteau	9-7S-19W										
16831	No	Simons	Thornton E. Anderson	(P) Simons	Simons	11-7S-17W	60	0	LKC-Top	2,758	20	2	0	0	0	Yes
16056	--	Trico	Cities Service Oil Co.	(W) Trico LKC Arbuckle Unit	Trico LKC Arbuckle Unit	33-10S-20W	280	0	LKC-Arb	3,580	24	8	0	0	5	Yes
7906	No	Trico	Colorado Oil Co., Inc.	(P) Williams	Williams	27-10S-20W	0	50	LKC	3,400	200	1	0	0	0	Yes
10794	No	Trico	Murfin Drilling	(P) Briggs/Harlan Waterflood	Briggs	34-10S-20W	40	24	LKC	3,500	37	1	0	0	0	Yes
17404	--	Twin Mounds	Pickrell Drilling Co.	(W) Twin Mounds Unit	Twin Mounds Unit	3,4-9S-17W	640	0	Up Pleas	3,426	7	7	0	0	0	Yes
12298	No	Vohs	Atlantic Richfield Co.	(W) H.J.Vohs "A"	H.J.Vohs	13-10S-19W	120	--	LKC	3,280	32	5	0	0	0	Yes
13602	--	Vohs	Energy Reserves Group, Inc.*	(W) Felix Senecal	Felix Senecal	12-10S-19W	40	0	Lans	3,303	105	1	0	0	0	Yes
14335	No	Webster	Phillips Petroleum Co.	(W) Fidelis	Fidelis	33-8S-19W	100	0	LKC	3,180	20	3	1	0	0	Yes
10080	No	Westhusin	Atlantic Richfield Co.	(W) Robert J.McClay	Robert J.McClay	12-9S-17W	80	--	LKC	3,130	254	4	0	0	1	Yes
13645	--	Westhusin	Harold Krueger	(P) Colahan	Colahan, Dougherty B	18-9S-16W	80	0	KC Lime	3,150	3-5	3	1	0	0	Yes
13647	--	Westhusin	Harold Krueger	(P) Mary Dougherty	Mary Dougherty	13-9S-17W	120	0	KC Lime	3,150	3-6	8	0	0	0	Yes
17200	No	Westhusin	Murfin Drilling	(P) Hrabe Waterflood	Hrabe "A", "B", "C"	1-9S-17W	160	0	LKC	3,150	15	7	0	0	0	Yes
10108	No	Westhusin	Terra Resources Inc.	(D) Westhusin	Westhusin Unit, J.Westhusin	11-9S-17W	80	70	LKC	3,130	20	10	1	0	0	Yes
					Baxa, Dora Smith, McClay	12-9S-17W										
6581	No	Zurich	Murfin Drilling Co.*	(W) McCullough	Johnson "A"	26-10S-19W	380	60	LKC	3,300	25	3	0	0	0	Yes
					McCullough, Johnson "B", Casey	35-10S-19W										
17039	--	Zurich Townsite	Cities Service Oil Co.	(W) Zurich Townsite Unit	Zurich Townsite Unit	27-9S-19W	560	0	Tor-LKC	3,360	1	6	0	0	0	Yes
ROOKS COUNTY TOTALS (Reported)							14635	3030				349	44	0	11	

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
6050 9350 11184 11185 11333	12	4	0	0	Irreg	150	238	Prod + Dak	600	200	M	1966	Grav	6/94	38	--	868,097	4,934,284	26,250	--	26,250	1,324,097	*Was Clinton Oil Co.
13043	4	0	0	1	Peri	312	269	Prod + Dak	600	200	M	1966	S Gas + Grav	6/94	38	--	393,317	3,517,858	16,893	--	16,893	217,908	*Was D & D Drilling Co.Inc.
14469	1	0	0	0	Irreg	130	238	Prod + Arb	3300	5	U	1969	S Gas	3/60	33	--	87,108	507,428	3,304	211,885	2,180	8,437	
15529	3	0	0	0	--	0	410	Prod	--	--	U	1969	Wat	2/3	35	--	449,000	2,616,368	22,011	396,327	17,211	79,281	*Was Kathol Petroleum Inc.
15302	1	0	0	0	Irreg	0	243	Prod	--	--	T	1970	S Gas	1/6.9	32	--	88,722	376,990	2,550	43,804	2,550	22,475	
9412*	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Currently inactive.
12517	1	1	0	0	Peri	0	200	--	--	--	T	1966	S Gas	4/1	29	--	73,767	385,417	38,096	--	6,349	20,864	
15992	0	0	0	0	Irreg	0	0	Prod + LKC	3480	10	T	--	Other	1/3	29	--	0	0	4,009	--	0	0	*Project has not started.
10570	1	0	--	0	Peri	Vac	363	Prod + Arb	3770	10	U	1969	S Gas	--	33	--	132,858	1,465,258	2,071	505,764	1,190	36,397	
18410	1	0	0	0	Irreg	500	50	Prod	--	--	U	1976	S Gas*	1/99	35	--	18,337	18,337	3,720	74,763	--	--	*+ Grav.
16483	4	0	0	0	Peri	200	307	Prod + Chey	690	62	T	1972	S Gas	27/167	35	--	433,493	1,761,646	17,150	420,601	17,150	103,587	
15354	3	0	0	0	5-spot	0	--	Prod	--	--	T	1970	S Gas	1/1	36	--	850,450	5,953,150	14,023	228,328	7,011	114,164	*Was T.I.Leben et al.
11849	8	0	0	0	Irreg	105	410	Prod	--	--	U	1965	S Gas+ Wat	1/4.3	35	10	1,197,679	12,022,879	75,638	2,711,408	67,840	980,649	
15389	1	0	0	0	Peri	0	309	Prod	--	--	T	1969	Grav	3/2	30.4	--	112,980	514,506	2,178	88,462	--	--	
11302 15129	1	0	0	0	Irreg	--	312	Prod	--	--	T	1965	Grav	--	29	--	113,785	887,200	6,462	276,113	6,462	276,113	
15855	3	--	--	--	4-spot	100	210	Prod	--	--	M+MS	1972	S Gas	--	37	--	229,950	--	2,240	--	--	--	*Was C.S.O.
12384	5	0	0	0	5-spot	940	286	Prod + Dak	700	300	T	1965	Grav	3/1	34	5.0	522,623	7,407,297	32,918	741,169	--	--	
13187	3	0	0	0	5-spot	890	326	Prod + Dak	700	300	T	1967	Grav	3/1	34	6.0	356,466	2,773,227	19,509	348,133	--	--	
14009	2	0	0	0	5-spot	710	32	Prod	--	--	T	1968	Grav	3/1	34	5.0	22,972	1,529,101	6,958	134,157	--	--	
16341	2	0	0	0	Line	575	735	Prod + Chey	945	50	T	1972	Grav	17/83	34.5	--	268,277	1,144,162	14,614	83,223	--	--	
16831	1	0	0	0	Irreg	150	70	None	--	--	U	1973	S Gas	3/7	38	--	25,000	101,000	5,750	99,713	750	2,250	
16056	5	0	0	0	Peri	665	219	Prod + Dak	650	40	T	1972	S Gas	34/94	31	--	412,724	2,487,901	19,049	1,170,541	19,049	145,407	
7906	1	0	0	0	Irreg	100	107	Prod	--	--	U	1960	Wat	--	30	--	36,311	1,112,826	5,310	--	--	--	
10794	1	0	0	0	Irreg	Grav	42	Prod	--	--	T	1964	S Gas	3/2	28	--	15,330	241,120	3,737	75,614	3,000	--	
17404	1	0	0	0	Irreg	416	137	Prod + Lo Dak	509	135	U	1974	S Gas	35/13	34	2.5	50,173	110,153	24,126	298,655	13,879	37,216	
12298	2	0	0	0	Irreg	Vac	640	Prod + Arb	3596	6	U	1966	Gas Exp*	32/68	34	5.5	531,538	4,328,211	14,076	1,246,907	14,076	239,058	*+Grav + Wat drive.
13602	1	0	0	0	Irreg	0	113	Prod	--	--	T	1967	S Gas	1/5.8	35.4	--	41,293	389,924	4,569	370,406	4,569	80,437	*Was Pan American.
14335	2	0	0	0	5-spot	0	339	Prod + Ced H	830	--	U	1968	S Gas	1/6.3	36	9	247,782	1,300,079	3,795	310,989	2,985	6,486	
10080	2	0	0	0	Irreg	Vac	342	Prod	--	--	U	1963	S Gas	2/5	35	4.8	844,893	10,845,581	15,195	1,059,312	15,195	311,086	
13645	1	0	0	0	Line	Vac	100	Prod	--	--	T	1967	S Gas	4/1	37	--	36,100	486,225	7,318	203,936	2,439	26,354	
13647	1	0	0	0	--	Vac	200	Prod	--	--	T	1967	S Gas	7/3	37	--	73,082	846,277	8,797	262,798	2,932	52,950	
17200	1	0	0	0	Irreg	Grav	75	Prod	--	--	T	1974	S Gas	1/4	36	--	27,375	78,475	9,196	229,295	--	--	
10108	3	0	0	0	Irreg	69	506	Prod	0	0	T	1963	S Gas	34/66	34.9	--	538,638	7,898,337	29,246	1,373,648	29,246	502,621	
6581	1	0	0	1	4-spot	755	235	Dak	600	--	M	1958	S Gas	2/5	32	--	85,890	220,458	9,234	100,680	4,333	91,618	*Was Veeder Supply & Dev. Co.
17039	3	0	0	0	Peri	82	457	Prod + Wat Sd	48	30	M	1974	S Gas	1/7	--	--	512,005	985,969	22,368	471,986	22,368	31,075	
	143	30	0	4													18,304,967	164,429,222	851,496	26,987,227	579,910	9,954,066	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
RUSH COUNTY																
16776 --		Basgall West	Energy Reserves Group, Inc.	(W) D.R.Roth	D.R.Roth	4-16S-17W	70	0	LKC	3,200	13	3	0	0	0	Yes
16358 --		Pleasant View	Frontier Oil Co.	(P) Basgall-Burgardt-Urban "J"	Basgall "C" Urban "J" Burgardt "A"	10-16S-17W 14-16S-17W 15-16S-17W	480	0	LKC	3,300	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"	33-14S-15W	24	0	LKC-Tor	3,118 3,082	28	2	0	0	0	Yes
17274 --		Boxberger West	Helmerich & Payne, Inc.	(P) Morgenstern	Morgenstern	34-15S-15W	160	--	Lans	3,200	26	3	0	0	0	Yes
12723 --		Davidson	Duke Drilling Co.	(D) Pelz-Schreiber	Pelz-Schreiber	34-15S-11W	0	0	Lans	3,045	4	1	0	0	0	Yes
17789 No		Driscoll	Jayhawk Oil Co.	(W) --	Kaufman "A" Heinze	13,14-15S-12W 23-15S-12W	30	--	LKC-Arb	3,000	--	5	0	0	1	Yes
14451 Yes		Eulert	Atlantic Richfield Co.	(W) Eulert Unit	Eulert Unit	35-11S-15W	400	100	LKC-Top	2,990	14-30	9	0	0	0	Yes
16754 --		Eulert	Shields Oil Producers Inc.	(D) Eulert	Eulert	34-11S-15W	80	0	Arb	3,260	10	1	0	0	0	Yes
11553 No		Fairport	Aylward Drilling Co.	(P) Booth	Booth	32-11S-15W	80	10	LKC	2,850	22	6	0	0	0	Yes
4976 --		Fairport	Energy Reserves Group Inc.*	(W) Frank Booth "A"	Frank Booth "A"	32-11S-15W	80	0	Lans-Dodge	2,875	10	3	1	0	0	Yes
15009																
11344 --		Fairport	Energy Reserves Group Inc.*	(W) Ed Oswald Unit	Ed Oswald	8-12S-15W	130	30	LKC	2,911	31	14	0	1	0	Yes
3243 --		Fairport	Energy Reserves Group Inc.*	(W) Kate Austin Waterflood Unit	K.Austin J.Brumgardt "A" J.Furthmyer L.L.Austin	30-12S-15W 31-12S-15W 25-12S-16W 36-12S-16W	450	0	Lans-Dodge-Top	3,050 3,000 2,750	90	11	0	0	0	Yes
5055																
5094																
12481																
14224																
14502 --		Fairport	John O.Farmer Inc.	(-) Fairport Waterflood	Cleve Miller, Driscoll	20-12S-15W	160	--	LKC	3,000	5	3	1	--	--	No
11438 --		Fairport	Harold Krueger	(P) Reich, Keeney & Meckel Unit	Reich, Keeney Meckel A, B	28-12S-15W 29-12S-15W	85	0	KC Lime	2,975	3-6	15	0	0	0	Yes
12911 --		Fairport	Mai Operations	(W) Beller Waterflood	Beller "A" Beller "C" Beller "B"	10-12S-15W 15-12S-15W 16-12S-15W	160	20	LKC	2,970	6	11	0	0	0	Yes
13149 --		Fairport	Mai Operations	(W) Sutton "B"	Sutton "B"	9-12S-15W	80	0	LKC	2,961-2,968	6	7	0	1	0	Yes
16012 --		Fairport	Mai Operations	(W) Milke-Krug	Milke, Krug	20-12S-15W	120	0	LKC	3,000	6	10	0	0	0	Yes
15693 --		Fairport	R.P.Nixon Operations	(D) Gibbs	Gibbs	20-12S-15W	160	0	LKC	3,001	30	3	4	0	0	Yes
13056 No		Fairport	Sohio Petroleum Co.	(W) Deckert	Deckert	30-12S-15W	46	--	LKC	3,020	36	3	0	0	0	Yes
13057 --		Fairport	Sohio Petroleum Co.	(W) Rusch "A"	Rusch "A"	19-12S-15W	50	--	LKC	3,020	36	2	2	0	0	Yes
13058 --		Fairport	Sohio Petroleum Co.	(W) Rusch "B"	Rusch "B"	19-12S-15W	50	--	LKC	3,020	36	3	0	0	0	Yes
16180 No		Fairport	Sohio Petroleum Co.	(W) Oswald-Wilcox Coop	Sutton "B" & "A" Ed Oswald "A" & "B", C.C.Oswald Oswald-Wilcox "A" Oswald-Wilcox "B", American Investment Co.	5-12S-15W 8-12S-15W 17-12S-15W	--	--	LKC	2,954	--	42	5	11	0	Yes
17612 --		Fairport	Sohio Petroleum Co.	(-) Sutton Coop*	--	--	--	--	--	--	--	--	--	--	--	--
6472 --		Fairport	Texaco Inc.	(W) P.Jacobs	P.Jacobs	31-12S-15W	155	--	Lans	3,000	34	6	0	0	1	Yes
13077 --		Gorham	C.L.Hanes	(P) Vonfeldt	Vonfeldt	6-15S-14W	80	0	KC-Arb	2,964	5	3	0	0	0	Yes
9137 No		Gorham	Home-Stake Production Co.	(W) Gorham Waterflood	Carter, Linenberger, Baxter, Mermis "C" & "D" Mills "B", Witt "D", Foster "A", Foster "B", Witt "E" Mills "B", Witt "D" & "E", Foster "A" & "B", Mermis "B", J.Dortland, Dortland "C", Marg Dortland Marg Dortland, Mermis "B", J.Dortland, Dortland "C"	32,33-13S-15W 3-14S-15W 4-14S-15W 5-14S-15W	1080	720	LKC	3,050	28	31	--	0	0	Yes
9846																

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
16776	1	0	0	0	Irreg	1530	176	Prod + Dak	268	75	M	1973	S Gas	9/1	35.3	--	64,167	245,074	11,753	174,174	11,753	54,283	
16358	2	0	0	0	Irreg	0	100	Prod	--	--	U	1972	S Gas	9/1	36	--	36,500	233,600	4,973	28,895	1,658	9,632	
	3	0	0	0													100,667	478,674	16,726	203,069	13,411	63,915	
14534	1	0	0	0	Irreg	0	34	Prod	--	--	-	1968	S Gas	2/3	32.2	--	10,472	35,852	4,371	74,860	0	2,555	
17274	1	0	0	0	Irreg	0	155	Prod + Dak Sd	345	70	U	1974	S Gas	700/1223	32	--	56,356	157,924	5,878	270,747	9	0	
12723	1	0	0	0	Irreg	0	4.5	Prod	--	--	U	1966	S Gas	--	37	--	1,642	624,832	520	50,547	--	--	
17789	1	0	0	0	Irreg	100	120	Prod	--	--	U	1974	S Gas	1/1	38	--	43,000	98,000	3,200	7,000	--	--	
14451	7	0	0	0	Peri	200	653	Prod + B LKC + Arb	3290	14-400	U	1968	S Gas	104/771	38.8	--	1,607,021	11,824,267	36,214	448,073	36,214	443,296	
16754	1	0	0	0	Irreg	0	200	Prod	--	--	U	1972	Wat	--	33	--	73,000	481,750	2,719	16,709	1,000	2;000	
11553	1	0	0	0	Irreg	Vac	520	Prod	--	--	T	1965	--	--	30	--	189,970	2,112,463	8,604	325,919	8,604	124,615	
4976	1	0	0	0	Irreg	0	189	Prod	--	--	U	1956	S Gas	1/4.1	33.4	--	68,941	3,082,925	6,443	1,046,571	6,443	285,604	*Was Pan American.
15009																							
11344	5	0	1	0	Irreg	0	776	Prod + Dak	325	233	U	1964	S Gas	2.6/1	35.9	--	1,415,691	7,996,957	50,982	3,220,133	50,982	455,038	*Was Pan American.
3243	3	1	0	0	Irreg	0	546	Prod	--	--	U	1956	S Gas	1/2.6	36.4	--	597,405	11,222,804	33,072	2,932,697	33,072	969,568	*Was Pan American.
5055																							
5094																							
12481																							
14224																							
14502	--	--	--	--	Irreg	0	50	Prod	--	--	U	1968	Grav	--	39	--	--	--	800	--	0	--	
11438	3	0	0	0	Line	0	188	Prod	--	--	T	1962	S Gas + Grav	4/1	35-39	--	206,622	2,316,696	13,559	658,569	9,280	259,221	
12911	4	0	0	0	Irreg	500	185	Prod	--	--	T	1966	S Gas	1/2.25	36	--	269,395	2,852,631	19,608	1,189,480	17,647	289,420	
13149	3	0	0	0	Irreg	350	294	Prod	--	--	T	1970	S Gas	1/2	37.6	--	321,576	1,252,628	24,412	224,212	9,155	65,722	
16012	2	0	0	0	Irreg	50	532	Prod	--	--	T	1971	S Gas	1/4	36	--	388,270	1,612,666	13,729	411,013	9,610	47,493	
15693	2	0	0	0	Irreg	0	480	Prod	--	--	T	1970	S Gas	3/2	38	--	174,500	846,665	15,743	59,143	7,872	59,143	
13056	1	0	--	--	Irreg	497	171	Prod + Fr	409	--	M	1967	S Gas	1/15	34.9	--	62,524	885,318	11,479	226,334	11,479	104,283	
13057	1	0	0	0	Irreg	497	379	Prod + Fr	409	24	M	1967	S Gas	1/14	37.8	--	138,816	1,114,188	9,974	171,347	9,974	120,275	
13058	2	0	0	0	Irreg	497	312	Prod + Fr	409	24	M	1967	S Gas	1/11	38.6	--	228,686	2,121,372	7,208	84,295	7,208	59,349	
16180	1	0	0	0	Irreg	0	202	Prod	--	--	M	1972	--	1/11	37	--	74,092	364,339	196,061	724,083	14,651	142,675	
17612	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Project not yet started.
6472	1	1	0	0	Irreg	25	293	Prod	--	--	U	1958	S Gas	3000/223	33	--	107,033	6,220,281	21,395	516,263	21,395	343,534	
13077	1	0	0	0	--	450	400	Prod	--	--	T	1966	Grav	2/3	34	--	164,250	1,111,575	1,229,767	123,205	9,220	69,185	
9137	10	2	0	0	5-spot	550	700	Prod	--	--	T	1962	S Gas	--	36	--	2,227,566	51,607,809	67,710	2,166,563	67,710	2,166,563	
9846																							

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
11901	No	Gorham	J.L.King	(P) Schwien-Hall Unit	Hall Schwien	36-14S-15W 1-15S-15W	240	0	Gorham Sd	3,210	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	Gorham	3,190	15	5	0	0	0	Yes
10923	No	Gorham	Leben Oil Corp.	(-) Mills A	Mills A	4-14S-15W	40	--	Lans	3,050	90	--	--	--	--	Yes
17573	--	Gorham	R.P.Nixon Operations	(-) Atherton	Atherton	4-13S-14W	160	0	LKC	3,070	35	5	0	0	0	Yes
11631	No	Gorham	Okmar	(W) Rexroat Coop	Rusch, Seeley, Hummel, Rexroat B Solbach N,S, Rexroat C Solbach E	30-14S-14W 31-14S-14W 32-14S-14W	--	--	LKC	3,235	12	3	0	0	0	Yes
12345	No	Gorham	Okmar	(W) Vaughn	Vaughn	17-14S-14W	90	0	LKC	3,180	8	4	2	0	0	Yes
1354	No	Gorham	Phillips Petroleum Co.	(-) Carroll	Carroll	18-14S-14W	70	0	LKC	3,100	50	4	1	0	0	Yes
15950	No	Gorham	Terra Resources, Inc.	(D) Reinhardt	Reinhardt "D"	19-14S-14W	30	100	LKC	3,055	18	3	0	0	0	Yes
4098 10618	--	Gorham	Texaco Inc.	(W) D.Brandenburg	D.Brandenburg	20-14S-14W	160	--	Lans	3,100	--	1	0	0	0	Yes
7370	--	Gorham	Roy Vonfeldt *	(W) --	Dumler Unit	11-14S-15W	160	20	KC	3,033	8	3	4	4	--	Yes
9974	--	Hall Gurney	A.B.Oil Co.,Inc.*	(P) --	Carl Dumler	16-14S-13W	160	--	Tark	2,370	10	1	--	--	--	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	2,315	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	2,380	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	2,410	10	3	6	0	0	Yes
14923	--	Hall Gurney	American Petrofina Co. of Texas*	(D) Kuhnle	Kuhnle	4-15S-12W	80	0	LKC	2,953	28	2	0	0	0	Yes
4543	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "A"	Holl "A"	22-14S-14W	60	40	LKC	3,000	22	7	0	0	0	Yes
7165	No	Hall Gurney	Aylward Drilling Co.	(P) Herbel "B"	Herbel "B"	26-14S-14W	80	0	LKC	2,924	20	3	0	0	0	Yes
7167	No	Hall Gurney	Aylward Drilling Co.	(P) J.Boxberger	J.Boxberger	26-14S-14W	80	10	LKC	2,292	18	4	0	0	0	Yes
7946	No	Hall Gurney	Aylward Drilling Co.	(-) Holl "A"	Holl "A"	22-14S-14W	10	50	Tark	2,425	22	1	0	0	0	Yes
7947	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "B"	Holl "B"	22-14S-14W	80	10	Tark	2,425	22	1	0	0	0	Yes
7950	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "B"	Holl "B"	22-14S-14W	140	20	LKC	2,950	22	9	1	0	0	Yes
8293	No	Hall Gurney	Aylward Drilling Co.	(P) H.A.Fink	H.A.Fink Holl "B" #13	15-14S-14W 22-14S-14W	10	--	Lans	3,000	22	1	0	0	0	Yes
9425	No	Hall Gurney	Aylward Drilling Co.	(D) Anschutz	Anschutz	21-14S-14W	150	10	LKC	3,127	20	7	0	0	1	Yes
13157	--	Hall Gurney	Aylward Drilling Co.	(P) Holl "C"	Holl "C"	21-14S-14W	80	60	LKC	3,027	60	4	0	0	0	Yes
15814	--	Hall Gurney	Carl W.Boxberger	(D) Boxberger "B"	Boxberger "B"	14-14S-14W	160	0	LKC	3,000	200	2	0	0	0	Yes
2328	--	Hall Gurney	Cities Service Oil Co.	(W) Carter-Graham Coop W.F.	Graham Carter	28-14S-13W 29-14S-13W	76	74	LKC	2,880	23	2	0	0	6	Yes
2030 4738 7524	--	Hall Gurney	Cities Service Oil Co.	(W) Hall-Gurney LKC Coop W.F.	Ebel "A" & "B" Strecker "B"	24-14S-14W 36-14S-14W	259	191	LKC	2,880	66	11	2	1	7	Yes
16582	--	Hall Gurney	Cities Service Oil Co.	(D) Weimeister	Weimeister	25-14S-13W	120	0	LKC + Tark	2,862	26	3	2	1	0	Yes
9985	No	Hall Gurney	Colorado Oil Co.,Inc.	(W) Weimaster-LKC	Weimaster	36-14S-13W	40	40	Lans-KC	2,850	150	1	1	0	0	Yes
4592	No	Hall Gurney	Continental Oil	(W) Hall Lansing WF	Wm.Letsch & A.C.Rogg, R.S.Hall R.Lipprand	26-14S-13W 35-14S-13W	275	0	LKC	2,800	20	8	10	--	--	Yes
9407	--	Hall Gurney	Continental Oil	(W) Rein Area	H.Rein, H.Rein "A"	27-14S-13W	160	0	LKC	2,860	13	3	2	--	--	Yes
14758	--	Hall Gurney	Continental Oil	(W) Hall Tarkio	R.S.Hall, Wm.Letsch	26-14S-13W	80	0	Tark	2,250	9	3	2	--	--	Yes
4587 4595 14620	--	Hall Gurney	Energy Reserves Group,Inc.	(W) Krug-Olson	Frederick Krug "A" & "B", Jerry B.Driscoll, A.J.Olson "A" & "C" A.J.Olson "B"	27-14S-14W 28-14S-14W	640	0	LKC	3,000	136	22	3	0	0	Yes
5437 8926	--	Hall Gurney	Energy Reserves Group,Inc.*	(W) Ben Rein	Ben Rein	25-14S-14W	160	0	LKC-Tark	2,950 2,290	20 8	6	0	0	1	Yes
12387	--	Hall Gurney	Energy Reserves Group,Inc.*	(W) C.L.Newcomer	C.L.Newcomer	10-14S-14W	160	0	LKC	3,000	60	5	0	0	0	Yes
9415	No	Hall Gurney	John O Farmer,Inc.	(P) Rein Waterflood	Rein	27-14S-13W	80	--	LKC	2,850	6	3	1	--	--	Yes
16068	--	Hall Gurney	John O Farmer,Inc.	(-) Smoky Flood Unit	JOF Kuhnle Tract #1, Sohio Kuhnle Tract #2, Cities S.Cook Tract #3, Shelburne Oil Major Tract #4	4-15S-12W	480	--	LKC	2,990	5	15	2	--	1	Yes
1088	No	Hall Gurney	Getty Oil Co.	(P) T.B.Carter Lease	T.B.Carter	33-14S-13W	160	0	LKC	2,885	10	6	0	0	0	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
11901	1	0	0	0	Irreg	--	1400	Prod + LKC	3175	*	T	1965	Wat	4/1	32	--	511,000	5,273,850	10,430	--	4,693	68,719	*Three seperate zones.
12022	1	0	0	0	Irreg	--	1375	Prod + LKC + Gorham Arb	3200	*	U	1965	Wat	4/1	32	--	501,875	5,363,995	4,717	--	2,122	28,074	*Three seperate zones.
10923	--	--	--	--	Irreg	40	200	Prod	--	--	T	1964	S Gas	--	56	--	72,000	880,000	1,256	433,478	--	--	
17573	3	0	0	0	Irreg	0	350	Prod	--	--	T	1974	S Gas	3/1	36	--	31,500	430,500	6,227	--	3,113	3,113	
11631	1	0	0	0	Irreg	400	119	Prod + Arb	3160	5	U	1965	S Gas	--	34	--	43,554	2,389,787	12,484	1,546,197	2,397	53,293	
12345	1	0	0	0	Peri	520	2000	Prod	--	--	U	1966	S Gas	--	40	--	732,000	7,363,371	6,223	681,982	6,223	180,587	
1354	3	0	0	0	Irreg	0	422	Prod	--	--	U	1957	S Gas	1/11.5	41	5	461,881	11,668,283	7,753	1,250,822	7,753	380,398	
15950	1	0	0	1	Irreg	Vac	1292	Prod	--	--	T	1954	S Gas	42/58	37.1	--	472,860	9,693,714	7,557	1,116,268	7,557	317,834	
4098	1	1	0	0	Peri	155	462	Prod	--	--	U	1954	S Gas	759/426	34	--	168,630	7,499,378	4,732	273,569	4,732	235,526	
10618																							
7370	2	--	0	--	--	0	110	Prod + Gorham Sd	3300	6	T	1969	Grav	1/6	35	--	30,000	--	--	--	2,000	--	*Was Sun Oil Co.
9974	1	--	--	--	Irreg	400	350	Prod	--	--	U	1974	Wat	--	36	--	127,750	291,900	1,511	3,303	--	--	*Was Carl Dumler.
6968	1	0	0	0	Irreg	800	44	Prod + Dak	356	30	U	1967	S Gas	1/3	41	--	16,048	4,527,551	4,070	76,557	4,070	76,557	*Was El Dorado Refining Co.
9395	1	0	0	0	5-spot	475	54	Prod + Dak	336	25	U	1962	S Gas	1/9	36	--	19,651	1,098,115	1,055	83,259	1,055	26,223	*Was El Dorado Refining Co.
9516	2	3	0	0	5-spot	500	55	Prod + Dak	232	50	U	1962	S Gas	1/5	38	--	40,312	3,572,179	2,918	574,619	2,918	190,112	*Was El Dorado Refining Co.
14923	1	0	0	0	Irreg	920	99	Prod + Gorham Sd	3204	4	U	1969	--	1/6	38.3	--	36,047	321,751	4,851	373,484	4,851	34,701	*Was El Dorado Refining Co.
4543	3	0	0	0	Irreg	350	462	Prod	--	--	T	1954	S Gas	--	36	--	505,907	2,364,110	11,166	1,031,510	11,166	870,402	
7165	1	0	0	0	Irreg	900	31	Prod	--	--	T	1959	S Gas	--	38	--	11,412	449,128	2,990	109,031	2,990	94,699	
7167	1	0	0	0	Irreg	150	427	Prod	--	--	T	1959	S Gas	--	39	--	155,706	3,008,540	11,302	263,955	11,302	251,766	
7946	1	0	0	0	Irreg	100	793	Prod	--	--	T	1957	S Gas	--	36	--	289,267	1,055,005	794	51,640	794	51,640	
7947	1	0	0	0	Irreg	450	590	Prod	275	65	T	1960	S Gas	1/1	37	--	215,170	1,519,486	653	71,423	653	38,433	
7950	2	0	0	0	Irreg	525	550	Prod + Dak	275	65	T	1970	S Gas	--	37	--	401,531	2,528,303	9,572	606,139	9,572	517,295	
8293	1	0	0	0	Irreg	1900	140	Prod	--	--	T	1975	S Gas	--	--	--	50,923	128,205	2,015	4,886	2,015	4,886	
9425	2	0	0	0	Irreg	750	162	Prod	--	--	T	1962	S Gas	--	37	--	117,984	2,222,910	4,037	88,813	4,037	67,299	
13157	2	0	0	0	Irreg	1000	290	Chey	175	90	M	1966	--	1/1	33	--	211,955	1,589,569	14,784	572,437	14,784	362,107	
15814	1	0	0	0	Irreg	420	130	Prod	--	--	U	1970	S Gas	1/5	38	--	47,400	401,900	2,218	387,071	2,218	11,618	
2328	2	1	0	3	Irreg	715	97	Prod + Dak	300	--	M	1950	S Gas	1/1	37	--	97,393	3,328,822	3,700	1,208,698	3,700	502,860	
2030	6	0	0	2	Peri	773	709	Prod	0	0	T	1948	S Gas	180/100	39	--	1,594,407	23,758,437	36,461	3,279,892	36,461	1,526,027	
4738																							
7524																							
16582	1	0	0	0	Irreg	0	65	Prod	--	--	F	1972	S Gas	5/3	39.1	--	2,000	44,000	8,954	245,884	--	--	
9985	1	0	0	0	Irreg	380	516	Prod	--	--	U	1963	Wat	20/66	37	--	154,331	2,678,903	2,450	--	2,450	44,819	
4592	6	3	--	--	Irreg	1000	282	Wat Sd + Granite	40-26	25-40	F	1956	S Gas	--	39.2	--	619,889	9,306,051	19,159	935,806	19,159	866,547	
9407	3	2	--	--	Irreg	500	212	Chey Sd	88	242	U	1972	S Gas	--	38.9	--	233,217	5,697,263	10,132	430,428	3,722	290,496	
14758	2	0	--	--	Irreg	975	174	Wat Sd	40	26	F	1969	S Gas	--	37.0	--	127,247	885,938	4,749	66,686	4,749	48,898	
4587	10	2	0	2	Irreg	725	492	Prod	--	--	U	1953	--	1/.25	37.4	--	1,797,575	19,232,216	124,020	6,233,884	102,299	4,017,456	
4595																							
14620																							
5437	2	0	0	0	Irreg	599	340	Prod	--	--	U	1957	S Gas	1/6.1	36.4	--	248,095	3,910,308	6,266	1,062,242	6,266	360,108	*Was Pan American.
8926																							
12387	1	1	0	0	Irreg	855	389	Prod	--	--	U	1966	S Gas	1/1.5	36.4	--	141,964	2,191,491	9,954	719,875	9,954	133,319	*Was Pan American.
9415	--	--	--	--	Irreg	500	500	Prod	--	--	U	1962	Grav	--	37	--	167,258	2,343,571	5,655	--	3,000	--	
16068	6	1	--	--	Irreg	800	2574	Prod + Dak	488	90	-	1971	Grav	--	38	--	977,100	6,275,344	18,030	243,832	8,000	--	
1088	2	0	0	0	Irreg	1350	400	Prod + Dak Chey	200	--	T	1944	S Gas	--	34	--	292,293	2,526,881	15,805	490,383	15,805	254,465	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
2439	No	Hall Gurney	Getty Oil Co.	(W) Hall-Gurney	Ben Rein	25-14S-14W	890	0	LKC	2,890	18	23	2	0	0	Yes
5195					C.Colliver	28-14S-13W										
5781					W.Opdycke	29-14S-13W										
16911	No	Hall Gurney	Getty Oil Co.	(W) A.Ehrlich LKC	A.Ehrlich	25-14S-15W	160	0	LKC	2,944	84	3	0	0	0	Yes
4032	--	Hall Gurney	Theodore Gore	(P) J.Boxberger SWD	Gurney A & B	23-14S-14W	480	--	LKC-	3,000	100	10	0	0	0	Yes
4499					J.Boxberger	26-14S-14W			Tark	2,300						
13980																
17491																
6101	--	Hall Gurney	Theodore Gore*	(P) Kastrup	Kastrup NW	15-15S-12W	160	0	LKC	2,930	48	2	0	0	0	Yes
12581	--	Hall Gurney	Theodore Gore	(P) Kaufman B	Kaufman B	22-15S-12W	320	--	LKC-	2,774	300	6	0	--	0	Yes
					Kaufman B	27-15S-12W			Tark							
					Luerman	28-15S-12W										
13036	--	Hall Gurney	Theodore Gore	(P) Ruby A	Ruby A	36-14S-13W	80	--	LKC	2,835	90	3	0	--	0	Yes
16088	--	Hall Gurney	Theodore Gore*	(P) Miller	Miller	15-15S-12W	160	--	LKC	2,865	100	2	0	--	0	Yes
16112	--	Hall Gurney	Theodore Gore	(P) Weber	Weber,Luerman	28-15S-12W	200	--	LKC	3,000	150	2	0	--	0	Yes
8293	No	Hall Gurney	Gulf Oil Corp.	(W) Fink	Fink	15-14S-14W	160	--	LKC	3,000	--	3	0	0	0	Yes
12992	--	Hall Gurney	Gulf Oil Corp.	(W) Abraham Heard	Abraham Heard	20-14S-12W	160	0	LKC	2,850	--	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	30-14S-13W	320	0	LKC	2,859	25	18	2	0	0	Yes
					G.O. Miller C&D, Lavon Miller A	31-14S-13W										
6727	--	Hall Gurney	Ivan Holt Well Serv.Inc.*	(P) Strecker Tarkio	Strecker "A" & "B"	25-14S-14W	45	115	Tark	2,257	7	6	1	0	0	Yes
7366	--	Hall Gurney	Jayhawk Well Servicing Co.	(D) Michel B	Michel B	2-15S-14W	160	--	KC	2,900	4	3	--	--	--	Yes
8456	--	Hall Gurney	Jayhawk Well Servicing Co.	(-) Cody	Cody	16-14S-14W	160	--	KC	2,900	4	6	--	--	--	Yes
11860	--	Hall Gurney	Jayhawk Well Servicing Co.	(D) Hall B	Hall B	21-14S-14W	80	--	KC	2,900	4	1	--	--	--	Yes
				(D) Hall	Hall	21-14S-14W	80	--	KC	2,900	4	4	--	--	--	Yes
17046	--	Hall Gurney	K & P Oil Co.(Louis Kahan)	(D) Rusch	Rusch	33-14S-14W	160	0	Tark	2,351	8	3	0	0	0	Yes
15052	--	Hall Gurney	Koch Exploration Co.	(W) Ney Pool Unit	Hilgenberg, Hafeman	32-15S-12W	80	--	LKC	3,020	--	5	1	0	0	Yes
8345	--	Hall Gurney	Mai Operations	(D) Rudiger-Shaffer	Shaffer-Rudiger	3-15S-13W	80	--	LKC	2,970	6	5	0	0	0	Yes
9091	--	Hall Gurney	Mai Operations	(W) Campbell-Graham	Graham	21-14S-13W	220	20	Tark Sd	2,275	20	10	0	3	1	Yes
11296					Campbell	22-14S-13W										
11301																
9417	--	Hall Gurney	Mai Operations*	(P) Wm Letsch	Letsch, Wm.	26-14S-13W	160	110	Tark Sd	2,280	28	5	0	0	0	Yes
13594																
11111	--	Hall Gurney	Mai Operations *	(W) Bond-Jones	Bond, Anna, Jones "A"	22-14S-13W	40	160	Tark Sd	2,265	20	5	0	0	0	Yes
11509																
11620	--	Hall Gurney	Mai Operations*	(P) Shaffer "C"	Shaffer "C"	26-14S-13W	80	0	LKC-	2,890	25	8	0	0	1	Yes
									Tark	2,200	8					
15796	--	Hall Gurney	Mai Operations*	(W) Rogg-Rein	Rogg, Rein†	27-14S-13W	80	40	Tark Sd	2,265	8	3	0	1	0	Yes
13313	Yes	Hall Gurney	Mobil Oil Corp.	(-) Smoky Hill River Unit	Cities Service- Marsh "C"	29-14S-11W	520	0	LKC	2,860-	18	18	0	0	7	Yes
					Cities Service - Marsh "B", Farmer - Marsh "B"	30-14S-11W				2,880						
					Skelly-Pekarek, Mobil-Trapp, Farmer-Hupfer	31-14S-11W										
					Cities Service-Steinle, Farmer-Steinle	32-14S-11W										
8566	No	Hall Gurney	Carl Motzkus*	(D) --	Major	4-15S-12W	160	0	Lans	2,940	8	2	--	--	--	Yes
13536	No	Hall Gurney	Murfin Drilling	(P) Carter Waterflood	Carter	33-14S-13W	20	0	LKC	2,868	48	2	0	0	0	Yes
11738	--	Hall Gurney	NCRA	(W) Mai	Mai	34-14S-14W	20	0	Lans	2,920	8	2	0	0	0	Yes
10610	--	Hall Gurney	R.P.Nixon Operations	(W) Dumler	Dumler	24-14S-14W	100	0	Tark	2,300	10	6	0	0	0	Yes
11459	--	Hall Gurney	R.P.Nixon Operations	(P) Boxberger	Boxberger	2-14S-14W	20	0	LKC	3,050	25	2	0	0	0	Yes
8022	No	Hall Gurney	Okmar*	(W) Bond	Bond A & B	23-14S-13W	125	10	Tark	2,275	10	4	1	0	0	Yes
15415	No	Hall Gurney	Okmar	(W) Boxberger A-B-D	Boxberger A-B-D	15-14S-14W	40	0	LKC	2,980	10	6	0	0	0	Yes
16088	--	Hall Gurney	Okmar*	(P) Miller	Miller	15-15S-12W	160	--	LKC	2,865	100	2	0	--	0	Yes
5033	--	Hall Gurney	Petroleum Management Inc.	(W) Boxberger	Boxberger	22-14S-14W	70	70	LKC	2,960	20	2	--	--	--	No

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
2439	15	2	0	0	Irreg	1100	278	Prod + Dak Chey	200	--	T	1950	S Gas	2421/3670	39	--	1,523,696	23,125,778	57,533	3,672,694	57,533	2,613,260	
5195																							
5781																							
16911	1	0	0	0	Irreg	0	556	Prod	--	--	T	1973	S Gas	358/669	32	--	203,555	633,358	12,551	470,087	12,551	29,831	
4032	4	0	0	0	Irreg	860	350	Prod	--	--	T	1955	Wat	--	37	--	307,648	3,642,398	16,683	1,383,657	8,842	473,120	
4499																							
13980																							
17491																							
6101	1	0	0	0	Irreg	0	581	Prod	0	0	T	1958	S Gas	--	--	--	226,000	529,000	3,643	130,288	--	--	*Was Cities Service Oil.
12581	1	0	--	--	Irreg	750	300	Prod	--	--	T	1967	Wat	--	40	--	256,960	1,189,931	13,459	1,222,012	2,230	15,063	
13036	1	0	--	0	Irreg	1030	419	Prod	--	--	T	1966	Wat	--	37	--	150,015	1,848,126	13,548	701,401	10,083	116,051	
16088	1	0	--	0	Irreg	0	112	Prod	--	--	T	1971	Wat	--	38	--	7,280	171,645	322	111,200	126	2,843	*Sold to Okmar, May 1976.
16112	1	0	--	0	Irreg	0	200	Prod	--	--	T	1971	Wat	--	40	--	58,400	417,309	3,905	612,732	338	2,510	
8293	1	0	0	0	5-spot	1400	413	Prod	--	--	U	1960	S Gas	19/185	38.2	--	142,307	3,597,642	3,701	139,792	3,701	139,792	
12992	0	0	0	0	--	--	--	--	--	--	-	--	--	278/13253	--	--	--	--	3,852	--	0	--	*Production not started.
15078	2	0	0	0	Irreg	1000	480	Prod	2859	25	T	1967	Grav	3/8	38	--	172,566	1,910,532	36,511	2,928,652	33,963	284,558	
6727	4	0	0	0	Irreg	820	300	Prod	--	--	T+S	1959	Wat	1/12.5	38.5	--	110,000	4,154,892	6,200	271,230	6,200	56,070	*Was Kaiser Francis.
7366	1	--	--	--	Irreg	500	100	Prod	--	--	U	1959	Gas Exp	1/9	38.5	--	36,500	75,650	5,625	--	2,862	21,822	
8456	1	--	--	--	Irreg	300	200	Prod	--	--	U	1961	Gas Exp	1/9	38.6	--	182,500	360,500	5,110	--	2,550	11,550	
11860	1	--	--	--	Irreg	400	300	Prod	--	--	U	1965	Gas Exp	1/9	39.2	--	36,500	99,650	1,200	--	600	25,400	
	1	--	--	--	Irreg	300	100	Prod	--	--	U	1967	Gas Exp	1/9	38.6	--	1,095,000	77,000	3,650	--	1,825	37,825	
17046	1	0	0	0	Irreg	0	140	Prod	--	--	U	1973	Wat	1/8	36	--	51,100	129,693	1,737	66,064	1,042	11,165	
15052	2	1	0	0	Irreg	--	293	Ced H	446	60	F	1969	Gas Exp	1/1	39.3	--	185,171	1,670,360	29,472	855,391	19,570	254,589	
8345	1	0	0	0	Irreg	Vac	25	Prod	--	--	T	1960	S Gas	1/5	39	--	9,125	97,325	3,977	--	2,585	32,334	
9091	5	0	1	1	Irreg	1100	151	Prod + Up Dak	295	35	T	1964	S Gas	1/4	39	--	219,768	2,815,087	9,280	419,151	9,280	166,409	
11296																							
11301																							
9417	3	0	0	--	Irreg	600	243	Prod	--	--	T	1962	S Gas	1/6	38	--	266,043	3,334,844	5,925	--	2,963	109,131	*Was Sunray-DX
13594																							
11111	1	0	0	3	Irreg	400	114	Prod	--	--	T	1965	S Gas	--	38	--	41,517	1,530,425	2,130	--	2,130	107,103	*Was CRA.
11509																							
11620	3	0	0	0	Irreg	700	165	Prod	--	--	T	1967	S Gas	1/5	36	--	120,316	2,937,406	8,150	--	2,445	39,958	*Was Continental Oil Co.
15796	1	0	0	0	Line	800	100	Prod	--	--	T	1970	S Gas	1/4	36	--	36,503	231,079	13,159	--	5,264	27,836	*Was Magnolia Petroleum. †Rein lease abandoned 12-31-76.
13313	8	2	0	0	Peri	1550	4415	Alluvial Plains	80	20	M	1967	S Gas	--	36.4	9	1,616,139	13,607,647	38,669	1,066,635	38,669	1,066,635	
8563	1	--	--	--	Irreg	100	120	Prod	--	--	U	1967	S Gas + Wat	14/86	37	--	64,600	--	2,836	--	--	--	*Was Amco Production Co.
13536	1	0	0	0	Irreg	Vac	53.86	Prod + Tark	2250	8	T	--	S Gas	73/27	37	--	19,659	142,493	1,737	--	1,737	20,577	
11738	1	0	0	0	Irreg	1100	65	Prod + Dak	420	--	U	1935	S Gas	1/1	37.3	--	23,629	542,554	9,129	77,059	6,589	31,380	
10610	3	0	0	0	Irreg	650	110	Prod	--	--	U	1963	S Gas	3/7	38	--	50,100	878,525	9,830	178,053	9,830	171,506	
11459	1	0	0	0	Irreg	625	150	Prod	--	--	T	1964	S Gas	3/1	34	--	53,300	540,975	2,072	6,666	2,072	6,666	
8022	2	1	0	0	Irreg	Vac	350	Prod + †	--	--	U	1960	S Gas	--	36	--	130,637	2,095,342	2,890	281,339	2,890	84,574	*Was R.P.Nixon. †Alluvium. Discontinued 1974.
15415	2	0	0	0	Peri	225	650	Prod	--	--	U	1979	S Gas*	73/870	34	--	307,336	1,873,956	14,003	627,871	7,701	32,027	*Area has history accidental dump floods.
16088	1	0	--	0	Irreg	Vac	275	Prod	--	--	T	1971	Wat	--	38	--	100,650	265,015	175	--	0	2,717	*Was Theodore Gore.
5033	1	--	--	--	Irreg	--	--	Prod	--	--	-	1966	--	--	37	--	0	2,551,198	1,383	289,662	0	284,756	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
8420 8615 9511 13121	No	Hall Gurney	Lee Phillips Oil Co.	(W) Letsch	Letsch	34-14S-13W	140	20	Tark-LKC	2,240 2,810	10 20	9	0	0	0	Yes
8065	--	Hall Gurney	Pioneer	(P) Flegler	Flegler	28-14S-14W	160	80	LKC	2,950	150	1	0	0	0	Yes
18327	--	Hall Gurney	Pioneer	(W) Boxberger C	Boxberger C	16-14S-14W	120	0	LKC	2,975	160	5	0	0	0	Yes
11343	--	Hall Gurney	Great Bend Hydrotest&Supply	(D) --	Ray Long	20-14S-12W	20	--	Tark	2,250	3	1	--	1	--	Yes
17645	No	Hall Gurney	Samson Resources Co.*	(D) Reinhardt	Reinhardt	24-14S-15W	80	40	Arb	3,250	--	1	0	3	2	Yes
1552	No	Hall Gurney	Shields Oil Producers,Inc.	(W) G.C.Ehrlich	Ehrlich	32-14S-13W	180	--	KC	2,800	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 Lime	2,840	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	2,800	30	6	0	0	0	Yes
9408	No	Hall Gurney	Shields Oil Producers,Inc.	(W) Rein Area Waterflood	Rogg "E", Letsch Rogg "B", Giese	27-14S-13W 28-14S-13W	480	80	KC	2,800	25	18	1	0	0	Yes
7619	--	Hall Gurney	Southern States Oil Co.	(P) Boxberger	Boxberger	26-14S-14W	160	--	LKC	2,928	79	4	1	0	0	Yes
3059 6527 7567 14872	No	Hall Gurney	Terra Resources Inc.	(P) C.E.P.-L.-K.C.	Clyde, Ehrlich Phinney, Phinney "S"	19-14S-13W 30-14S-13W	300	0	LKC	2,950	8	15	0	0	0	Yes
5396	No	Hall Gurney	Terra Resources,Inc.	(W) Fink	Herbert Fink, Horace Fink Horace Fink	15-14S-14W 16-14S-14W	240	0	LKC	3,020	15	8	0	0	0	Yes
10571 10671 12707	No	Hall Gurney	Terra Resources,Inc.	(P) Krug	Albert Krug, Harry Krug	9-14S-14W	100	10	LKC	3,000	45	4	0	0	0	Yes
3771	--	Hall Gurney	Texaco Inc.	(-) C.W.Shaffer	C.W.Shaffer	18-14S-13W	--	--	Tark	--	--	1	0	0	0	No*
4517 5073	--	Hall Gurney	Texaco Inc.	(W) G.Boxberger A & B	G.Boxberger A & B	22-14S-14W	240	--	Lans	3,100	--	6	0	0	0	No
5858	--	Hall Gurney	Texaco Inc.	(P) Keil & Schnoor	N.Schnoor D.Keil	31-14S-13W 36-14S-14W	320	--	LKC	2,875	122	5	0	0	2	Yes
4219 4220 4504 5445 10948	--	Hall Gurney	Texaco Inc.	(W) H.L.& S.Boxberger	S.Boxberger, L.Boxberger, H.Boxberger	10-14S-14W	480	--	Reag-Lans	3,050	--	15	1	0	3	Yes
10284 10725	--	Hall Gurney	Texaco Inc.	(W) Goodheart-Ruby	W.S.Goodheart E.Z.Ruby	25-14S-13W 36-14S-13W	240	--	Lans	2,900	23	9	1	0	1	Yes
10433 10434 11915	--	Hall Gurney	Texaco Inc.	(-) Borell & Vejl	E.A.Borell F.Vejl	32-14S-12W 5-15S-12W	480	--	Lans	2,900	10	5	2	0	1	No*
17442	--	Hall Gurney	Texaco Inc.	(P) E.P.Gurney	E.P.Gurney	23-14S-14W	160	--	Tark	2,340	--	5	1	0	0	Yes
14969	No	Kraft-Prusa	Isern Petroleum Co.	(P) Durr	Durr AB	31-15S-12W	160	0	Quartzite Sd	3,374	20	4	1	0	0	Yes
8871	--	Nuss B	Duke Drilling Co.	(D) Nuss	Nuss	32-15S-14W	0	--	Lans	3,120	25	2	0	0	0	Yes
18014	No	Parker NE	Murfin Drilling	(P) Hilgenberg WF	Hilgenberg, Kaufman Herber, McKnight	7-15S-24W 8-15S-24W	560	60	LKC	3,050	162	8	0	0	0	Yes
16992	No	Roosevelt	Shields Oil Producers,Inc.	(D) Morgenstern	Morgenstern	23-15S-13W	40	--	LKC	3,300	10	1	0	0	0	Yes
15953	No	Russell	Okmar	(W) Holland-Killian	Holland, Killian	28-13S-14W	160	0	LKC	3,020	5	2	0	0	0	Yes
15949	No	S & S	Glenn W.Peel Oil	(D) Shaffer	Shaffer	1-13S-15W	160	0	LKC	2,804-21	45	5	0	0	0	Yes
11977	--	Stricker	American Petrofina Co. of Texas*	(W) Stricker	Stricker, Stricker "B" & "C"	16-15S-14W	200	0	LKC	3,041	--	3	0	0	0	Yes
16047	Yes	Trapp	Icer Addis*	(W) Trapp Unit Waterflood	Trapp Unit	25,26,35-15S-13W	720	--	LKC	3,064	150	9	3	0	0	Yes
2969	No	Trapp	Arvada Oil Co.*	(W) Hickey	Hickey	30-14S-13W	160	--	KC	2,922	--	4	--	0	--	Yes
5472 13257	--	Trapp	Cities Service Oil Co.	(W) Eichman "A" Waterflood	Eichman "A", Tittel "A" Krug "G", Krug "F"	12-15S-14W 13-15S-14W	91	75	LKC	3,090	12	4	0	0	11	Yes
7631	--	Trapp Northeast	Cities Service Oil Co.	(W) Rogg "D"	Rogg "D"	9-15S-13W	196	36	LKC	3,090	28	3	1	0	1	Yes
13776	No	Trapp	Colorado Oil Co.,Inc.	(W) Maag	Maag	7-15S-13W	30	--	LKC	3,000	8	1	1	0	0	Yes
13777	--	Trapp	Colorado Oil Co.,Inc.	(W) Krug	Krug	7-15S-13W	70	0	LKC	3,000	8	5	0	0	0	Yes
7606	--	Trapp	Continental Oil	(W) Trapp Lansing	J.W.Meharg	17-15S-13W	160	0	LKC	2,950	21	5	2	--	--	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
8420	2	0	0	0	Irreg	95	600	Prod + River Sd	70	10	M	1961	S Gas	93/7	38	--	219,000	2,258,010	58,207	2,995,034	47,400	644,772	
8615																							
9511																							
13121																							
8065	1	0	0	0	Irreg	635	370	Prod	--	--	T	--	S Gas	2/3	39	--	135,000	--	2,913	--	2,550	--	
13327	1	0	0	0	Irreg	625	340	Prod	--	--	T	1976	S Gas	1/1	37	--	61,200	--	6,099	--	3,000	--	
11343	1	--	1	--	--	0	3	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Herman A.Flader
17545	1	0	0	0	Irreg	0	675	Prod	--	--	T	1975	Wat	2/98	30	--	247,260	498,977	2,761	148,442	--	--	*Was S&S Pipe & Supply.
1552	1	0	0	0	Irreg	1000	404	Prod + Dak + Chey	220	20	M	1971	S Gas	--	37	--	147,476	735,659	24,741	99,910	21,000	88,500	
6847	1	0	0	0	Irreg	0	200	Prod + Arb	3300	100	U	1957	S Gas	--	37	--	72,000	878,500	4,890	50,290	2,000	50,100	
7750	3	0	0	0	Irreg	900	277	Prod + Dak + Chey	220	20	M	1964	S Gas	--	37	--	304,198	2,565,951	35,204	212,556	30,000	168,500	
9408	9	0	0	0	Irreg	800	237	Prod + Dak + Chey	2800	25	T	1963	S Gas	--	39.3	--	779,865	12,913,788	44,222	1,004,848	35,000	710,000	
7619	2	0	0	0	Irreg	450	152	Prod + Dak	1520	--	M	1960	Grav	--	36	--	110,829	3,544,306	2,258	163,701	2,258	163,701	
3059	5	0	0	0	Irreg	1282	283	Prod + Dak	134	30	T	1959	S Gas	39/61	37	--	508,962	5,077,149	42,437	1,458,771	42,437	880,233	
6527																							
7567																							
14872																							
5396	3	0	0	0	Irreg	1257	228	Prod	0	0	T	1957	S Gas	53/47	36.4	--	241,895	5,527,167	12,418	747,802	10,706	451,609	
10571	2	0	0	0	Irreg	1069	719	Prod	0	0	T	1963	S Gas	15/85	35.7	--	526,301	6,664,398	6,154	194,157	3,875	114,087	
10671																							
12707																							
3771	0	0	0	0	--	0	0	None	--	--	U	1959	Wat	--	--	--	0	0	1,792	18,464	0	0	*No injection since 1969.
4517	1	0	0	0	--	0	124	Prod	--	--	U	1953	S Gas	2418/8804	37	--	4,529	5,079,634	13,128	530,820	13,128	530,820	
5073																							
5858	2	1	0	0	Irreg	Vac	22	Chey	280	100	F	1958	Wat	--	--	--	8,083	8,083	5,810	111,612	2,534	8,271	
4219	3	1	0	6	Peri	250	368	Prod	--	--	U	1954	S Gas	73/118	--	--	402,566	9,306,693	18,859	1,951,465	18,859	698,500	
4220																							
4504																							
5445																							
10948																							
10284	4	1	0	1	Irreg	600	156	Prod + Arb Granite	--	--	U	1963	S Gas	1944/3621	36	--	237,928	7,917,847	17,594	555,766	17,594	429,396	
10725																							
10433	0	0	0	5	Irreg	0	0	Prod	--	--	U	1963	S Gas	1261/2640	36.5	--	0	4,059,827	7,577	390,791	7,577	301,074	*No injection since 8/1/71.
10434																							
11915																							
17442	2	0	0	0	Irreg	575	187	Prod	--	--	U	1974	--	44/200	--	--	136,637	358,898	10,500	29,001	0	862	
14969	1	--	--	--	Irreg	0	590	Prod	--	--	T	1969	S Gas	10/1	35	--	215,625	2,543,282	3,744	153,121	0	--	
8871	1	0	0	0	Irreg	200	350	Prod + Dak	305	--	U	1961	S Gas	--	35	--	127,750	1,973,100	2,011	122,912	--	--	
18014	1	--	--	--	Irreg	200	--	Prod	--	--	T	1976	S Gas	1/1	37	--	78,146	78,146	9,970	9,970	5,065	5,065	
15992	1	0	0	0	Irreg	0	100	Prod	--	--	T	1973	S Gas	--	38	--	36,500	122,300	3,033	11,990	1,500	5,000	
15953	1	0	0	0	Irreg	0	82	Prod + Arb	3600	5	U	1971	S Gas	36/154	35	--	29,927	604,036	10,354	897,053	5,572	27,070	
15949	1	0	0	0	Irreg	Grav	18	Prod	--	--	U	1971	Wat	14/65	37.5	--	32,850	163,037	2,915	22,057	2,915	22,057	
11977	1	0	0	0	Irreg	Vac	330	Prod	--	--	U	1965	S Gas	1/1	40	--	120,273	932,778	3,133	62,786	3,133	62,786	*Was El Dorado Refining Co
16047	4	0	0	0	Irreg	750	1296	Prod	--	--	U	1971	S Gas	--	37	--	474,316	1,177,281	15,034	47,551†	10,000	25,667†	*Was Willie E.Schultz †Since 1974
2969	1	--	--	--	5-spot	260	385	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Skelly Oil.
5472	2	0	0	4	Irreg	685	250	Prod	--	--	T	1957	S Gas	60/85	38	--	188,459	6,672,088	10,995	1,595,732	10,995	569,812	
13257																							
7631	4	0	0	1	Irreg	769	472	Prod + Dak	400	--	U	1960	S Gas	22/10	37	--	1,507,226	7,620,759	29,080	1,432,884	29,080	431,620	
13776	1	0	0	0	Irreg	1100	120	Prod + Arb	3316	--	U	1967	--	12/53	37	--	30,078	452,608	1,888	--	0	6,853	
13777	2	0	0	0	Irreg	775	284	Prod + Arb	3306	4	U	1967	Wat	21/37	37	--	106,404	1,093,662	8,656	--	6,131	101,993	
7606	7	13	--	--	Irreg	950	224	Chey Sd + Dak	550	72	U	1961	S Gas	--	38.5	--	573,475	7,586,367	24,109	882,413	24,109	810,202	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Concl.)																
7589	Yes	Trapp	Energy Reserves Group, Inc.*	(W) Northeast Trapp	John Letsch "A" & "B", John Heffernan, R. Roesner	4-15S-13W 9-15S-13W	520	0	LKC	3,010	55	12	2	0	0	Yes
7590																
7604																
7553	--	Trapp	Exxon Co. U.S.A.	(W) North Trapp Waterflood Unit	D.Josephine J.Detrich J.Letsch, L.Sellens	7-15S-13W 8-15S-13W 17-15S-13W	460	--	KC Lime	2,986	28	14	--	--	1	Yes
7765	Yes	Trapp	Getty Oil Co.	(W) Anderson-Rein Unit	M.E.Anderson M.E.Anderson, George Rein Jr.	7-15S-13W 8-15S-13W	480	0	LKC	2,900	50	13	4	0	0	Yes
7566	No	Trapp	Hillenburg Oil Co.*	(P) Berrick	Berrick	6-15S-13W	40	20	LKC	2,990	20	3	0	0	0	Yes
14141	No	Trapp	Kewanee Oil Co.	(W) Berrick, Piester A & B	Berrick Berrick, Piester A & B	23-15S-13W 24-15S-13W	80	0	KC	3,028	18	3	0	0	0	Yes
15070	No	Trapp	Kewanee Oil Co.	(W) Berrick	Berrick	23,24-15S-16W	0	40	Tark	2,301	45	0	1	0	0	Yes
14364	Yes	Trapp	Murfin Drilling Co.	(W) Ber-Sel-Es Unit	Ber-Sel-Es Unit	22,27-15S-13W	80	35	LKC	3,060	36	7	0	0	0	Yes
5183	--	Trapp	NCRA	(W) Flegler "B" Tarkio	Flegler "B"	2,11-15S-14W	10	60	Tark	2,298	20	1	0	0	0	Yes
6038	--	Trapp	NCRA	(W) Flegler "C"	Flegler "C"	11-15S-14W	60	40	Lans	3,057	7	6	0	0	0	Yes
10484	--	Trapp	NCRA	(W) Boxberger "B"	Boxberger "A" & "B"	10-15S-14W	40	40	Lans	2,976	6	--	--	--	--	No*
9131	--	Trapp	NCRA	(W) Flegler "B" Lansing	Flegler "B"	11-15S-14W	30	30	Lans	2,966	26	3	0	0	0	Yes
7568	No	Trapp	Phillips Petroleum Co.	(W) Roesner Lease	Roesner	9-15S-13W	50	0	LKC	3,100	50	1	0	0	0	Yes
10920	--	Trapp	Ruthven, Inc.	(D) Ben Rein	Ben Rein	8-15S-13W	80	0	LKC	2,950	150	2	0	0	0	Yes
3537	--	Trapp	Shell Oil Co.	(D) L.Sellens B & C	L.A.Sellens B & C	22-15S-13W	160	0	LKC	3,035	84	5	0	0	0	Yes
11871																
13496																
11410	--	Trapp	Shell Oil Co.	(W) Mary Kejr A,B,C	Mary Kejr C Mary Kejr A,B	11-15S-13W 14-15S-13W	400	0	LKC-Tor	2,917	115	4	0	0	0	No
12252	--	Trapp	Shell Oil Co.	(W) N.A.Hoffman A & B, J.Ehrlich A	N.A.Hoffman A J.Ehrlich A N.A.Hoffman B	7-16S-13W 18-16S-13W 12-16S-14W	360	0	LKC-Top	2,962	100	11	3	0	0	No*
7570	No	Trapp	Shields Oil Producers, Inc.	(W) Northeast Trapp	Rogg "A"	9-15S-13W	160	80	KC	2,800	25	3	0	0	0	Yes
5952	No	Trapp	R.H.Siegfried, Inc.	(W) Ross Lease*	Ross	11-15S-13W	20	20	Lans	3,000	12	2	0	0	0	Yes
7565	No	Trapp	Sohio Petroleum Co.	(W) Anschutz Lease	Anschutz	10-15S-13W	100	--	LKC	3,050	18	3	0	0	0	Yes
7607	No	Trapp	Terra Resources, Inc.	(W) North Trapp W.F.S.	Bitter, Holland L.Sellens, Tom Sellens	16-15S-13W 17-15S-13W	370	80	LKC	3,000	25	18	0	0	0	Yes
7370	--	Trapp Pool	Roy Vonfeldt*	(W) George Sellens	George Sellens	20-15S-13W	60	--	KC	2,950	6	5	0	0	1	Yes
15539	--	Wilson Creek	L.G.Stephenson & Co, Inc.*	(P) Sebesta; Stopple	E.Sebesta, R.Stopple	24-14S-11W	320	0	Lans	2,820	20	11	0	0	0	Yes
16282																
17428	No	Wilson Creek	L.G.Stephenson & Co, Inc.	(P) Princ	Princ, Small Sebesta, J.Kratky, Stopple J.Kratky "B"	23-14S-11W 24-14S-11W 25-14S-11W	560	0	Lans	2,821	2828	27	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	2,100	4	2	0	0	0	Yes
17954																
		RUSSELL COUNTY TOTALS (Reported)					26357	3086				893	89	27	50	
SALINE COUNTY																
17809	No	Hunter North	Melland Drlg. Co. Inc.	(D) North Hunter	Swisher	5,8-16S-1W	160	160	Miss	2,662	3-5	5	0	0	0	Yes
10664	--	Lindsborg	Ray Perera	(-) Robinson-Martinson-Johnson	Robinson, Martinson, Johnson	32-15S-3W	160	80	Maq	3,400	5	4	--	0	2	No*
18390	--	Mortimer	R.K.Teichgraeber	(P) Mortimer	Mortimer	4-16S-1W	160	0	Miss	2,600	10	3	0	--	0	Yes
11513	No	Pihl	Tomlinson Oil Co, Inc.	(D) Pihl	Krauss "A"	24-15S-2W	400	240	Miss	2,750	10	3	1	0	0	Yes
13808	--	Salina	Art Small & Co.*	(D) Airport-City of Salina	Airport-City of Salina	20-14S-2W	80	80	Maq	3,224	20	1	--	0	1	No†
18025	No	Salina	L.B.Jackson Co.	(P) Salina	Cline	29-14S-2W	560	--	Maq	3,225	6	5	0	0	0	Yes
9817	No	Salina South	Shenandoah Oil Corp.*	(W) Swigart	Swigart Riddle Wauhob	6-15S-2W 7-15S-2W 8-15S-2W	170	20	Maq	3,225	15	4	--	--	--	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
7589	9	3	0	0	Irreg	797	297	Prod + Dak	600	130	U	1960	S Gas	1/1.5	38.8	--	977,170	10,626,378	53,204	3,530,705	53,204	1,355,782	*Was Pan American.
7590																							
7604																							
7553	10	--	--	1	5-spot	700	300	Dak	240	87	T	1961	S Gas	--	39	6	1,139,320	14,995,446	60,353	3,440,338	60,353	2,207,326	
7765	9	0	0	0	Irreg	1400	274	Prod + Dak	337	32	T	1961	S Gas	1396/1026	37	--	902,611	11,019,451	41,325	2,557,366	41,325	1,174,017	
7566	1	0	0	0	Irreg	31V	720	Prod	--	--	T	1960	Wat	2/98	36	--	262,800	--	3,740	--	3,740	--	*Was Terra Resources Inc.
14141	2	0	0	0	Irreg	550	176	Prod	--	--	U	1968	--	27/32	38	--	128,203	1,425,515	4,832	509,628	3,327	38,390	
15070	1	0	0	0	Irreg	500	373	Prod + KC + Arb	3028	18	U	1969	S Gas	5/23	38	--	136,288	647,381	0	36,084	--	--	
14364	3	0	0	0	Irreg	500	200	Prod + Dak	250	154	M	1969	S Gas	44.22/55.78	38-39	--	213,780	1,804,105	22,148	--	22,148	163,299	
5133	1	0	0	0	Irreg	900	206	Prod	--	--	U	1956	S Gas	1/.29	38.3*	--	75,077	2,691,941	2,522	350,548	2,522	186,575	*@ 60.
6038	2	0	0	0	Irreg	550	334	Prod + Arb	3322	4	T	1958	S Gas	1/3.7	27.7*	--	243,321	5,083,224	10,466	311,711	10,466	233,116	*@ 60.
10484	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	87,707	2,489,719	1,754	137,734	1,754	88,174	*Project terminated 6/76.
9131	1	0	0	0	Irreg	475	928	Prod + Arb	3177	3	U	1962	S Gas	1/2.5	38.3*	--	338,700	4,482,890	5,300	233,618	5,300	148,267	*@ 60.
7568	1	0	0	0	Irreg	52	799	Prod *	--	--	U	1960	S Gas	1/0.5	39	6	291,595	3,554,330	2,757	310,449	2,757	130,273	*+ water from other leases.
10920	1	0	0	0	Irreg	0	75	Prod	--	--	T	--	S Gas	1/1	38	--	27,500	--	6,905	--	5,200	--	
3537	1	0	0	0	--	--	--	Prod	--	--	U	--	S Gas	--	33	--	63,137	275,899	17,674	304,577	--	--	
11871																							
13496																							
11410	1	1	0	0	--	--	--	Prod	--	--	U	--	S Gas	--	37	--	48,791	1,264,033	3,434	614,814	--	--	
12252	0	2	--	--	--	--	--	Prod	--	--	U	--	S Gas	--	36	--	0	388,000	18,342	5,559,617	--	--	*Inj. wells temp. abd.
7570	4	0	0	0	Irreg	800	242	Prod	--	--	T	1960	S Gas	--	37.2	--	354,326	4,445,666	24,743	382,622	15,000	330,100	
5952	2	0	0	0	Irreg	0-Vac	425	Prod + Arb	3286	8	T	1958	--	4/1	41.3	--	148,750	2,477,639	6,112	261,601	6,112	261,601	*+Dump Flood
7565	3	1	0	0	Irreg	930	278	Prod + Dak	450	55	T	1960	S Gas	1/1.5	40.7	--	304,239	3,334,626	25,105	356,311	25,105	278,055	
7607	13	0	0	0	5-spot	721	265	Prod	0	0	T	1961	S Gas	56/44	36.9	--	1,228,187	14,792,129	78,884	6,994,657	78,884	2,460,313	
7370	2	--	0	--	5-spot	0	235	Prod	--	--	T	1965	Grav	--	36	--	128,460	--	5,475	--	4,000	--	*Was Terra Resources Inc.
15539	2	0	0	0	Peri	950	201	Prod	--	--	U	1970	S Gas	83/17	39	--	147,443	852,305	26,795	428,496	--	--	*Was Ash
13272																							
17428	1	0	0	0	Peri	Vac	316	Prod	--	--	U	1974	S Gas	83/13	39.3	--	115,822	322,884	16,392	336,683	--	--	
17785	2	0	0	0	--	275	38	Prod	--	--	U	1973	S Gas	92/8	39	--	27,740	228,842	662	20,683	--	--	
17954																							
	348	47	3	30													43,012,215	530,458,271	3,414,910	97,548,593	1,617,891	40,562,712	
17809	1	0	0	0	Irreg	Vac	475	Prod	--	--	U	1975	Wat	25/475	34	--	90,000	180,000	4,500	6,266	--	--	
10664	1	1	--	--	--	--	130	Prod	--	--	T+S	1964	Wat	--	34	--	70,000	2,045,000	2,750	36,650	1,200	20,200	*As continuous as recycling permits.
18390	1	--	1	--	--	0	300	Prod	--	--	U	1976	Wat	1/9	36	--	45,900	45,900	3,517	3,517	--	--	
11513	1	0	0	0	Peri	Vac	201	Prod	--	--	U	1965	Wat*	--	35.5	--	73,365	2,285,227	5,731	183,806	5,731	105,713	*+S Gas + Gas Exp.
13808	--	--	--	--	Irreg	Vac	0	Prod	--	--	-	1967	--	1/4	32-34	--	0	8,000	0	7,000	0	120,000	*Was Don McKellar. †Trouble with injection.
18025	1	0	0	0	Irreg	0	60	Prod	--	--	U	1975	Wat + Grav	3/1	32	--	21,900	25,650	6,687	12,253	1,337	1,587	
9817	1	--	--	--	Irreg	350	761	Prod	--	--	U	1962	Wat	3/7	35	--	277,780	3,635,269	7,200	2,524,130	7,200	2,000,313	*Was Solar Oil.

TABLE 1—ENHANCED OIL-RECOVERY PROJECTS, 1976—*Continued*

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
SALINE COUNTY (Concl.)																
14385	--	Smolan	Gear Petroleum Co.	(W) Smolan Field Waterflood Project	Larson B Frost, Gustafson Bengtson, Lofgren	30-15S-3W 25-15S-4W 36-15S-4W	800	--	Maq	3,400	6	14	2	0	0	Yes
6631	No	Smolan	Ray Perera	(D) Ostenberg	Ostenberg	30-15S-3W	--	--	Maq	3,413	--	3	--	--	2	No*
		SALINE COUNTY TOTALS (Reported)					2490	580				42	3	0	5	
SCOTT COUNTY																
4383	Yes	Shallow Water	Maurice L.Brown Co.	(P) Mark "B"	Mark "B"	14-20S-33W	120	0	Miss	4,595	80	2	3	0	0	Yes
SEDGWICK COUNTY																
16044	--	Buzzi	American Petrofina Co. of Texas*	(P) Hemme	Hemme	31-25S-1E	100	0	Hunt	3,445	5	3	1	0	0	Yes
17209	No	Cheney	A.Scott Ritchie	(P) Casad	Casad	7-27S-4W	120	0	Mise-Viola	3,976	44	1	0	1	0	Yes
15022	No	Clearwater	King Oil Co.	(P) Senter	Senter	23-29S-2W	20	20	LKC	2,940	10	1	0	0	0	Yes
8324	Yes	Gladys	Kewanee Oil Co.	(W) Gladys Unit	Gladys Unit	29,30,31,32-28S-1E 25,36-28S-1W	1060	550	Miss	3,200	10-78	56	10	0	1	Yes
8325	Yes	Gladys	Kewanee Oil Co.	(W) East Gladys Unit	Blood, Parton, Tucker	29-28S-1E	160	70	Miss	3,200	10-40	6	1	0	0	Yes
15691	No	Goodrich	Jerry Bouse*	(P) Rowley	Rowley	17-25S-1E	160	0	KC	2,690	30	1	0	0	0	Yes
13037	--	Goodrich	Cities Service Oil Co.	(W) Goodrich Unit	Goodrich Unit - Smith "A"	13-25S-1E	87	0	KC Lime	2,730	11	9	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	2,884	8	17	9	--	--	Yes
17666	Yes	O.S.A.	Continental Oil	(W) Gillian Simp Sn.Un.	Gillian Simp Sn.Un.	33-29S-1W	920	0	Simp	3,735	15	10	3	--	--	Yes
4626	--	Robbins	Stelbar Oil Corp.	(W) Robbins	Brookings, Lohkamp Tracts Nolan	16-28S-1E 21-28S-1E	280	200	Miss	3,140	30	5	0	0	0	Yes
16303	--	Ulmer South	Crowe Drilling Co,Inc.	(D) Greenup	Miller	33-25S-2E	160	--	Burg	2,902	8	2	0	0	0	Yes
12272	--	Valley Center	Bankoff Oil Co.	(W) Bright Inj.	Sam Bright	1-26S-1W	40	120	Lans	2,555	--	2	0	0	0	Yes
11419	No	Valley Center	Samson Resources Co.*	(W) Valley Center WF	Reed, Corr Wright Shawver	1-26S-1W 12-26S-1W 7-26S-1E	220	0	KC	2,500	--	5	0	0	0	Yes
		SEDGWICK COUNTY TOTALS (Reported)					4847	960				118	24	1	1	
SEWARD COUNTY																
16786	--	Condit Unit	Anadarko Production Co.	(W) Condit Unit	Condit Condit, Dodd Etzenhouser, Cady Worthington,M., Worthington Eubanks McAhren	7-34S-32W 18-34S-32W 19-34S-32W 12-34S-33W 13-34S-33W 24-34S-33W	1030.8	0	Miss + Ches Sd	6,236	13.3	3	1	1	0	Yes
15801	--	Massoni	Leben Oil Corp.*	(-) Stewart	Stewart	25-32S-31W	160	--	LKC	5,370	184	1	--	--	--	Yes
		SEWARD COUNTY TOTALS (Reported)					1190.8	0				4	1	1	0	
SEWARD-STEVENS COUNTY																
13902	Yes	Cutter	Mobil Oil Corp.	(-) Cutter Unit Area Cooperative Waterflood Project.	George B.Strong Wm.I.Cutter George B.Strong	6,7-31S-34W 1-31S-35W 12-31S-35W	880	--	Up Morr	5,200	15	4	1	0	1	Yes
SHERIDAN COUNTY																
8906	--	Adell	Continental Oil	(W) Adell LKC Un	Adell LKC Un	1,2,3,11,12-6S-27W	584	0	LKC	3,500	23	14	21	--	--	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
14835	5	2	0	0	Irreg	Vac	2514	McPher	250	--	U	1962	--	--	--	35	917,752	--	10,131	--	10,131	--	
6631	0	--	--	--	Irreg	--	--	Prod	--	--	T+S	Pre-1962	S Gas	--	35	--	--	--	--	--	--	--	*Temporarily discontinued.
	11	3	1	0													1,496,697	8,225,046	40,516	2,773,622	25,599	2,247,816	
4383	1	0	0	0	Irreg	0	259	Prod	--	--	T	1968	Wat	--	26	--	34,663	888,780	2,374	2,063,673	1,187	18,893	
16044	1	0	0	0	Irreg	400	767	Prod	--	--	U	1971	Wat	1/40	41	--	279,883	1,776,221	1,959	249,035	--	--	*Was El Dorado Refining Co
17209	1	0	1	0	Irreg	0	100	Prod	--	--	U	1973	S Gas	1/1	34	--	36,000	90,000	1,963	42,991	950	1,200	
15022	1	0	0	0	Irreg	0	4.5	Prod	--	--	U	1969	S Gas	11/100	37	--	1,650	8,650	3,290	69,307	1,700	6,869	
8324	31	12	0	0	Peri	1500	258	Gr Wells	20	50	F	1961	S Gas	1658/1687	42	--	2,914,539	103,848,199	92,204	8,179,034	92,204	6,652,095	
8325	6	0	0	0	Peri	1500	341	Gr Wells	20	50	F	1961	S Gas	153/24	42	--	746,911	15,937,374	17,271	1,124,078	17,271	1,000,367	
15691	1	0	0	0	Line	350	40	Prod	--	--	U	1970	Wat	1/8	35	--	15,330	78,330	1,226	9,751	--	--	*Was Albert A. Bouse.
13037	5	0	0	0	Peri	1200	200	Prod + Miss	3000	5	U	1966	S Gas	18/9	33	--	491,376	3,170,260	13,986	704,368	13,986	273,214	
15105	7	1	--	--	Irreg	1150	331	Stal Sd	2450	100	U	1970	Wat	--	45.5	--	846,908	4,927,177	62,009	923,015	32,009	865,477	
17666	2	0	--	--	Irreg	100	491	Prod	--	--	U	1974	S Gas	--	--	--	359,213	879,391	147,241	267,079	143,532	149,360	
4626	3	0	0	0	Irreg	400	650	Prod	--	--	T	1954	S Gas	--	44	--	711,000	5,962,000	15,302	--	15,302	1,371,241	*Includes Lohkamp Tracts
16303	2	0	0	0	Peri	Vac	40	Prod	--	--	U	1971	--	--	--	--	--	--	--	--	--	--	
12272	2	0	0	0	Irreg	165	170	Prod	--	--	-	1965	Grav	1/15	36.6	--	62,050	946,733	3,522	53,304	2,200	47,622	
11419	1	1	0	0	Irreg	0	512	Prod	--	--	U	1966	S Gas	--	33	--	187,338	2,765,017	3,834	3,866,150	3,834	57,025	*Was Kathol Petroleum Inc.
	63	14	1	0													6,652,198	140,389,352	363,807	15,488,112	322,988	10,424,470	
16786	2	0	0	0	Irreg	900	777	Prod + Sh Fr	202	138	M	1973	S Gas	86/50	41.9	2.2	567,426	3,605,878	115,235	228,196	114,907	133,497	
15801	1	--	--	--	Irreg	0	100	Prod	--	--	T	1970	S Gas	11/100	36	--	36,500	228,000	4,284	27,082	--	--	*Was T.I.Leben.
	3	0	0	0													603,926	3,833,878	119,519	255,278	114,907	133,497	
13902	3	1	0	1	Irreg	200	2783	Ogal	250	250	M	1968	S Gas	417/50	40	.66	1,018,606	15,426,781	57,497	1,038,882	57,497	2,234,882	
8906	7	32	--	--	Peri	350	487	Ced H	1875	50	U	1972	S Gas	--	39	--	1,247,350	25,070,568	77,413	2,007,352	77,413	1,780,611	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
SHERIDAN COUNTY (Concl.)																
9881 --		Adell	Petroleum Management, Inc.	(W) Adell Lansing-KC Unit	Adell	7-18-6S-26W 12,13-6S-27W	190	0	LKC	3,530	12	2	3	0	0	Yes
16164 --		Hoxie	John O. Farmer, Inc.	(-) Hoxie Unit	Decker Pratt "B" Mosier, Mosier "B"	6-9S-28W 1-4S-29W 36-8S-29W	400	--	Tor	3,856	5	3	0	0	0	Yes
15224 --		Hoxie West	Koch Exploration Co.	(W) Pratt	Pratt	35-8S-29W	40	--	Shaw	3,816	14	2	0	1	0	Yes
18370 --		Hoxie West	Koch Exploration Co.	(W) West Hoxie Unit	Mickey, Currier Pratt	34-8S-29W 35-8S-29W	--	--	LKC	3,915	--	3	0	0	0	Yes
15349 No		Jerome	Okmar Oil Co.	(W) Jerome W.F.	Jerome	35-8S-27W	100	0	LKC	3,930	5	4	0	0	0	Yes
18290 No		Ochs	L.G. Stephenson & Co. Inc.	(P) Ochs	Ochs	24-9S-28W	320	0	Lans	3,906	8	1	0	0	0	No*
6322 No		Studley	K.R.M. Petroleum Co.*	(D) Pratt	Pratt	22,23-8S-26W	640	0	LKC	3,740	20	3	0	0	0	Yes
SHERIDAN COUNTY TOTALS (Reported)							2274	0				32	24	1	0	
STAFFORD COUNTY																
15826 No		Bayer	Phillips Petroleum Co.	(P) Lincoln "A" Lease	Lincoln "A"	29-21S-14W	10	0	Simp	3,750	14	1	0	0	0	Yes
15211 Yes		Brenn	Sterling Drilling Co.	(P) Brenn Unit	--	19-23S-13W	320	--	LKC	3,654	8	2	0	0	0	Yes
12237 No		Centerview	Ladd Petroleum Corp.	(P) E. Toland & O. Toland Repressuring Project	E. Toland, O. Toland	28-24S-13W	120	0	LKC	3,590	20	3	0	0	0	Yes
11941 --		Centerview	White Hawk Oil Co.*	(D) Van Lieu Unit	Van Lieu	28-34S-13W	60	0	LKC	3,580	12	2	0	0	0	Yes
9481 No		Chase-Silica	Parrish Oil Co.	(D) Spacil Lease	Spacil	4-21S-12W	30	50	Arb	3,321	10	2	0	0	0	Yes
13792 No		Crissman	Atlantic Richfield Co.	(W) Welsh Beaver Unit	George Walls Beaver, R.J. Welsh	15-23S-14W 16-23S-14W	480	200	Simp	3,950	8	6	0	0	0	Yes
15378 --		Dell East	White Hawk Oil Co.*	(P) Reed Unit	Reed-White Hawk, Reed-Cities Service	8-21S-13W	160	0	LKC	3,450	10	5	0	0	0	Yes
16314 No		Fanshier	Icer Addis	(W) Fanshier	Fanshier	9-21S-13W	160	--	LKC	3,313	5	3	0	0	0	Yes
16704 No		Fanshier	Icer Addis	(W) Harms	Harms	16-21S-13W	120	--	LKC	3,319	5	2	0	0	0	Yes
16034 --		Gartung	R.E. Davis	(P) Gartung	Gartung	4-22S-14W	160	0	Viola-Arb	3,822	25	3	0	0	0	Yes
12284 No		Gates	Atlantic Richfield Co.	(W) Gates Unit	Gates	27-21S-13W	80	30	LKC	3,550	130	6	0	0	0	Yes
15785 Yes		Gates	Nadel and Gussman	(W) Fischer Unit	Fischer	25,36-21S-13W	420	0	LKC	3,300	20	25	6	0	0	Yes
13744 No		Gates	Okmar Oil Co.	(W) Fischer-Weizbrod	Fischer Estate Weizbrod	36-21S-13W 1-22S-13W	50	0	LKC	3,300	5	3	0	0	0	Yes
16109 No		Gates	Phillips Petroleum Co.	(W) Stafford	Stafford	33-21S-13W	25	0	LKC	3,371	24	5	0	0	0	Yes
14491 Yes		Glasscock	Petroleum, Inc.	(W) Glasscock LKC Unit	Harris "D", Belote, Glasscock "B" Barstow, Barstow "B"	32-24S-13W 5-25S-13W	300	0	LKC	3,837	15	5	0	0	0	Yes
17842 No		Grunder	Tomlinson Oil Co, Inc.	(D) Grunder	Wilson "B"	11-25S-15W	60	0	Miss	4,222	26	2	1	0	0	Yes
18556 No		Hazel West	Brougher Oil, Inc.	(-) Grow Lease	G.H. Grow	17-21S-13W	40	--	KC	3,325	175	2	0	0	0	Yes
17790 No		Hickman	H.A. Chapman*	(W) Krampe	Krampe	33-21S-14W	80	--	LKC	3,556-3,614	14	1	--	--	--	Yes
10320 --		Hickman	Kaiser Francis	(-) Gates B & Pile	Gates B, Pile	27-21S-14W	240	40	Lans	3,412	200	8	1	0	0	Yes
16179 --		Hufford	Energy Reserves Group, Inc.	(W) Chapman	Chapman	32-21S-13W	160	0	LKC	3,500	20	3	0	0	0	Yes
16263*--		Jordan	Cities Service Oil Co.	(W) Jordan	Neeland "A" & "B" Jordan, Stimatze	15-25S-14W 16-25S-14W	108	0	LKC	3,630	35	5	0	0	0	Yes
1976 --		Kenilworth	Phillips Petroleum Co.	(-) Ochel SWD #3	Ochel	15-22S-13W	30	10	Arb	3,820	--	2	0	0	0	Yes
1419 --		Kipp	Earl M, Knighton*	(P) Kipp Repressure System	Kipp "F" Kipp "C" Kipp "A"	22-25S-14W 26-25S-14W 27-25S-14W	160	40	LKC	3,836	73	5	0	0	0	Yes
14970 --		Kipp Northeast	Cities Service Oil Co.	(W) Kipp N.E. Waterflood	Tanner Kipp "A" Kipp "B"	14-25S-14W 23-25S-14W 24-25S-14W	40	0	LKC	3,650	21	2	0	0	0	Yes
14623 No		Knoche South	Palomino Petroleum*	(D) Jordan "B"	Jordan "B"	8-24S-12W	80	0	Viola-LKC	3,871	--	1	0	0	0	Yes
15408 No		Koelsch West	Nadel and Gussman	(W) Koelsch	Koelsch	23-24S-14W	50	0	LKC	3,700	8	2	0	0	0	Yes
17285 No		Kowalsky SW	Okmar Oil Co.	(W) Schlochtermeier	Schlochtermeier Kasselman A	7-21S-11W 8-21S-11W	160	0	Simp-Arb	3,418	29	5	0	0	0	Yes
11122 Yes		Leesburg	Continental Oil	(W) Leesburg, No.	Leesburg, No.	12-25S-13W	386	0	Lans-Simp	3,710 4,070	83 13	6	1	--	--	Yes

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
9881	1	4	0	0	Irreg	275	149	Prod + Ced H	1900	--	T	1963	S Gas	1/1	38	--	48,905	4,930,984	3,189	315;655	3,189	277,133	
16164	3	--	--	--	--	0-150	700	Prod + Fr Sd	155	20	M	1971	Grav	--	39	--	269,465	1,369,498	11,857	114,166	9,100	--	
15224	1	0	0	0	Irreg	--	227	Prod	--	--	U	--	Gas Exp	2/1	34.5	--	82,907	633,210	18,476	92,508	18,476	30,917	
18370	1	0	0	0	Irreg	--	236	Prod	--	--	U	1976	--	1/1	23.1	--	28,584	28,584	1,372	359,292	1,372	1,372	
15349	1	0	0	0	Peri	700	251	Prod + Alluvium*	50	--	U	1970	S Gas	30/142	39	--	91,866	366,846	14,225	152,253	13,067	46,397	*Discontinued in 1974.
18290	1	0	0	0	Peri	0	44	Prod	--	--	U	1976	Wat	22/78	28.3	--	9,900	9,900	1,581	14,379	--	--	*Began injection 5/20/76.
6322	1	0	0	0	Irreg	Vac	90	Prod	--	--	U	1958	S Gas	1/9	39	--	33,000	2,024,000	2,000	--	2,100	59,700	*Was Crown Oil Co.
	16	36	0	0													1,811,977	34,433,590	130,116	3,055,605	124,720	2,196,130	
15826	1	0	0	0	Irreg	0	11	Prod	--	--	U	1970	S Gas*	1/0.2	32	--	3,913	14,187	4,054	275,711	--	--	* + Wat.
15211	1	0	0	0	Irreg	1300	250	Prod + Sh Gr	50	17	M	1969	S Gas	--	31	--	91,250	635,500	8,702	77,766	8,702	77,766	
12237	2	1	0	0	Irreg	Vac	108	Prod + Ground	30	--	M	1966	S Gas	17/20	26	25	98,797	1,037,693	3,911	391,881	3,911	83,069	
11941	1	0	0	0	Irreg	0	76	Prod	--	--	U	1965	Wat	--	25	--	27,740	185,010	2,937	--	2,937	25,713	*Was Natural Gas & Oil.
9481	1	0	0	0	Irreg	0	257	Prod	--	--	U	1962	Wat	1/9	37	--	93,805	1,116,187	5,258	375,788	1,906	35,644	
13792	2	0	0	0	Irreg	240	328	Prod + Ter Sd	60	25	M	1966	S Gas	16/0	33	6	220,861	2,423,874	9,019	210,582	9,019	205,805	
15378	1	0	0	0	Irreg	600	566	Prod	--	--	U	1970	Wat	--	37	--	206,590	1,323,201	11,951	--	11,951	119,553	*Was Natural Gas & Oil.
16314	1	0	0	0	Irreg	50	166	Prod + Fr	--	--	M	1972	Gas Exp	2/3	32	--	60,769	317,357	6,679	176,457	2,200	35,781	
16704	1	0	0	0	Irreg	50	125	Prod + Fr	--	--	M	1972	Gas Exp	35/65	33	--	45,634	217,203	5,169	153,374	1,000	7,130	
16034	1	0	0	0	3-spot	0	450	Prod	--	--	T	1971	--	4/15	28	--	164,300	938,800	7,574	--	7,574	--	
12284	1	--	0	--	Irreg	Vac	315	Prod + Arb	3660	--	U	1966	S Gas	38/913	38	3.5	118,297	2,276,554	9,726	136,374	9,726	136,374	
15785	3	0	0	0	Peri	0	163	Prod + Sh Fr	60	20	F+T	1970	S Gas	1/1	34.5	--	288,640	1,779,206	34,239	--	17,439	31,630	
13744	1	0	0	0	Peri	0	320	Prod + Arb	3670	5	U	1967	S Gas	28/58	34	--	117,300	529,490	7,745	489,580	4,260	19,062	
13109	1	0	0	0	Irreg	0	283	Prod	--	--	U	1971	S Gas	1/4.4	30	--	103,477	471,355	14,084	347,768	5,930	44,498	
14491	2	0	0	0	Line	754	838	Quat	100	50	F	1968	S Gas	52/35	30.1	15	611,791	3,545,412	29,500	764,285	29,500	271,610	
17842	1	1	0	0	Irreg	250	14	Prod	--	--	U	1975	S Gas	3/50	34	--	5,000	13,600	804	55,783	--	--	
18556	1	0	0	0	Irreg	500	60	Prod	--	--	U	--	Grav	--	31.2	--	21,600	--	4,323	--	1,200	--	
17790	1	--	--	--	Irreg	Vac	64	Fr Wat Sd	50	50	M	1975	S Gas	3/1	22	--	23,245	38,609	1,050	97,397	--	--	*Co-op Flood. Tenneco operates east half of the small structure.
10320	2	0	1	0	Irreg	Vac	600	Prod	--	--	T+S	1963	Gas Exp	43/57	29	--	213,000	1,061,710	43,070	1,202,998	8,000	32,300	
16179	1	0	0	0	Irreg	Vac	739	Prod	--	--	U	1971	S Gas	1/11.9	26.2	--	269,714	969,905	9,920	606,880	9,920	55,045	
16263	5	1	0	0	Peri	123	290	Prod + Wat Sd	80	--	M	1956	S Gas	150/210	33	--	517,590	6,683,170	21,307	1,568,427	21,307	491,746	*Formerly C-5070 and C-10626
1376	1	0	0	0	Irreg	0	628	Prod + Arb*	3820	--	U	1948	Wat	--	20	--	229,117	12,200,698	2,604	224,522	--	--	*From another lease
1419	1	0	0	0	Peri	Vac	145	Prod	--	--	U	1946	S Gas	--	35	--	46,750	1,203,845	3,025	--	8,025	--	*Was Skelly Oil
14970	2	0	0	0	Irreg	655	312	Prod + Wat Sd	80	--	M	1969	S Gas	16/25	32	--	238,130	1,827,940	6,819	422,956	6,819	71,382	
14623	1	0	0	0	Irreg	0	22	Prod	--	--	U	1968	S Gas	6/70	34	--	8,050	52,215	1,259	96,489	--	--	*Was Terra Resources (CRA).
15408	1	0	0	0	Irreg	600	175	Prod + Sh Fr	75	35	M	1970	S Gas	1/1	31	--	64,000	222,840	2,427	--	2,427	17,082	
17285	--	--	--	--	Peri	1000	51	Prod	--	--	U	1974	S Gas	1/7	33	--	18,666	78,161	5,661	271,752	325	795	
11122	8	0	--	--	Peri	1600	293	Wat Sd	91	23	F	1964	S Gas	--	33.5	--	856,751	8,574,086	24,278	855,914	24,278	734,484	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
STAFFORD COUNTY (Concl.)																
11123	Yes	Leesburg	Continental	(W) Leesburg, So.	Leesburg, So.	13-25S-13W	246	0	Lans-Simp	3,708 4,064	84 12	--	6	--	--	Yes
14032	No	McCandless	Atlantic Richfield Co.	(-) McCandless	McCandless	30-25S-13W	--	--	LKC	3,701	280	5	0	0	0	--*
17223	--	McKittrick	Aspen Drilling Co.	(-) Wolf "A"	Wolf "A"	28-21S-11W	320	0	Simp	3,350	18	4	0	0	0	Yes
15562	No	Max	Phillips Petroleum Co.*	(D) Siefkes "A"	Siefkes "A"	34-21S-12W	40	0	LKC	3,264-3,494	--	2	0	0	0	Yes
8551	--	Merle	Southern States Oil Co.	(P) Williams	Kuske Williams	31-23S-13W 32-23S-13W	320	--	KC	3,699	10	3	1	0	0	Yes
15347	Yes	Moody	Nadel and Gussman	(W) Moody	Moody	7,8-25S-14W	150	160	Miss Ch	4,200	20	5	--	0	0	Yes
13909	No	Mountain View	Petroleum Inc.	(W) Walls "A" Water-flood Project	Walls "A"	29-22S-13W	160	0	LKC	3,450	7	2	0	0	0	Yes
6117	No	Mueller	Joe Holman	(W) Welch	Welch "A"	18-21S-12W	50	10	Arb	3,570	14	2	1	0	0	Yes
6062	--	Mueller	Kaiser Francis	(D) Batman B	Batman B	12-21S-13W	90	40	Arb	3,570	--	3	0	0	0	Yes
13245	--	Mueller	White Hawk Oil Co.*	(P) Batman Unit	Batman	13-21S-13W	80	0	LKC	3,280	10	2	0	0	0	Yes†
13180	--	Omlor	Wm.D.Witcraft*	(W) Omlor-Bushnell	Omlor	10-24S-12W	120	--	KC	3,556	6	2	--	--	--	Yes
15248	No	Oscar North	Palomino Petroleum*	(W) Williams	Williams	12-22S-14W	80	0	LKC	3,553	5	3	0	0	0	Yes
5948	No	Oscar South	Petroleum, Inc.	(D) Oscar South	Smith "J"	26-22S-14W	80	0	LKC	3,456	10	1	0	0	0	Yes
6336	--	Oscar West	Cities Service Oil Co.	(W) Oscar West Unit	Oscar West Unit	15,16,21,22-22S-14W	334	112	LKC	3,600	7	9	6	0	1	Yes
6910	No	Pleasant Grove	J.S.Martin*	(D) Spangenberg Unit	Spangenberg	26-22S-12W	--	--	KC	3,550	10	2	1	5	1	Yes
13372	--	Pundsack	Cities Service Oil Co.	(W) Pundsack Unit	Pundsack Unit Schartz "B"	19,29,30-21S-13W 20-21S-13W	107	38	LKC	3,270	27	5	7	0	1	Yes
15232	No	Radium Townsite	H.A.Chapman	(W) Bauer-Strobel WF	Bauer Strobel	32-21S-14W 33-21S-14W	320	0	LKC	3,569	7	5	--	--	--	Yes
18179	No	Rattlesnake East	Petroleum, Inc.	(P) Henderson Lease	Henderson #2	7-24S-13W	160	120	LKC	3,643	30	1	0	0	0	Yes
18379	No	Rattlesnake East	Petroleum, Inc.	(P) Rixon "A"	Rixon #1	7-24S-13W	160	120	LKC	3,646	30	1	0	0	0	Yes
8232	--	Rattlesnake South-east	White Hawk Oil Co.*	(D) McConnaughhay Unit	Harrison	13-24S-24W	60	0	LKC	3,700	10	1	0	0	0	Yes
13751	No	Richardson	C & S Well Service	(P) Aiken	C.Aiken	20-22S-11W	40	--	KC	3,500	200	1	--	2	--	Yes
13654	--	Richardson	Energy Reserves Group, Inc.	(W) Komarek	V.Komarek C.J.Heyen "B"	30-22S-11W 31-22S-11W	480	0	LKC	3,386	28	--	--	--	--	No*
12920	--	Sand Hill	Bergman Oil Co.	(W) Mellies	Mellies	31-21S-11W 36-21S-12W	40	--	Simp Sd	3,504	4	1	0	0	0	Yes
17119	No	Sand Hill	H.A.Chapman	(W) Duggan	Duggan	30-21S-11W	160	0	LKC	3,236-3,329	3	1	--	--	--	Yes
15780	--	Saundra	Southern States Oil Co.	(P) Christiansen	Christiansen	15-21S-12W	160	--	KC	3,361	25	4	1	0	0	Yes
13406	No	Seever Northwest	Thornton E.Anderson*	(D) Bowker	Bowker	36-24s-14W	60	0	Miss	4,030	20	2	0	0	0	Yes
13617	No	Seever Northwest	Ladd Petroleum Corp.	(P) Sanders	Sanders	1-25S-14W	160	--	LKC	3,664	0	3	0	0	0	Yes
14994	Yes	Seever Northwest	Petroleum, Inc.	(W) Seevers NW LKC Unit	Bowker "I" & "J", Long "C", Seevers, Goodman(Wallingford) Neill, Goodman(Pet.Inc.), Turner "E", Goodman "B" Bowker "L" & "B"	6-25S-13W 1-25S-14W 12-25S-14W	860	0	LKC	3,760	15	11	4	0	0	Yes
8784	--	Shaeffer Rothgarn	Kaiser Francis	(P) Willcut B	Willcut A & B	4-21S-13W	160	0	Lans	3,270	200	1	0	0	0	Yes
11894	Yes	Shaeffer Rothgarn	Petroleum, Inc.	(W) Shaeffer Unit	Tucker, Sharp, Fanshier "A"	4-21S-13W	120	0	Congl	3,500	7	2	4	0	0	Yes
14211	--	Shaeffer Rothgarn	Texaco Inc.	(W) C.D.Koopman	C.D.Koopman	4-21S-13W	160	--	Congl	3,540	10.6	2	0	0	0	Yes
15937	No	Silver Bell	Woodman-Iannitti Oil Co.	(W) Silver Bell Pilot Flood	Soeken-Besthorn	9-22S-13W	160	--	LKC	3,530	4	3	0	0	0	Yes
11775	--	Smallwood	White Hawk Oil Co.*	(D) Wetig Unit	Wetig	2-22S-14W	80	0	LKC	3,412	20	4	0	0	0	Yes
11857	Yes	Smallwood	White Hawk Oil Co*	(W) Smallwood-LKC Unit	Keenan, Strobel Adams	2-22S-14W 11-22S-14W	80	0	LKC	3,550	6	3	1	0	0	Yes
13889	--	Snider	F.G.Holl	(D) Schafer	Schafer	11-21S-11W	100	--	Congl Ch	3,350	25	2	1	0	1	Yes
12286	No	St.John	Atlantic Richfield Co.	(W) McNaughten "B"	McNaughten "B"	27-24S-13W	160	--	LKC	3,711	300	2	0	0	0	Yes
12323	No	Strobel	Thornton E.Anderson	(P) Strobel Lease	Strobel	8-22S-14W	160	160	KC	3,658	6	1	0	0	0	Yes
18099	No	Zenith Peace Creek	A.Scott Ritchie	(*) Richardson	Richardson	22-24S-11W	240	0	Viola	3,813	42	2	0	3	1	Yes
		STAFFORD COUNTY TOTALS (Reported)					10346	1130				220	42	10	5	

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
11123	--	10	--	--	Peri	--	--	Wat Sd	99	23	F	1964	S Gas	--	33.5	--	126,060	5,230,332	1,226	236,087	1,226	194,600	
14032	0	0	0	0	Irreg	--	--	None	--	--	-	--	--	--	--	--	0	0	8,286	629,412	0	0	*Injection not yet started.
17223	1	0	0	0	Irreg	700	60	Prod	--	--	U	1973	S Gas	--	48	3.5	21,900	65,224	18,159	339,040	10,589	13,896	
15562	1	0	0	0	Peri	0	43	Prod	--	--	U	1970	S Gas	1/1	38	--	15,640	54,095	27,852	183,684	--	--	*Was Thomas H.Allen.
8551	1	0	0	0	Irreg	--	204	Prod	--	--	T	1965	Grav	--	33	--	74,460	1,164,778	2,026	--	2,026	--	
15347	0	4	0	0	Peri	0	0	Prod	--	--	T	1970	S Gas + Wat	1/12	35	--	0	1,389,400	8,650	--	0	11,400	
13909	1	1	0	0	Line	990	178	Prod + Quat	100	50	M	1967	S Gas	63/19	30.6	14	64,980	407,230	12,390	380,342	12,390	140,102	
6117	2	1	0	0	Irreg	130	190	Prod	3570	14	T	1958	S Gas	1/10	36.3	--	66,500	1,157,950	4,571	99,074	4,571	99,074	
6062	1	0	0	0	Irreg	Vac	70	Prod	--	--	T+S	1958	Gas Exp	4/7	37	--	26,000	311,070	15,200	--	500	13,800	
18245	1	0	0	0	Irreg	0	70	Prod	--	--	U	1976	--	12/70	35	--	16,170	16,170	2,702	2,702	392	392	*Was Natural Gas & Oil. †Since 5/15/76.
13180	1	--	--	--	Irreg	100	96	Prod	--	--	U	1967	Wat	4/96	34	--	40,296	149,700†	3,923	13,847†	--	--	*Was Sun Oil Co. †Since 6/73.
15248	1	0	0	0	Irreg	0	355	Surface	80	--	F	1969	S Gas	4/1	30	--	129,930	859,259	5,320	489,999	2,026	21,326	*Was Shell Oil Co.
5948	1	0	0	0	Line	Vac	0.5	Prod	--	--	T	1957	S Gas	881/536	32.4	11	160	41,163	1,825	129,759	1,825	50,578	
6336	9	0	0	0	Peri	737	263	Prod + Fr Sd	60	--	M	1958	S Gas	45/11	33	--	813,422	13,528,932	33,071	2,511,040	33,071	1,692,529	
6910	1	1	--	1	Irreg	Vac	210	None	--	--	U	--	S Gas	9/1	35.1	--	76,650	--	2,920	277,920	2,920	--	*Was Shelly-Miller.
13372	7	0	0	0	Peri	478	140	Prod + Sh Sd	35	53	-	1967	S Gas	44/67	30	--	456,495	5,212,825	10,683	1,093,417	10,683	216,023	
16232	3	--	--	--	Peri	Vac	79	Prod + Arb	--	--	T	1973	S Gas	3/1	36	--	86,348	382,932	32,538	1,075,961	29,157	67,331	
18179	1	0	0	0	Line	Vac	20	Prod	--	--	T	1976	S Gas	5/20	32.5	--	7,300	7,300	1,800	1,800	--	--	
18379	1	0	0	0	Line	Vac	30	Prod	--	--	T	1976	S Gas	--	32.5	--	4,500	4,500	450	450	--	--	
8232	1	0	0	0	Irreg	0	10	Prod	--	--	U	1961	Wat	--	28	--	3,650	39,285	1,462	--	1,462	32,841	*Was Natural Gas & Oil.
13751	1	0	2	0	Line	200	300	None	--	--	U	1960	Gas Exp	5/1	38	--	106,000	1,968,800	2,555	48,665	1,400	29,460	
16654	--	--	--	--	Irreg	0	0	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Shut down through 1976.
12920	1	--	--	--	Irreg	0	10	Prod	--	--	T	1966	S Gas	1/0	42	--	360	37,315	2,879	36,374	0	13,342	
17119	1	--	--	--	Irreg	Vac	84	Prod + Arb	--	--	T	1973	S Gas	1/3	36	--	30,834	100,893	6,101	206,594	1,250	1,250	
15780	1	0	0	0	Irreg	--	121	Prod	--	--	T	1971	Grav	--	34	--	44,165	279,994	4,838	33,038	4,838	33,038	
13406	1	0	0	0	Irreg	0	60	None	--	--	U	1967	S Gas	16/2	34	--	21,000	284,000	3 750	143,623	600	3,600	*Was Dunne-Gardner.
13617	3	0	0	0	Irreg	Vac	217	Prod	--	--	U	1967	S Gas	50/19	29	25	172,260	1,202,739	5,136	357,126	5,136	50,413	
14994	3	4	0	0	Peri	921	461	Quat Sd	100	50	F	1969	S Gas	137/136	32	12	504,261	4,471,608	21,936	1,409,220	21,936	332,084	
8784	1	0	0	0	Irreg	485	250	Prod	--	--	T+S	1961	Gas Exp	3/2	38	--	91,250	980,915	2,555	218,886	--	--	
11894	1	1	0	0	Line	640	281	Prod + Quat	73	50	M	1965	S Gas	258/2	43.8	3	102,541	335,939	5,257	374,738	5,257	141,034	
14211	2	0	0	0	Irreg	200	413	Prod + Arkansas River Gravel	100	--	M	1969	S Gas + Liquid Exp	680/5	44.5	--	302,005	1,839,505	8,752	111,850	8,752	85,659	
15937	1	0	0	0	4-spot	425	280	Prod	--	--	T	1967	S Gas	3/2	31	--	102,200	1,242,650	4,500	--	3,000	22,400	
11775	1	0	0	0	Irreg	0	299	Prod	--	--	U	1965	Wat	--	32	--	109,135	445,850	17,338	--	13,003	86,255	*Was Natural Gas & Oil.
11857	3	0	0	0	Peri	875	509	Prod + Fr	70	--	M	1957	S Gas	4.7/1	35	--	557,355	4,296,200	8,618	--	8,618	185,141	*Was Sun Oil.
13889	1	--	0	--	Peri	--	25	Prod	--	--	U	1967	S Gas	1/1	48.9	--	9,125	102,250	6,228	92,404	--	--	
12286	2	0	0	0	Irreg	550	513	Ter	63	23	M	1968	S Gas	30/58	32.2	--	352,731	2,168,575	23,501	419,860	23,501	419,860	
12323	1	0	0	0	Irreg	0	150	None	--	--	U	1965	S Gas	1/1	35	--	52,000	362,000	1,660	70,764	200	200	
18099	1	0	1	0	Irreg	0	1200	Prod	--	--	U	1975	S Gas	8/92	39	--	400,030	465,000	4,893	373,491	4,893	65,000	*Repressuring
	104	25	4	1													9,758,583	100,344,186	617,646	20,163,851	413,578	6,520,127	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
SUMNER COUNTY																
13051	No	Churchill	Docking Development Co.*	(D) Rutter #3	Churchill	25-31S-2E	530	530	Stal	1,850	75	6	0	0	0	Yes
11093	Yes	Anson Southeast	Phillips Petroleum Co*	(P) Anson East Unit	Anson East Unit	6,7,18-31S-1W	220	60	Miss	3,750	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	3,750	10	7	1	0	0	Yes
12774	No	Ashton Northwest	Lario Oil & Gas Co.	(D) Williamson	Lario Williamson	13,14-34S-1E	320	0	Miss Ch	3,484	--	2	0	0	0	Yes
13900	--	Bates Pool	Phillips Petroleum Co.*	(P) Bates Unit	Bates Unit	31-30S-1W 36-30S-2W	520	120	Miss	3,750	10	11	0	0	0	Yes
15716	--	Caster	Reserve Oil,Inc.	(P) Caster Unit	Dunbar #1, Melick (SWD) Caster Lease, Long #1 Caster "A" Lease	33-33S-2E 35-33S-2E 2-34S-2E	160	15	Lay "A"	2,680	10	13	--	--	--	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	4,352	15	3	0	0	5	Yes
14630	--	Fall Creek	Texaco Inc.	(W) Fall Creek K.C.Unit	S.Hibbisiefken S.Hibbisiefken, I.E.Showplter N.J.Peters E.A.Hudson	3-35S-3W 4-35S-3W 9-35S-3W 10-35S-3W	380	--	KC	3,700	6.5	5	1	0	1	Yes
17006	--	Guelph	Herndon Drilling Co.	(P) --	Gurley	6-35S-1E	140	--	Simp	3,908	19	5	--	--	--	Yes
18062	Yes	Holman	Donald C.Slawson	(W) Holman Bartlesville Unit	Holman Bartlesville Waterflood Unit	26-33S-2E 35-33S-2E	580	0	Bartl	3,275	18	9	0	0	0	Yes
10738	No	Interchange	Lario Oil & Gas Co.	(P) Ashton-Lynch Unit	Lario-Lynch Lario-Ashton	18-32S-1E 19-32S-1E	480	0	Simp	4,050	--	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	LKC	3,045	5	4	0	0	0	Yes
17986	No	Latta Northwest	Dunne-Gardner Petroleum,Inc.	(D) Daley	Daley	5-30S-2W	80	--	Lans	3,170	3	2	0	0	0	Yes
15195	--	Love	Continental Oil*	(P) Love	Love, Orie, Ruth	13-32S-4W	--	--	Simp	4,378	12	1	--	--	--	Yes
14498	Yes	Murphy	Terra Resources, Inc.	(W) Vernon North Unit	Kemp Callender, Callender "B" Waggoner McClasky	8-35S-2E 9-35S-2E 16-35S-2E 17-35S-2E	288	0	Miss-Dolomite	3,392	10.9	6	0	0	0	Yes
9106	--	O'Hara	Stelbar Oil Corp.,Inc.	(W) O'Hara	O'Hara	18-32S-1W	160	--	KC	3,250	10	4	2	0	0	Yes
4601	No	Padgett	R.P.Guyot*	(D) Thiessen Lease Well #3	H.H.Thiessen	22-34S-2E	70	--	Miss	3,462-3,491	29	2	1	3	--	Yes
9209 14030	--	Padgett	Stelbar Oil Corp.	(-) Norrish-Shawver	Fee Spence, Norrish Fee "A"	26-34S-2E 27-34S-2E 34-34S-2E	560	0	Miss Ch	3,450	30	11	0	0	0	Yes
10688	--	Padgett	Stelbar Oil Corp.	(-) Post	Post	34-34S-2E	80	--	Miss Ch	3,450	30	2	0	0	0	Yes
16148	No	Portland	A.L.Abercrombie, Inc.	(D) Hunt	Hunt	16-34S-1E	80	160	Lay	3,026	31	3	1	0	0	--
17898	No	Rusk	Lario Oil & Gas Co.	(P) Rusk	Rusk B	8-32S-1E	240	0	Simp	4,027	--	1	1	3	0	Yes
12773	No	Rutter Southwest	Lario Oil & Gas Co.	(P) King	Lario-King	29-33S-2E	160	0	Simp	3,525	15	1	0	0	0	Yes
11612	No	Seydell	E.Morris Seydell*	(W) Seydell	Nordstrom Seydell Seydell "B"	8-30S-1E 16-30S-1E 17-30S-1E	200	80	Simp	3,800	13	4	0	0	0	Yes
14742	No	Seydell	Shenandoah Oil Corp.*	(W) Stunkel	Stunkel	9-30S-1E	20	0	Simp	3,766	7	1	--	--	--	Yes
17256	--	Shell	Moran Oil Co.*	(-) Miller	--	17-32S-2E	40	0	Simp	3,341	10	2	0	0	0	Not
18259	No	Slate Creek	Oil Property Management	(P) Brann Martin	Brann Martin	9-33S-2E	160	0	KC	2,680	12	1	0	0	0	Yes
16485	No	Slick Carson	J.A.Allison	(W) Conrod	Conrod	24-32S-2E	80	40	Bartl	3,124	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	3,750	40	2	0	0	0	Yes
15952	No	Voils	Donald C.Slawson	(W) Bell "B" & Kraft "B"	Bell "B" Kraft "B"	16-30S-1W 17-30S-1W	320	0	Miss	3,500	20	2	0	0	0	Yes
3396	Yes	Wellington	Terra Resources, Inc.	(W) Wellington Unit	Beam, Manahan Curtis, Kamas, Markley Hennigh, Ludwig, Riddell, Miller, Gaskill, Neel Frankum, Frankum "A", Murphy	20-31S-1W 28-31S-1W 29-31S-1W 32-31S-1W	2240	0	Miss-Dolomite	3,650	20	63	3	0	0	Yes

(Continued on pp.95.)

Oros, Saile, Sherman, and Woods—Enhanced Oil-Recovery Operations in Kansas, 1976

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60 F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
13051	0	0	0	0	--	0	--	Prod	--	--	U	--	--	--	--	35.5	365,000	--	8,030	--	--	--	*Was Green Pipe & Supply.
11093	2	0	0	0	Peri	250	552	Wellington	50	20	F	1964	S Gas	--	41	--	402,861	3,824,855	72,130	1,688,674	63,923	809,339	*Was Beardmore Oil Co.
13989	3	0	0	0	Peri	180	280	Prod + Wellington	50	20	M	1968	S Gas	--	41	--	306,688	3,447,819	36,553	1,142,554	22,291	241,355	*Was Beardmore Oil Co.
12774	1	0	0	0	Irreg	Grav	DHDF	Prod + Lay + Arb	2863 3764	--	U	1966	S Gas	37/149	40	--	--	--	6,263	93,161	1,849	5,045	
13900	2	0	0	0	Peri	260	1062	Prod + Stal	2700	60	U	1967	Gas Exp	--	41	--	775,053	5,740,646	65,825	927,164	42,412	219,431	*Was Beardmore Oil Co.
15716	2	--	--	--	--	150	235	Prod	--	--	U	1970	Gas Exp +Limited	7/3	41	1.5	171,000	786,000	28,200	421,700	--	--	
12381	3	0	0	2	Peri	Vac	286	Prod	--	--	U	1967	Wat	29472/ 16450	44	1.13	313,517	4,660,630	8,861	1,179,786	--	--	
14630	1	5	0	0	Peri	150	152	Prod + Stal	3225	--	M	1969	S Gas	559/ 2572	36	3.6	55,479	2,080,025	4,963	143,878	4,963	117,447	
17006	--	--	--	--	Irreg	0	--	Prod	--	--	U	1973	Wat	1/12	45	--	60,000	2,091,950	28,249	2,545,113	10,000	30,627	
18062	4	0	0	0	Irreg	0	175	Prod + Stal Sd	225	90	T	1976	S Gas	1/2.5	39	2.5	23,296	256,802	10,837	522,478	6,299	6,299	
10738	1	0	0	0	Irreg	Grav	297	Prod	--	--	U	1964	Wat	3524/ 630	43	--	108,747	566,530	38,127	799,854	13,507	19,528	
15035	--	--	--	--	Irreg	0	203	Prod	--	--	U	1969	S Gas	30/ 320	37	--	74,475	921,144	9,985	545,768	4,308	13,421	
17986	1	0	0	0	Irreg	0	50	Prod	--	--	U	1975	S Gas + Wat	45/55	36	--	17,500	22,000	2,433	158,900	0	--	
15195	1	--	--	--	Irreg	0	130	Prod	--	--	U	1973†	S Gas	--	--	--	165,800	252,000	--	--	--	--	*Was Oasis Petroleum, Inc. †Date of purchase.
14498	5	0	0	0	Peri	Vac	301	Prod + Stal Sd	2293	138	T	1961	S Gas	.26/1.0	41.5	--	521,193	6,875,849	16,594	666,117	16,594	295,568	
9106	2	1	0	0	Peri	150	76	Prod	--	--	T	1961	S Gas	--	36	--	55,780	1,549,384	7,117	--	7,117	255,809	
4601	1	--	--	--	Line	Vac	--	Prod	--	--	U	--	S Gas + Wat	--	40.2†	--	22,520	--	1,901	--	0	--	*Was Rock Hill Petroleum. †@60.
9209 14030	2	0	0	0	Line	300	350	Prod	--	--	U	1960	S Gas + Wat	--	40	--	255,500	1,104,250	25,590	--	25,590	156,276	
10688	1	0	0	0	Irreg	400	350	Prod + Stal	2350	150	U	1965	Wat	--	40	--	127,750	793,836	7,778	--	5,834	53,274	
16148	--	--	--	--	--	--	--	Prod	--	--	U	1971	S Gas	--	39	--	68,956	545,741	3,472	617,108	1,000	13,500	
17898	1	1	3	0	Irreg	Grav	185	Prod	--	--	U	1975	Wat	17/162	38	--	67,612	91,588	5,592	361,535	--	--	
12773	1	1	0	0	Peri	60	434	Arb	3544	--	U	1964	S Gas	31/0	38	--	159,021	303,224	9,270	138,005	1,030	17,258	
11612	2	1	0	0	Irreg	460	425	Prod + Fr Sd	26	--	M	1963	S Gas + Wat	1/0	40	--	309,785	2,213,362	10,152	832,214	10,152	256,000	*Was Sam P.Wallingford, Inc.
14742	1	--	--	--	Peri	0	0	Prod	--	--	T	1969	S Gas	1/2	47-48	--	0	134,000	4,205	247,157	--	--	*Was Solar Oil Co.
17256	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	3,117	--	--	--	*Was Dunn & Strait Drilling Co. †Water hauled out.
18259	1	0	0	0	Irreg	0	53	Prod	--	--	T	1976	Gas Exp	16/84	36.5	--	12,720	12,720	2,757	2,757	0	0	
16485	1	0	0	0	Irreg	Vac	10000	Fr Surface	10	100	F	1972	S Gas	1/0	42	--	10,000	130,000	2,219	97,584	2,219	18,906	*Inject intermittently, as well varies.
11012	1	1	0	0	Peri	400	518	Prod	--	--	U	1964	S Gas	--	41	--	189,250	3,365,347	5,902	341,287	5,902	100,521	*Was Beardmore Oil Co.
15952	1	0	0	0	Irreg	200	125	Prod + Stal Sd	2600	90	U	1971	S Gas	2/1	46	1.5	45,625	230,338	7,032	162,493	4,922	40,631	
3396	38	1	0	0	Irreg	163	426	Prod + Stal Sd	2650	100	T+ U	1953	S Gas	98/1	42.4	--	5,828,269	118,321,280	163,641	9,412,780	163,641	8,798,040	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S – T – R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
SUMNER COUNTY (Concl.)																
3396 (Lease names and locations continued from pp.93.)					Peasel, Barlow, Erker, Barlow "A" & "B"	33-31S-1W										
					Rothrock, Rothrock "A", Deturk	4-32S-1W										
					Deturk "A" Nelson, Carr, Moore, White, McKee	5-32S-1W										
					Stone	6-32S-1W										
					McDowell	7-32S-1W										
					Cole	8-32S-1W										
					Caples	9-32S-1W										
SUMNER COUNTY TOTALS (Reported)							9428	1605				185	10	6	6	
TREGO COUNTY																
16437 No		Garner West	Benjamin Tepper	(P) Brown	Shearer	13-11S-25W	120	0	LKC	3,711	22	2	0	0	0	Yes
					Connors	23-11S-25W										
					Brown	24-11S-25W										
17618 No		Groff	John O.Farmer, Inc.	(-) Wannamaker-Holtsinger	Wannamaker "A" & "B"	34-14S-21W	200	--	Penn Sd	3,830	6	8	--	--	--	Yes
					Holtsinger "B"	35-14S-21W										
13935 --		Groff	Earl M.Knighton*	(W) Holtzinger	Holtzinger	35-14S-21W	80	0	Cher	3,795	16	2	1	0	0	Yes
17377 No		Holland	Donald C.Slawson	(W) Holland "B"	Holland "B"	23-13S-22W	320	0	LKC	3,600	10	2	0	0	0	Yes
13976 No		Kutina West	Shields Oil Producer,Inc.	(W) Dickman-Phillip Waterflood	Dickman	24-15S-22W	80	0	Cher Sd	4,200	20	1	0	0	0	Yes
11229 No		Mong	Wick's Petroleum Co.	(D) Trego	Mong	25-11S-13W	320	0	KC Lime	3,616	*	1	0	0	0	Yes
8278 No		Newcomer	A.L.Abercrombie,Inc.	(-) Rasek A	Rasek "A"	12-12S-23W	60	--	LKC	3,700	35	2	1	0	0	Yes
10092 --		Newcomer	Petroleum Management,Inc.	(W) Newcomer Coop-Hixson,LKS	Hixson LKC Unit	2,11-12S-23W	1280	0	LKC	3,660	12	7	3	0	0	Yes
					Newcomer A & B, Morgan C	12-12S-23W										
16356 --		Newcomer	Texaco Inc.	(W) Newcomer Unit	Sarah Losee, F.Rinker	1-12S-23W	480	--	LKC	3,650	3.3	4	1	0	0	Yes
17636 --		Nicholson	Cities Service Oil Co.	(W) Nicholson Field LKC W.F.	Huck "A"	25-11S-21W	80	0	LKC	3,580	12	2	0	0	0	Yes
14633 --		Ogallah	Colorado Oil Co,Inc.	(W) Schoenthaler	Schoenthaler	26-12S-22W	30	10	LKC	3,580	82	3	0	0	0	Yes
14666 --		Ogallah	Texaco Inc.	(P) Ogallah	Christian Church, Powers, Kellogg-Wynn	25-12S-22W	1690	--	Arb	3,950	24	34	14	0	17	No*
14667					J.F.Steckline, E.A.Scott, A.Schoenthaler, V.G.Powers C.Scott	26-12S-22W										
14948					G.Bittel	27-12S-22W										
					Monroe	31-12S-22W										
					Anderson "C"	34-12S-22W										
					P.Hendrickson, U.S.Government	35-12S-22W										
					Kellogg-Wynn, C.Scott, Benson E.M.Monroe	36-12S-22W										
17401 --		Ridgeway	Texaco Inc.	(P) E.King	Schoenthaler	26-12S-21W	320	--	Lans-Arb	3,712 3,893	--	4	0	0	0	Yes
					E.King	27-12S-21W										
17094 --		Trico	Cities Service Oil Co.	(W) Spaulding "B" W.F.	Spaulding "B"	1-11S-21W	160	0	LKC	3,366	8	3	1	0	0	Yes
6045 No		Wakeeney	Okmar Oil Co.*	(W) Kraus-Lemke	Kraus, Lemke	15-11S-23W	120	0	LKC	3,500	5	2	0	0	0	Yes
14181 No		Wakeeney	Okmar Oil Co.	(W) Mong	Mong	24-11S-24W	50	0	LKC	3,539	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	LKC	3,400	17	5	0	--	--	Yes
TREGO COUNTY TOTALS (Reported)							5490	10				84	21	0	17	
WABAUNSEE COUNTY																
13504 Yes		Ashburn	Mack Oil Co.*	(P) Ashburn Droll Unit	Ashburn, Droll	29-14S-10E	40	--	Viola	3,250	15	2	--	4	2	Yes
13124 No		Mill Creek	Frank Small Oil Co.*	(P) Thowe	Carl Thowe	2,3-13S-10E	150	--	Viola-Lime	2,930	3-4	2	0	0	0	No†
WABAUNSEE COUNTY TOTALS (Reported)							190	0				4	0	4	2	

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Wellhead press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
3396																							
	79	11	3	2													10,513,397	160,321,320	596,795	23,048,067	413,553	11,468,275	
16437	1	0	0	0	Irreg	Vac	550	Prod	--	--	U	1972	Wat + S Gas	3/1	24	--	192,000	665,000	6,789	86,146	--	--	
17618	2	--	--	--	Irreg	600	600	Prod + Ced H	1200	100	U	1974	--	--	40	--	199,255	399,645	32,180	88,918	15,000	45,000	
13935	1	1	0	0	Peri	1200	200	Prod + Fr	16	--	-	1967	Wat	1/.9	39.4	--	68,750	--	2,650	--	2,650	--	*Was Sun Oil Co.
17377	1	0	0	0	Irreg	0	76	Prod	--	--	U	1974	S Gas	3/1	31	6.5	27,763	72,565	8,667	74,728	1,895	1,895	
13976	1	0	0	0	Irreg	1800	347	Prod + Ced H	1100	250	T	1968	Grav	--	38	--	126,790	672,300	3,434	127,687	1,500	124,400	
11229	1	--	0	--	--	0	50	Prod	--	--	U	1962	Grav	1/1	36.6	--	--	15,000	--	1,213	--	606	*Five seperate zones.
8278	1	1	0	0	Irreg	0	195	Prod	--	--	U	1960	S Gas	5/29	39	--	72,000	895,589	3,490	202,962	2,000	100,939	
10092	2	3	0	0	Irreg	350	242	Prod	--	--	U	1960	--	--	36	--	149,765	4,008,086	14,157	582,646	9,603	426,659	
16356	4	0	0	0	Irreg	400	289	Prod + Ced H	1380	220	M	1972	S Gas	58/12512	38.4	3.2	421,985	1,965,927	20,246	90,376	13,197	45,033	
17636	1	0	0	0	Irreg	0	370	Prod + Dak	815	43	M	1974	S Gas	1/3	--	--	73,233	123,329	4,146	163,878	4,146	7,563	
14633	1	0	0	0	Irreg	Vac	184	Prod + Arb	3972	24	U	1969	Wat	52/17	39	--	87,074	544,254	4,008	--	4,008	70,452	
14666	0	0	0	0	--	0	0	None	--	--	-	--	Wat	2860/880	37	2.6	0	0	115,067	2,772,577	0	0	*No injection, active water drive.
14667																							
14948																							
17401	1	0	0	0	Irreg	Vac	446	Prod	--	--	U	1974	Wat + S Gas	22/750	--	--	162,671	352,992	7,921	16,938	--	--	
17094	1	0	0	0	Irreg	800	216	Prod	--	--	U	1974	S Gas	16/21	--	--	84,960	225,356	13,512	568,215	13,512	38,712	
6045	1	0	0	0	Irreg	150	271	Prod	--	--	U	1958	S Gas	--	40	--	99,186	--	1,462	621,570	1,462	--	*Was S & G Oil.
14181	1	0	0	0	Irreg	350	601	Prod	--	--	U	1968	S Gas	15/5	36	--	219,966	1,819,284	537	58,235	537	4,207	
14887	2	0	--	--	Line	310	712	Prod	--	--	U	1969	S Gas	--	33.6	--	520,955	2,550,863	15,869	140,114	11,397	57,577	
	22	5	0	0													2,506,353	14,310,190	254,135	5,596,203	80,907	923,133	
13504	1	--	--	--	Peri	0	750	Prod	--	--	U	1967	--	2/98	21	--	266,250	1,961,885	3,701	238,553	370	20,942	*Was Wm. Gruenerwald.
13124	0	0	0	0	Irreg	180	1050	Prod	--	--	U	--	Wat	--	23.5	--	110,000	--	1,560	--	0	--	*Was Skelly Oil Co. †No response, State permitted disposal into upper formations.
	1	0	0	0													376,250	1,961,885	5,261	238,553	370	20,942	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
WILSON COUNTY																
12711 --		Altoona	John T.Davis	(W) Umbarger	Umbarger	36-28S-16E	40	0	Squir	660	16	8	0	0	0	Yes
12954 --		Altoona	Davis & Bell Const.	(P) Folger	Folger	36-28S-16E	40	0	Squir	690	10	3	0	0	0	Yes
▶ 7516 No		Altoona	Hope Oil & Investment Co.*	(W) Arthur Mullen	Arthur Mullen	21-29S-16E	40	0	Bartl	780	12	3	4	0	2	Yes
11983 --		Benedict	C & B Well Service*	(D) --	Mattix	1-28S-15E	80	0	Bartl	1,074	15	3	--	0	--	Yes
10473 No		Benedict	Layton Oil Co.	(-) Employers Reinsurance	Employers Reinsurance	9-28S-15E	--	--	Bartl	980	6	--	--	--	--	--*
11290 No		Benedict	Layton Oil Co.	(-) Manderscheid & Pierpoint	Manderscheid Pierpoint	4-28S-15E 9-28S-15E	--	--	--	--	--	--	--	--	--	--*
9507 No		Buffalo-Vilas	Estoril Producing Corp.*	(W) --	Larson, Nelson Sutterfield (Butler) Union Central (Miley)	13-27S-16E	40	0	Bartl	985	10-20	5	--	--	--	No†
8283 No		Fredonia	R.R.Abderhalden*	(W) Van Camp	Hamilton, Mikesell, Van Camp	27,28,34,35-29S-15E	150	0	Bartl	1,160	40	25	1	0	0	Yes
18342 No		Fredonia	Carl D.Wyckoff*	(D) Baker	Baker	2-30S-15E	158	--	Bartl	1,000	12	2	0	1	0	Yes
13022 --		Humboldt-Chanute	Foster Oil & Gas Co.,Inc.*	(P) Stover-Anderson	Stover, Anderson Anderson	3-28S-17E 4-28S-17E	20	--	Bartl	942	20	9	1	1	1	No†
9937 Yes		Neodesha	Albian W.Bailey	(-) Unit #1	Greer, Irvine-Wilson, Mann, Holmberg, Bowman, Fee #2 Fee #2, Irvine-Wilson, Clegg C.W.Long, J.W.Sutherland, R.M.Jones, Theo Johnson, Skiles-Rankin, Keys Heirs, Wolfe (East), Fee #2 Ellis, Mong-Kimball, Mong-Skiles, City Sewage, Hutchins, Wolfe (West), Skiles-Rankin, Borceaux, Skiles-Sweeney, Belle Keys, Kimball, Rogers, Cook-Kimball Hutchins, Cramer, C.W.Long, Wolfe (West) Cramer, C.W.Long, Wolfe (East), Holland, Scott	20-30S-16E 21-30S-16E 28-30S-16E 29-30S-16E 32-30S-16E 33-30S-16E	350	--	Neodesha	800	15	70	0	0	0	Yes
10231 No		Neodesha	Albian W.Bailey	(-) Barnes	Barnes	21-30S-16E	--	--	Neodesha	750	12	3	--	0	--	No*
10232 No		Neodesha	Albian W.Bailey	(-) Kimball-Dunn	Kimball-Dunn, Wilhelm, H.H.Kimball	19-30S-16E	90	--	Neodesha	--	15	3	1	0	--	No*
11508 No		Neodesha	Geo.J.Hempen*	(P) Thompson	Thompson	12-30S-16E	120	0	Bartl	1,020	16	8	4	0	0	No†
7521 No		Neodesha	Hope Oil & Investment Co.	(W) Susie Phillips	Susie Phillips	26-30S-16E	60	30	Bartl	780	30	8	4	--	--	Yes
18060 No		Neodesha	Hope Oil & Investment Co.	(W) Cram	C.E.Cram	16-30S-16E	240	40	Bartl	780	20	7	--	4	--	Yes
18097 No		Neodesha	Hope Oil & Investment Co.*	(W) Loren Dickens	Loren Dickens	26-30S-16E	160	60	Bartl	800	15	6	--	0	--	Yes
WILSON COUNTY TOTALS (Reported)(Includes project in supplemental list.)							1748	130				172	28	6	3	
WOODSON COUNTY																
6103 --		Big Sandy Pool	Mack C.Colt,Inc.	(W) Big Sandy	Allen Cobble, Pendley Schafer, Scott, Louk, Lauber, West Lauber, Duncan	14-26S-14E 22-26S-14E 23-26S-14E	30	0	Bartl	1,200-1,300	20-50	41	0	0	0	Yes
14889 No		Durand	Dunigan Operating Co.	(W) Earl Davidson	Earl Davidson	6-25S-16E	18	0	Squir	965	10	3	0	0	0	Yes
15067 --		Durand	N & B Enterprises	(-) Durand Flood	Marvin Chambers	7-25S-16E	320	--	Squir	990	6-12	6	1	0	0	Yes
9075 No		Humboldt-Chanute	Floyd Dotson Estate	(W) Moon-Pribbernow	Pribbernow, Tebbens Reno Moon Bennett A & B, Orth, Williams	20-25S-17E 21-25S-17E 27-25S-17E 28-25S-17E	1750	0	Squir Sd	800	10	98	0	0	--	Yes

▶See Supplemental List on Pages 101-102.

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp.@ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
12711	4	0	0	0	5-spot	600	20	Prod + Bartl	800	20	T	1972	--	9/1	29	--	40,000	158,000	2,197	7,461	1,100	--	
12954	1	0	0	0	Irreg	500	10	Prod + Bartl	800	20	T	1966	--	9/1	26	--	3,500	106,000	766	--	150	4,050	
7516	2	0	0	0	Irreg	400	20	Prod + Oswego Sd	640	8	U	1964	S Gas	95/5	36	--	14,400	230,400	500	24,369	500	14,369	*Was Crest Oil Co.
11983	1	--	--	--	Irreg	--	75	Prod	--	--	U	1965	Grav	1/10	29	--	27,375	--	1,825	--	1,825	--	*Was Miller Oil Co.
10473	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Lease is operated by stripper production methods.
11290	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Lease is operated by stripper production methods.
9507	--	--	--	--	5-spot	600	62	Prod + Salt Sd	1100	--	T	1962	S Gas	--	30	--	99,718	1,559,718	2,297	77,097	2,297	77,097	*Was Walter Walne. †Shut down at times/repairs.
8283	11	4	0	0	Irreg	500	120	Prod + Oswego	350	50	T	1961	S Gas	--	25	--	480,000	7,980,155	13,141	274,468	13,141	274,468	*Was Sun Oil Co.
18342	--	--	--	--	Irreg	0	8	Prod	--	--	U	1976	Gas Exp	2/1	33	--	1,450	--	1,500	--	0	--	*Was Van Camp and Cauble.
13022	--	3	0	0	5-spot	200	10	Prod	--	--	U	--	Grav	--	23	--	1,500	--	467	--	--	--	*Was James L.Cheever. †Mechanical problems.
9937	69	0	--	--	5-spot	700	19.5	Prod + Fall River	--	--	-	1961	S Gas	97/3 7/3	38	4	490,255	11,167,927	13,094	472,909	13,094	472,909	
10231	--	4	0	--	5-spot	--	--	Shallow well in River Gr	40	6	-	1964	--	--	38	4	0	240,000	162	--	--	4,240	*Water supply exhausted. Injection temp. stopped.
10232	0	7	0	0	5-spot	0	--	Shallow well in Gr	40	5	-	1963	--	--	38	4	0	564,425	721	--	--	24,901	*Water supply exhausted. Injection temp. stopped.
11508	3	0	0	0	Line	450	35	Prod + Oswego	700	20	U	1973	Grav	3/2	38	5	12,000	96,000	290	3,561	200	2,800	*Was Jeaubro Oil Co. †Renovating and repairing.
7521	5	1	0	0	Irreg	200	10	Prod + Salt Sd	900	50	U	1962	S Gas	95/5	38	--	18,000	791,525	600	91,767	600	41,767	
18060	1	--	--	--	Irreg	100	20	Prod	--	--	U	1976	S Gas	9/1	36	--	7,000	7,000	1,120	13,200	1,000	1,000	
18097	1	--	0	--	7-spot	300	30	Prod	--	--	U	1976	S Gas	9/1	35	--	1,080	1,080	680	10,680	500	500	*Was Edw.Matuk.
	105	19	0	0													1,305,778	22,902,230	42,064	975,512	37,111	918,101	
6103	8	0	0	0	5-spot	0	36	Prod + Cher	1100	30-50	T	1957	Grav	3/1	21	--	104,411	1,774,401	19,771	--	19,771	545,547	
14889	1	0	0	0	5-spot	500	31	Prod + KC Lime	500	--	T	1969	S Gas	5/95	22	243	11,433	102,279	2,285	18,798	2,285	18,798	
15067	1	--	0	0	5-spot	600	25	Prod	--	--	U	1970	Grav	1/0	24	0	--	--	3,482	--	--	--	
9075	36	0	0	--	Irreg	600	20	Prod + KC Lime	400	50	U	--	Wat	--	27	--	259,200	3,864,322	15,054	283,615	--	--	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S–T–R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
WOODSON COUNTY (Cont.)																
11074 --		Neosho Falls-Leroy	Rue-B-Lee	(-) --	Rue-B-Lee #2	12-13S-16E	--	--	Squir	955	--	2	--	--	--	--
11619 --		Neosho Falls-Leroy	Bartlett & Hannon	(-) Rue-B-Lee #1	--	35-22S-16E	--	--	Squir	975	--	12	--	--	--	--
13220 --		Neosho Falls-Leroy	Robert Leedy	(P) Leedy-Beamont	Street Leedy, Gritz	24-23S-16E 25-23S-16E	50	0	Squir	924	12	15	0	2	0	Yes
17352 --		Owl Creek	N & B Enterprises	(-) --	Schornick	16-25S-16E	80	--	Squir	990	6-14	8	0	0	0	Yes
15417 --		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	19	0	4	0	Yes
3345 No 8990		Perry-Halligan	Layton Oil Co.	(-) Rose Flood	--	16,17,18,19,20,21, 29,31-26S-17E	--	--	Squir	--	--	--	--	--	--	--*
727 No 10584 10634		Quincy	Bird & Hanley	(W) Batesville	Mills, Eades Nordmeyer, Klick, Akins R.Tipton Lee, J.Tipton, Enloe A.W.Tipton	24-25S-13E 19-25S-14E 21-25S-14E 28-25S-14E 29-25S-14E	2080	0	Bartl	1,500	30	32	19	0	9	Yes
10770 --		Quincy	Marion Myers	(W) Batesville	Corkery	29-25S-14E	160	0	Bartl	1,800	20	5	0	0	0	Yes
11604 No		Silver City	Loren Steinforth- Royce Saubers*	(W) Silver City Water-flood Unit B	Adams Hill A & B	20-26S-15E 29-26S-15E	55	0	Bartl	1,400	20	3	0	0	1	Yes
12198 No		Silver City	Loren Steinforth- Royce Saubers*	(W) Silver City Water-flood Unit A	Lauber, Lauber A & B	19-26S-15E	100	0	Bartl	1,400	20	7	0	0	2	Yes
13137 No		Tichenor	McK Drilling Co.*	(-) R.E.Dearinger "B"	R.E.Dearinger "B"	9-23S-16E	160	0	Squir	1,037	9	7	0	1	0	Yes
17126 No		Vernon	L.C.Bodemann, Jr.*	(W) John F.Wingrave	John F.Wingrave	16,17-24S-16E	480	0	Squir	1,015	20	9	4	0	0	Yes
10663 -- 10670		Vernon	Kanalta Resources Ltd.	(W) Sturlong	Keske, Long,Sturdivan	34-23S-16E	320	20	Squir	1,100	14	13	3	--	--	Yes
18572 Yes		Vernon	Kanalta Resources Ltd.	(W) Weston-Rausch-Sardon	Weston, Rausch, Sardon	13-24S-15E	480	--	Squir	1,090	14	14	--	--	--	Yes
12385 --		Vernon	Long-Tye Oil Co.	(W) Glades-Fuller	Robison Glades,Fuller, Sturdivan	29-23S-16E 33-23S-16E	540	--	Squir	1,039	15	25	1	1	0	Yes
6887 Part		Vernon	James E.Russell Petroleum, Inc.	(W) Aljo Flood	Alexander Butler, Riley, Alexander	2-24S-16E 35-23S-16E	116	0	Squir Sd	1,000	21.6	38	9	4	0	Yes
12706 No		Vernon	James E.Russell Petroleum, Inc.	(W) South Vernon	Wilson-Dunne Mathias Strahm, D.W.Long A.J.Link	1-24S-16E 11-24S-16E 12-24S-16E	15	0	Squir Sd	1,000	20	22	0	0	0	Yes
14285 No		Vernon	TAP Oil Co.	(W) Vernon Project	Carl Keske, A.A.Newby	5-24S-16E	40	0	Squir	1,180	35	4	0	0	0	--
7103 No		Winterscheid	Atlantic Richfield Co.	(W) Wintersheid Water-flood	W.P.Headly "A" "B" & "C", J.W.Maclaskey "A" W.P.Headly "A" "B" & "C", J.W.Maclaskey "A", Henry G. Collins	29-23S-14E 30-23S-14E	560	--	Miss Ch	1,700	20	29	10	--	4	Yes
17607 No		Winterscheid	Barnett Oil, Inc.	(D) Bahr	Bahr	23-23S-13E	160	--	Viola-Arb	2,200	10	6	--	--	--	Yes
16395 --		Winterscheid	French Oil Co.	(P) E.Otto (B) (Throg-morton)	Otto B, Throgmorton	21-23S-14E	--	--	Miss Lime	1,685	5	9	0	0	0	Yes
8459 --		Winterscheid	French Oil Co.	(P) Floyd Jones	Floyd Jones	24-23S-13E	50	0	Miss Lime	1,700	3	5	0	0	0	Yes
1056 --		Winterscheid	French Oil Co.	(P) Maclaskey	Maclaskey	31-23S-14E	40	0	Miss Lime	1,700	4	4	0	0	0	Yes
3902 --		Winterscheid	French Oil Co.	(P) W.P.Headley	Headley	29,32-23S-14E	90	0	Miss Lime	1,700	6	11	0	0	0	Yes
5646 --		Winterscheid	French Oil Co.	(P) South Peek	Peek	20-23S-14E	100	0	Miss Lime	1,700	6	8	0	0	0	Yes
5662 --		Winterscheid	French Oil Co.	(P) Headley (541)	Headley	29-23S-14E	70	0	Miss Lime	1,700	6	6	0	0	0	Yes
6222 --		Winterscheid	French Oil Co.	(P) Quartet	Quartet	21-23S-14E	40	0	Miss Lime	1,700	6	2	1	0	0	Yes
416 --		Winterscheid	French Oil Co.	(P) Dewey	Dewey	32-23S-14E	100	0	Miss Lime	1,600	6	7	0	0	0	Yes
1055 --		Winterscheid	French & Winterscheid,Inc.	(P) Estes	Estes	7-24S-14E	40	20	Miss Lime	1,700	6	5	0	0	0	Yes
3892 --		Winterscheid	French & Winterscheid,Inc.	(-) Winterscheid	Winterscheid	6-24S-14E	60	20	Miss Lime	1,700	5	6	1	0	0	Yes
3893 --		Winterscheid	French & Winterscheid,Inc.	(P) Smith Jobe	Smith Jobe	7-24S-14E	40	20	Miss Lime	1,700	6	5	0	0	0	Yes
5645 --		Winterscheid	French & Winterscheid,Inc.	(P) Emma (Old) Otto	E.Otto	21-23S-14E	20	0	Miss Lime	1,700	4	2	0	0	0	Yes
6021 --		Winterscheid	French & Winterscheid,Inc.	(P) Kimble	Kimble	18-24S-14E	60	10	Doug	1,700	6	3	0	0	0	Yes
6088 --		Winterscheid	French & Winterscheid,Inc.	(P) W.Jones	W.Jones	30-23S-14E	70	10	Miss Lime	1,700	6	4	0	0	0	Yes
7898 --		Winterscheid	French Oil Co.	(P) Arnold	Arnold	35-23S-14E	40	0	Miss Lime	1,700	5	4	0	0	0	Yes
12149 --		Winterscheid	French Oil Co.	(P) Rhea	Rhea	24-24S-13E	120	0	Miss Lime	1,650	6	6	0	0	0	Yes
12189 --		Winterscheid	French Oil Co.	(P) Knox	Knox	24-24S-13E	40	0	Miss Lime	1,600	4	4	0	0	0	Yes
16396 --		Winterscheid	French & Winterscheid,Inc.	(P) Eby (Figge)	Figge	28-23S-14E	640	0	Miss Lime	1,685	7	16	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1976	Injection Wells: Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Injected-water data: Depth, ft.	Injected-water data: Thick., ft.	Injected-water data: Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection: 1976	Water Injection: Cum. 12-31-1976	Total Oil recovered from project Pri. & sec.: 1976	Total Oil recovered from project Pri. & sec.: Cum. 12-31-1976	Oil recovered by enhanced methods: 1976	Oil recovered by enhanced methods: Cum. 12-31-1976	Remarks
11074	--	--	--	--	--	--	--	--	--	--	-	1964	--	--	--	--	--	--	810	--	810	--	
11619	--	--	--	--	--	--	--	--	--	--	-	1965	--	--	--	--	--	--	10,439	--	10,439	--	
13220	1	--	--	--	Irreg	30	--	Prod + K.C. Lime	105	20	U	1967	Grav	4/1	26	--	2,000	26,900	5,580	26,815	--	--	
17352	4	0	0	0	--	120	20	No	--	--	U	1976	Grav	1/0	24 25	--	--	--	5,769	--	--	--	
15417	6	0	1	0	5-spot	300	38 23	Prod	--	--	T	1975	S Gas	100/1	24	80	60,895	75,489	16,971	179,848	10,155	27,252	
3345 8990	--	--	--	--	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Project operated by stripper production methods.
727 10584 10634	10	25	0	1	Irreg	700	133	Prod	--	--	T	1942	Gas Exp	1/0	40	5	485,803	31,081,683	47,905	5,144,509	47,905	5,144,509	
10770	2	0	0	0	Line	300	300	Prod	1400	20	U	1972	Wat	1/4	40	--	88,000	--	4,000	--	1,200	--	
11604	3	5	0	0	Line	200	25	Prod	--	--	U	1967	Grav	1/2	28	21	8,000	197,450	1,320	25,032	1,320	25,032	*Was Pauley Petroleum.
12198	4	0	0	0	Line	200	15	Prod	--	--	U	1965	Wat	2/1	29	21	7,000	676,069	1,594	27,247	1,594	27,247	*Was Pauley Petroleum.
13137	1	0	0	0	Irreg	300	50	KC	360	60	T	1969	Wat+S Gas	1/3	24	--	18,250	110,337	3,455	45,855	--	--	*Was Tec Drilling Co,Inc.
17126	1	0	0	0	Irreg	331	31	Prod	--	--	U	1973	S Gas	2/1	26.1	--	11,392	77,944	2,295	66,706	2,295	8,848	*Was J.F.Williams & Paul J.Gibbs.
10663 10670	5	1	--	--	Irreg	300	30	Prod + KC	420	150	T	1965	S Gas	1/2	24	--	54,750	--	7,248	--	7,248	--	
18572	3	--	--	--	5-spot	125	40	Prod + KC	490	190	U	1976	Grav	20/1	24	--	43,800	--	4,956	--	4,956	--	
12385	5	1	--	--	Irreg Grav	10	Prod + KC Lime	565	35	U	1966	Grav	9/1	24	--	84,000	--	9,112	--	3,236	--		
6887	34	17	0	0	5-spot	549	24	KC Lime	550	40	T	1963	S Gas	--	26	70	249,724	4,143,488	16,762	715,404	16,762	573,769	
12706	4	2	0	0	Irreg	263	26	KC Lime	500	40	T	1966	S Gas	--	26	70	37,651	457,716	5,733	113,857	5,733	68,100	
14285	4	0	0	0	5-spot	300	20	Prod + KC Lime	420	20	T	1969	Grav	9/1	22	--	29,200	110,000	3,370	--	--	--	
7103	13	7	--	--	5-spot	404	240	Prod + Doug	700	30	U	1960	S Gas + Wat	82/ 380	39	3.1	1,069,002	17,796,016	27,167	858,795	27,167	774,806	
17607	--	--	--	--	Irreg	Vac	400	Prod	--	--	U	1975	S Gas	2/20	34	--	146,400	156,400	13,744	345,237	3,000	3,000	
16395	1	0	0	0	Irreg	0	20	Prod	--	--	T	1960	Wat	3/2	36	--	2,000	10,000	1,878	--	751	8,511	
8459	1	0	0	0	Irreg	100	180	Prod	--	--	T	--	Wat	1/1	36	--	38,000	1,142,000	3,199	--	640	18,576	
1056	1	0	0	0	Irreg	Vac	100	No	--	--	T	1960	Wat	45/55	36	--	10,000	150,000	2,351	--	588	17,967	
3902	--	--	--	--	Irreg	75	200	Prod	--	--	T	1955	Wat	1/1	37	--	35,000	1,115,000	12,639	--	4,424	71,190	
5646	1	0	0	0	Irreg	75	125	Prod	--	--	T	1956	Wat	51/49	37	--	30,000	990,000	9,941	--	2,982	101,956	
5662	1	0	0	0	Irreg	80	200	Prod	--	--	T	1955	Wat	1/1	37	--	12,000	368,000	5,860	--	2,344	46,109	
6222	1	0	0	0	Irreg	75	50	Prod	--	--	T	1955	Wat	3/2	36	--	4,000	36,000	3,487	--	1,395	28,987	
416	1	0	0	0	Irreg	75	100	Prod	--	--	T	1956	Wat	55/45	37	--	24,000	316,000	13,039	--	3,260	80,599	
1055	1	0	0	0	Irreg	125	150	Prod	--	--	T	1950	Wat	45/55	36	--	58,000	624,000	2,821	--	1,411	71,530	
3892	1	0	0	0	Irreg	50	100	Prod	--	--	T	1950	Wat	52/48	36	--	25,000	825,000	2,779	--	1,390	59,361	
3893	1	0	0	0	Irreg	90	110	Prod	--	--	T	--	Wat	49/51	36	--	28,500	906,500	2,056	--	1,542	68,104	
5645	1	0	0	0	Irreg	25	50	Prod	--	--	T	--	Wat	1/1	36	--	14,000	361,000	455	--	455	19,320	
6021	1	0	0	--	Irreg	150	200	Prod	--	--	T	--	Wat	45/55	35	--	20,000	140,000	1,764	--	882	7,117	
6088	1	0	0	0	Irreg	80	100	Prod	--	--	T	--	Wat	2/3	37	--	32,500	1,022,500	1,779	--	890	48,761	
7898	1	0	0	0	Irreg	60	50	Prod	--	--	T	1960	Wat	45/55	36	--	15,000	385,000	1,567	--	470	17,499	
12149	1	0	0	0	Irreg	100	125	Prod	--	--	T	1963	Wat	55/45	33	--	18,000	242,000	2,636	--	395	25,284	
12189	1	0	0	0	Irreg	70	75	Prod	--	--	T	1965	Wat	48/52	33	--	8,000	82,000	3,254	--	814	22,187	
16396	--	--	--	--	Irreg	50	15	Prod	--	--	-	--	--	3/2	36	--	5,000	25,000	15,433	--	6,173	24,771	

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Acres in project Abd.	Oil producing zone Name	Oil producing zone Depth, ft.	Oil producing zone Thick., ft.	Oil producing wells (1976) Active	Oil producing wells (1976) Inactive	Oil producing wells (1976) Drilled	Oil producing wells (1976) Abd.	Has inj. been continuous?
WOODSON COUNTY (Concl.)																
1054 No 12212		Winterscheid	Kewanee Oil Co.*	(W) Maclaskey	Maclaskey	29-23S-14E	140	20	Miss	1,670	20	12	1	0	0	--
11700 --		Winterscheid	Arnold Kraft	(W) Rich A & Owens	Rich A & Owens	24-23S-14E	50	0	Miss Lime	1,600	20	4	0	0	1	Yes
13047 --		Winterscheid	Arnold Kraft	(W) Weide	Weide	31-23S-15E	100	0	Miss Lime	1,550	14	3	2	0	0	Yes
13070 --		Winterscheid	Arnold Kraft	(W) Weide	Weide	6-24S-15E	50	0	Miss Lime	1,550	20	3	1	0	0	Yes
10251 --		Winterscheid	Union Oil Co. of California	(W) W.P.Headley	W.P.Headley	32,33-23S-14E	520	--	Miss-Dolomite	1,700	20	17	3	0	0	Yes
4218 --		Winterscheid	Wells Oil Co.Inc.	(D) --	H.D.Stevenson	5-24S-14E	53	--	Miss	1,695	6	6	3	0	0	Yes
1474 No		Yates Center	Bird & Hanley	(W) Yates Center	Krueger Aetna, Aetna "A" Degree of Honor	22-25S-15E 27-25S-15E 28-25S-15E	400	0	Miss	1,500	5	6	1	0	0	Yes
11592 --		Yates Center	Tesoro Petroleum Corp.	(W) Lauber	Lauber, Degler Harder	21-25S-15E 22-25S-15E	280	--	Miss Lime	1,480	15	13	3	0	0	Yes
6143 -- 14365		Winterscheid	Tesoro Petroleum Corp.	(W) Emery Project	Ehrhardt, Ryser Ryser, Westlake, Figge	33-23S-14E 34-23S-14E	500	20	Miss Lime	1,680	20	24	4	0	0	Yes
14365 --		Winterscheid	Arnold E.Kraft	(W) Figge	Figge	34-23S-14E	80	0	Miss Lime	1,650	20	5	0	0	0	Yes
WOODSON COUNTY TOTALS (Reported)							11497	140				618	67	12	17	
SUPPLEMENTAL LIST OF PROJECT DATA RECEIVED AFTER CUT-OFF DATE																
ALLEN COUNTY																
18297 --		Elsmore Shoestring	Geo.A.Hoffman - Oil	(W) Elsmore Project	Sisson, Ludlum	22-25S-21E	160	0	Bartl	700	12	7	0	0	0	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	--	--	--	--	--
8170 --		Humboldt-Chanute	Jones & Campbell, Inc.	(-) Monarch	Monarch Unit	9-26S-18E	40	--	Bartl	800	10	4	10	0	0	Yes
3802 --		Humboldt-Chanute	Overland Energy, Inc.	(W) Wolf-Tebay Unit	Wolf Wolf-Tebay, Benson	19-26S-18E 24-26S-18E	640	0	Bartl	820	18	9	--	--	--	Yes
11361 --		Savonberg	Geo.A.Hoffman - Oil	(W) Savonburg	Donald R.Nelson, etux. Joseph Lowe, etux (now Nelson) Guy Shirely, etux.	21,29-26S-21E 28-26S-21E 29-25S-21E	640	--	Bartl	690	13	17	--	1	--	Yes
GREENWOOD COUNTY																
2071 Yes		DeMalorie-Sauder	John P.Rodenbeck *	(W) Pix Unit	Pixlee	3-22S-10E	160	--	Bartl	2,100	40	5	1	0	1	Yes
CRAWFORD COUNTY																
18552 --		Farlington	Geo.A.Hoffman - Oil	(W) Russell Baber	Russell Baber	4-28S-23E	--	--	Bartl	--	8	9	0	0	0	Yes
18553 --		Hepler	Geo.A.Hoffman - Oil	(W) Albert Elmer	Albert Elmer	30-27S-22E	420	--	Bartl	601	15	11	--	--	--	--
WILSON COUNTY																
8983 --		Altoona	Overland Energy, Inc.*	(W) Short Unit	Gates Short, Travis Gates	1-29S-16E 31-28S-17E 6-29S-17E	160	--	Squir	790	20	9	13	--	--	Yes
REPORTS OF ABANDONED OR INACTIVE PROJECTS																
ALLEN COUNTY																
17800 No		Elsmore Shoestring	Donald K.Daniels	(D) Don Daniels Oil	Brandenburg	9,10-26S-21E	Inactive									
BARTON COUNTY																
10713 --		Cheyenne	Loyd H.Phillips	(D) Miller	Miller	4-19S-12W										

REPORTS OF ABANDONED OR INACTIVE PROJECTS CONTINUED ON PAGE 103.

Project no.	Injection Wells: Active	Inactive	Drilled 1976	Abd. 1976	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Depth, ft.	Thick., ft.	Type	Date, first inj.	Primary production mechanism	Primary oil-water ratio	API grav., deg.	Oil visc., cp. @ 60° F	Production and injection statistics (bbls): Water Injection 1976	Water Injection Cum. 12-31-1976	Total Oil recovered from project Pri. & sec. 1976	Total Oil recovered from project Pri. & sec. Cum. 12-31-1976	Oil recovered by enhanced methods 1976	Oil recovered by enhanced methods Cum. 12-31-1976	Remarks
1054	3	1	0	0	Irreg	425	225	Prod	--	--	U	1944	S Gas	8/5	39	--	246,820	3,024,051	13,441	920,531	13,441	224,527	*Was Barbara Oil Co.
12212																							
11700	1	0	0	0	--	150	60	Prod	--	--	U	1965	Wat	15/85	38	--	21,900	69,300	1,095	2,190	400	800	
13047	1	2	0	0	Peri	250	300	Prod	--	--	T+S	1965	Wat	1/4	39	--	109,500	427,050	2,920	5,475	1,210	2,420	
13070	1	0	0	0	Peri*	100	55	Prod	--	--	U	1967	Wat	1/4	36	--	20,075	76,650	2,555	4,280	530	1,060	*+ 4-spot.
10251	7	3	0	0	5-spot	900	117	Prod + Arb	2011	439	T	1963	Grav	17/63	38.5	--	300,176	9,816,649	17,336	357,363	17,336	357,363	
4218	1	0	0	0	Irreg	0	100	Prod	--	--	U	1954	Gas Exp + Grav	8/60	35	35	36,500	--	1,590	--	290	--	
1474	2	.75	1	1	Irreg	450	358	Prod	--	--	T	1946	Gas Exp	50/1	32	--	261,128	2,339,502	7,454	329,649	7,454	329,649	
11592	9	2	0	0	Irreg	800	585	Prod + Arb	2030	500	T	1968	S Gas	1/4	38	--	1,780,278	13,915,740	14,386	761,076	--	--	
6143	11	2	0	0	Peri	990	510	Prod + Arb	1850	311	U	1961	S Gas	1/1	35	--	1,966,356	18,416,710	17,697	401,236	--	--	
14365																							
14365	1	1	0	0	Peri+ 5-spot	250	700	Prod	--	--	T	1968	Wat	1/3	38	--	25,550	1,533,000	4,380	9,125	1,095	2,190	
	199	69.75	2	2													7,918,194	119,009,146	398,614	10,642,643	238,438	8,872,746	
18297	3	--	--	--	Irreg	70	200	Prod + Lake	--	--	M	1973	--	--	30	--	53,125	203,375	1,800	12,777	--	--	
8152	--	--	--	--	--	--	--	Prod + Arb	1800	16	-	--	--	--	30	--	--	--	0	--	--	--	*Sold to Jack L. & Donald K.Ensminger, 1/1/77.
8170	6	8	0	0	Irreg	400	40	Prod + Oswego	500	25	T	--	Wat	--	31	--	14,600	--	1,662	--	1,662	--	
3802	6	--	--	--	Irreg	550	500	Prod + Oswego	525	100	T	--	S Gas	--	28	--	125,000	--	2,022	--	2,022	--	
11361	6	--	--	--	Irreg	600	400	Prod + Arb	1600	16	T	--	S Gas	--	30	--	129,503	12,861,835	5,068	749,594	0	0	
2071	1	0	0	0	5-spot	600	200	Prod + Doug	700	--	U	1973	S Gas	--	40	--	73,000	--	3,184	--	3,184	--	
18552	5	0	0	0	Irreg	150	12	Prod + Miss	--	--	-	1976	--	--	28	--	2,013	2,013	253	--	--	--	
18553	1	--	--	--	Irreg	250	25	Prod + Miss	1002	--	-	1976	--	--	25.8	--	--	--	1,782	1,782	--	--	
8983	7	--	--	--	Irreg	600	300	Prod + Oswego	353	75	U	--	S Gas	--	29	--	109,500	--	2,704	--	2,704	--	*Was Wimsett & Thompson.

County / Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project: Prod.	Acres in project: Abd.	Oil producing zone: Name	Oil producing zone: Depth, ft.	Oil producing zone: Thick., ft.	Oil producing wells (1976): Active	Oil producing wells (1976): Inactive	Oil producing wells (1976): Drilled	Oil producing wells (1976): Abd.	Has inj. been continuous?
REPORTS OF ABANDONED OR INACTIVE PROJECTS (Concl.)																
BARTON COUNTY (Concl.)																
15227	--	Redwing	Sierra Petroleum Co.,Inc.	(-) Redwing Unit	Redwing Unit	32-17S-12W										
14323	--	Reif South	Four-Way Operating,Inc.	(-) Klug	--	31-16S-12W										
5560	No	Soderstrom	Aladdin Petroleum Corp.	(P) Soderstrom	Soderstrom	21-17S-13W										
BUTLER COUNTY																
11895	No	Elbing	Aladdin Petroleum Corp.	(P) Furman	Furman	8-23S-4E										
7763	--	El Dorado	Gear Petroleum Co.	(W) Robison Lease	--	18-25S-5E										
COWLEY COUNTY																
7357	--	S.Gibson	Aladdin Petroleum Corp.	(-) S.Gibson	Baird-Drennan	32-34S-3E	Inactive									
ELLIS COUNTY																
10574	--	Catherine South	Texaco	(-) L.J.Dreiling Group	L.J.Dreiling "B" L.J.Dreiling "C" L.J.Dreiling "E"	12-13S-17W 21-13S-17W 22-13S-17W	Inactive									
GREENWOOD COUNTY																
11118	--	Seeley-Wick	Howard Johnson	(-) Morlin	--	17-24S-12E										
MCPHERSON COUNTY																
6760 7076	--	Ritz-Canton	Ray Perera	(D) Drum-Somers	Drum-Somers	35-19S-2W	Inactive									
RICE COUNTY																
10470	No	Chase-Silica	Fell & Wolfe Oil Co.	(D) Bayer B	Bayer "B"	20-20S-10W										
ROOKS COUNTY																
12309	No	Vohs	Kewanee Oil Co.	(-) Vohs Waterflood	Vohs	14-10S-19W	Inactive									
RUSSELL COUNTY																
5955	No	Hall Gurney	Clarence H.Wilhelm	(D) Shaffer	Ray Shaffer	26-14S-13W	Inactive									

TABLE 2. -- COUNTY SUMMARY OF ENHANCED RECOVERY PROJECTS IN KANSAS -- 1976.

COUNTY	TOTAL OIL FROM PROJECT AREA bbl.	OIL RECOVERED BY ENHANCED METHODS* bbl.	WATER INJECTED bbl.	CURRENT PRODUCING ACRES	ACTIVE PRODUCING WELLS	ACTIVE INJECTION WELLS	WELLS DRILLED OIL	WELLS DRILLED INJ.	NUMBER OF PROJECTS
ALLEN	320,809	251,690	4,008,698	8,366	669	397	79	34	35
ALLEN-BOURBON	1,350	0	0	0	14	0	0	0	1
ALLEN-NEOSHO	7,331	7,331	298,042	765	65	17	0	0	2
ANDERSON	180,206	142,349	3,048,997	3,599	804	626	30	6	23
BARBER	243,631	191,745	4,473,395	3,632	66	35	5	1	14
BARTON	504,552	354,444	7,986,540	10,747	272	106	11	3	80
BARTON-RICE	26,015	26,015	558,044	370	8	8	0	0	1
BARTON-RUSSELL	43,782	20,902	821,370	400	16	7	0	0	1
BARTON-STAFFORD	17,395	12,126	217,286	170	9	3	0	0	2
BOURBON	64,399	55,399	371,828	1,135	91	63	38	1	6
BUTLER	1,039,558	705,367	50,560,233	19,129	686	277	24	3	103
BUTLER-COWLEY	16,036	1,837	25,550	1,600	16	2	0	0	2
BUTLER-MARION	1,549	900	14,400	81	2	2	0	0	1
CHASE	306	0	89,580	70	5	3	0	0	2
CHASE-GREENWOOD	11,068	4,000	152,000	250	13	2	0	0	1
CHASE-LYON	9,600	3,000	50,000	80	11	2	0	0	1
CHAUTAUQUA	344,761	226,906	2,357,481	16,613	531	125	28	0	47
CHEYENNE	1,460	0	800	2,480	4	1	4	1	1
CLARK	5,628	5,628	76,975	1,280	3	1	0	0	1
COFFEY	31,627	10,728	409,836	1,260	103	22	25	1	15
COFFEY-WOODSON	49,554	49,554	65,700	220	26	6	1	0	2
COMANCHE	9,713	9,000	29,200	480	2	2	0	0	1
COWLEY	616,359	357,565	8,371,632	17,352	336	113	48	2	60
COWLEY-ELK	4,214	0	90,000	0	7	2	1	0	1
CRAWFORD	18,942	10,746	359,311	1,190	148	112	11	0	8
DECATUR	274,682	237,184	3,104,531	5,687	71	32	0	0	13
DICKINSON	6,064	0	36,500	320	9	1	0	0	1
DOUGLAS	4,377	3,977	32,271	125	15	4	1	4	2
DOUGLAS-FRANKLIN	17,358	17,358	602,250	177	38	26	2	5	1
EDWARDS	1,942	1,942	3,900	100	1	1	0	0	1
ELK	55,507	24,010	1,864,334	927	52	47	0	0	8
ELLIS	757,339	413,309	12,368,316	9,825	294	88	20	14	68
ELLIS-ROOKS	64,076	64,076	1,668,385	352	21	10	0	0	1
ELLSWORTH	190,891	19,134	1,165,683	2,006	84	15	0	0	8
FINNEY	156,360	20,740	449,871	1,920	27	2	1	0	2
FINNEY-HASKELL	511,946	--	978,321	--	63	7	0	0	1
FRANKLIN	48,773	13,469	707,116	2,585	176	89	12	0	14
GOVE	58,149	4,775	119,279	1,400	13	7	0	0	7
GRAHAM	730,618	690,343	11,010,365	18,177	270	104	1	0	48
GRAHAM-SHERIDAN	40,021	40,021	196,908	130	4	1	0	0	1
GRAHAM-TREGO	7,689	7,689	416,542	290	7	2	0	0	1
GREENWOOD	548,688	361,000	11,552,634	21,650	656	235	27	8	109
HARPER	31,757	--	341,498	400	13	2	0	0	2
HARVEY	196,184	113,443	7,740,344	4,032	108	26	0	0	5
HARVEY-MCPHERSON	34,878	22,732	0	1,550	12	0	0	0	2
HASKELL	6,450	--	67,169	640	3	1	0	0	1
HODGEMAN	191,970	42,166	2,844,191	3,120	48	15	1	0	12
JACKSON	13,119	--	300,000	400	7	1	0	0	1
JOHNSON	13,240	3,450	59,775	1,360	37	9	2	0	3
KEARNY	26,424	--	8,234	--	2	1	1	0	1
KINGMAN	284,528	77,267	2,299,078	3,580	38	18	1	0	8
KINGMAN-PRATT	18,676	18,676	1,015,089	800	12	7	0	0	1
KINGMAN-SEDGWICK	10,635	0	0	0	10	0	0	0	1
KIOWA	25,915	0	35,000	6,440	12	1	0	0	2
LABETTE	5,429	2,761	61,900	185	27	7	15	0	5
LABETTE-MONTGOMERY	969	--	--	240	10	7	0	0	1
LANE	63,034	--	152,660	120	8	2	3	1	2
LINN	17,760	7,469	901,877	3,029	281	237	9	1	8
LINN-MIAMI	1,719	1,719	25,833	40	11	10	0	0	1
LYON	1,050	0	9,050	350	9	3	0	0	2
MCPHERSON	235,060	151,509	8,865,168	9,150	179	56	25	0	40
MCPHERSON-MARION	8,439	8,439	229,243	800	7	5	0	0	1
MARION	17,169	2,920	460,297	1,080	18	5	11	0	5
MEADE	74,121	74,121	794,195	3,240	93	9	0	0	1
MIAMI	57,753	13,926	1,126,477	2,554	280	119	31	19	14
MONTGOMERY	172,248	108,741	1,870,144	5,310	404	209	30	27	32
MORRIS	4,771	2,208	235,942	360	2	3	1	0	2
MORTON	1,446,044	1,355,176	13,114,840	17,800	83	38	4	0	7
NEOSHO	113,119	77,067	2,738,237	5,316	652	243	77	25	22
NESS	211,075	50,884	1,968,045	1,460	44	12	20	2	14
NORTON	11,486	2,900	81,226	280	5	1	0	0	2
PAWNEE	130,160	37,007	1,436,904	2,107	27	14	8	2	14
PHILLIPS	416,085	399,061	3,996,958	10,925	185	90	1	0	23
PRATT	181,453	147,493	5,893,475	5,174	68	37	9	1	16
RAWLINS	323,935	236,353	3,781,662	7,340	74	33	3	0	10
RENO	168,028	108,428	9,265,821	2,450	55	20	12	3	14
RENO-RICE	5,615	4,928	5,614	400	8	1	0	0	1
RENO-STAFFORD	28,852	28,852	3,361,610	800	8	6	0	0	2
RICE	556,053	431,120	8,312,216	12,851	239	87	45	6	45
ROOKS	851,496	579,910	18,304,967	14,635	349	143	0	0	61
RUSH	16,726	13,411	100,667	550	8	3	0	0	2
RUSSELL	3,414,910	1,617,891	43,012,215	26,357	893	348	27	3	152
SALINE	40,516	25,599	1,496,697	2,490	42	11	0	1	9
SCOTT	2,374	1,187	34,663	120	2	1	0	0	1
SEDGWICK	363,807	322,988	6,652,198	4,847	118	63	1	1	13
SEWARD	119,519	114,907	603,926	1,191	4	3	1	0	2
SEWARD-STEVENS	57,497	57,497	1,018,606	880	4	3	0	0	1
SHERIDAN	130,116	124,720	1,811,977	2,274	32	16	1	0	8
STAFFORD	617,646	413,578	9,758,583	10,346	220	104	10	4	66
SUMNER	596,795	413,553	10,513,397	9,428	185	79	6	3	30
TREGO	254,135	80,907	2,506,353	5,490	84	22	0	0	17
WABAUNSEE	5,261	370	376,250	190	4	1	4	0	2
WILSON	42,064	37,111	1,305,778	1,748	172	105	6	0	18
WOODSON	398,614	238,438	7,918,194	11,497	618	199	12	2	52
TOTALS	19,061,004†	11,939,142†	319,528,347	364,666	11,522	5,041	746	184	1,454

*The term enhanced recovery, as used in this report, includes all methods of production, except primary.

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