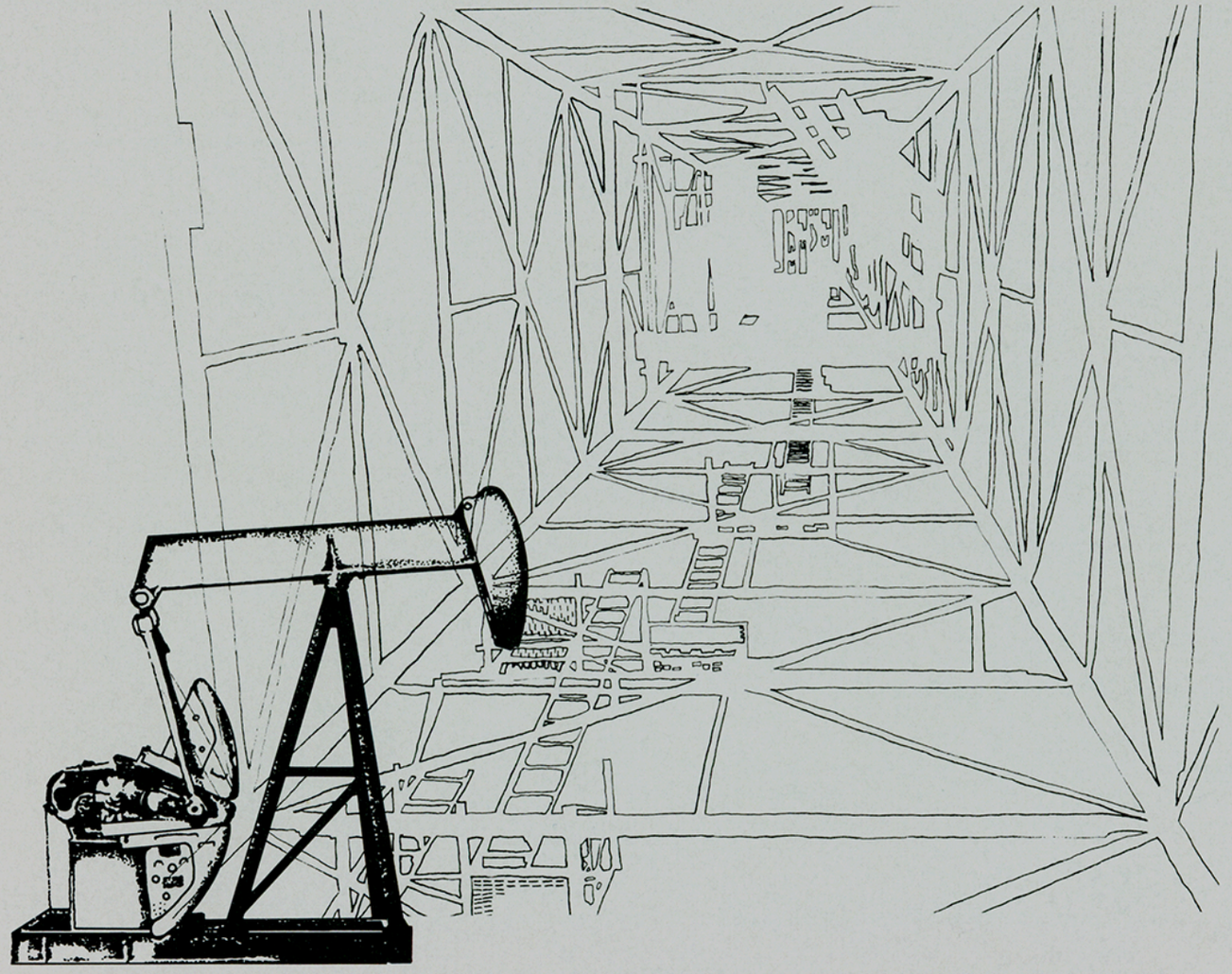
ENHANCED OIL-RECOVERY OPERATIONS IN KANSAS 1977



ENERGY RESOURCES SERIES 11

Margaret Oros
Donna Saile
Ruth Sherman

For the Kansas Enhanced Oil Recovery Committee
M.O. Oros & M.C. Colt co-chairmen



For years the name and the person of Margaret Oros have been synonymous with the activities of the oil and gas industry in Kansas. Since coming to the Kansas Geological Survey in 1962, Margaret has earned the respect and affection of those in industry and government with whom she has worked. These feelings have been displayed publicly on more than one occasion when Margaret was recognized for her diligent work, most recently when she retired this fall. KIOGA, EKOGA, Kansas Geological Society, and the Kansas Geological Survey recognized Margaret with awards in appreciation for her efforts.

Margaret Oros is a member of several professional organizations, has been chairman since 1966 of the A.A.P.G. Committee on Statistics of Drilling of the North Mid-Continent region, has been a member of the A.P.I. Committee on Crude Oil Reserves and responsible for southeastern Kansas, was the first woman appointed to membership on a committee of the Interstate Oil Compact Commission, and served as President of the Kansas Chapter of the Association of Professional Geological Scientists. Margaret has been co-chairman of the Kansas Enhanced Oil Recovery Committee for a number of years and author of several of these annual reports. It is fitting, then, that we dedicate this year's report, of which she is principal author, to Margaret O. Oros, in recognition for her many years of service to industry, State, and friends in Kansas.

KANSAS ENHANCED OIL RECOVERY COMMITTEE

COVER DESIGN: Carla Kuhn Fisher

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; 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 Eva Nguyen, of the Conservation Division, Kansas Corporation Commission, Wichita, were called on all through the year, and were very helpful. We also appreciate Dr. G. Paul Willhite's contribution on the status of tertiary oil recovery research at The University of Kansas.

ENHANCED OIL-RECOVERY OPERATIONS IN KANSAS 1977

Margaret Oros Donna Saile Ruth Sherman

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ENHANCED OIL-RECOVERY OPERATIONS IN KANSAS 1977

Margaret Oros Donna Saile Ruth Sherman

ENERGY RESOURCES SERIES 11
Kansas Geological Survey

ABSTRACT

Data for 1,448 enhanced oil-recovery projects are listed in this report, and a map shows their geographic distribution in 69 Kansas counties. Included are 698 projects identified as waterfloods, 397 pressure maintenance operations, 275 dump floods, 1 fireflood (thermal), 1 steam, and 1 air injection that maybe converted to tertiary recovery, and 74 that were not identified.

Total crude oil production in Kansas during 1977 was 57,496,021 barrels. Of this, 18,149,221 barrels (32%) were recovered from project areas. The records show that about 17 barrels of water were injected for every barrel of oil produced. There were 5,036 water injection wells and 11,450 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 a 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 statistics 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 submitted 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 to 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. Apparatus for experimenting with thermal recovery methods is being assembled. Reservoir geology studies of several producing fields have been completed, and further study of the effect of reservoir variability on fluid-flow is being conducted.

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. Geological studies will complement these studies in transferring this technology to real situations.

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 was published and distributed during the summer of 1977. A third conference is planned for spring 1979.

5. Liaison with Field Projects in Kansas

Local project members interact with company personnel operating selected field projects. Cities Service Oil Company and the U. S. Department of Energy are jointly conducting one of the micellar flood tests in the State. Project members maintain contact with their staff to learn the progress of their work in Butler County's El Dorado field. Technical assistance is also being given to a tertiary recovery project conducted by M. C. Colt, Inc., in the Colony West field in Allen County. Carmel Energy's experimental thermal recovery effort in the Carlyle Pool has been such a success, at the level of a pilot project in an Allen County heavy-oil pool, that they are expanding their efforts to other areas of the field.

Kansas Geological Survey research work has also included the drilling of test holes in three counties of southeastern Kansas to obtain data on oil-bearing sands. A report has been published by the Department of Energy, sponsors of the research, which shows the results of this study.

HISTORICAL REVIEW

The roots of enhanced oil recovery operations date back to the late 1800s. 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 vi) 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 Corporation Commission personnel prior to commencement of a project. After injection is started, the operator must submit yearly summaries of the project to the Conservation Division.

For many years project data have been published by members of the Kansas Geological Survey. 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.

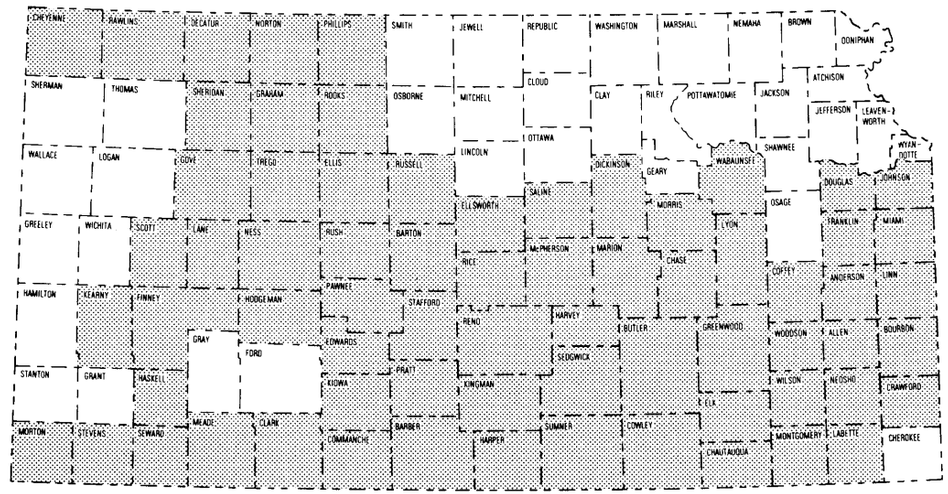


Fig 1--Map of Kansas showing counties with enhanced recovery projects.

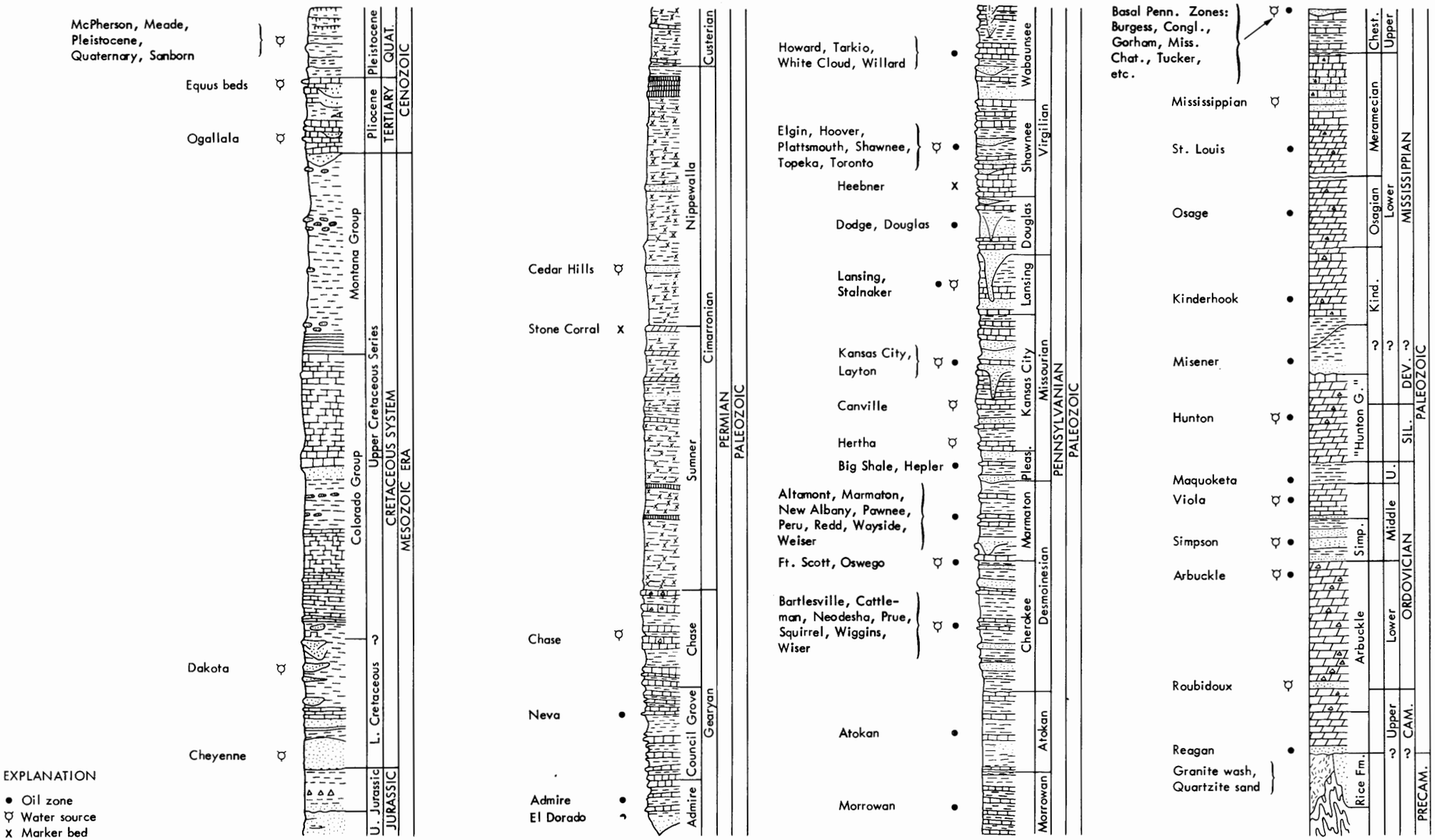


Fig. 2--Classification of rocks in Kansas (Oros, 1971, modified from Jewett et al, 1968). Stratigraphic positions of oil producing zones, water sources, and marker beds are indicated.

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.

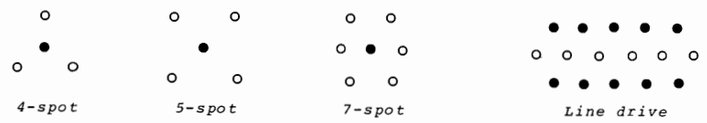
In addition to the indicated water source beds, a number of the projects depend on fresh water from streams, lakes, and municipal water supplies.

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

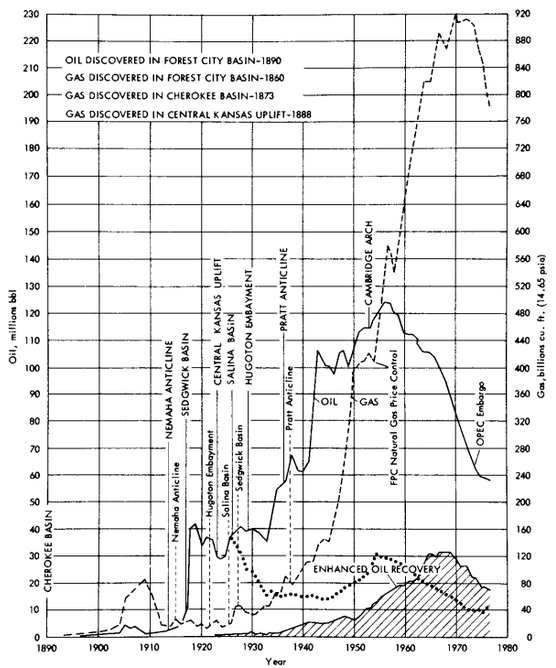


Fig. 3--Annual oil and gas production in Kansas from before 1900 to 1977, and year of discovery of oil and gas in different structural provinces. Estimated amount of crude oil produced each year by enhanced recovery methods (secondary and tertiary) is also shown. Dots on graph show Ks. East Range Production since 1923.

ANNUAL KANSAS SECONDARY RECOVERY AND REPRESSURING QUESTIONNAIRE (1977)

FIELD NAME: _____; COMPANY 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:	Sec.	T.	R.	County
_____	____ ,	_____ ,	____,	_____
_____	____ ,	_____ ,	____,	_____
_____	____ ,	_____ ,	____,	_____

CURRENT ACREAGE IN PROJECT: _____; DEPLETED ACREAGE: _____

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

OIL WELL DATA: Avg. number producing (1977): _____ ; Inactive wells: _____;

Number drilled in 1977: _____ ; Abandoned (1977): _____.

INJECTION WELL DATA: Has injection been continuous? Yes _____; No: _____

If not, explain: _____

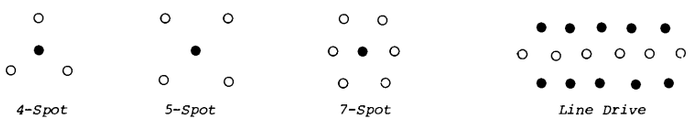
Avg. number injecting (1977): _____ ; Inactive: _____;

Number drilled in 1977:_____ ; Abandoned in 1977: ____.

INJECTION WELL PATTERN: *(Please check one. Some patterns are shown below):*

[ ] 4-Spot [ ] 5-Spot [ ] 7-Spot [ ] Line Drive(Line)

[ ] Peripheral or perimeter (Peri) [ ] Irregular or random(Irreg)



KEY: ● oil well; ○ water input

Average well-head injection pressure, _____psi. Amount of water and/or gas injected per well, per day:_____Barrels; _____MCF _____

Please send this questionnaire 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 No. Water, Wichita, KS 67202)*

(Over)
CO-11F-1978

SOURCE OF INJECTED WATER:

(a) Produced water: [ ] Yes [ ] No [ ] Part

(b) 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, such as Surfactant (S), Polymer (P), Micellar Solution (MS)

(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 - 1977

(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.)

	1977	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): .	_____	_____

("Enhanced recovery," as used here, includes all methods of production except primary)

- -

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 1977 operations. (The term "Enhanced oil-recovery," as used here, includes all methods of recovery except primary.)

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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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
ALLEN COUNTY																
3091	No	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	78	49	0	1	Yes
9440	No	Bronson-Xenia	Mack C.Colt, Inc.	(W) C-W	Harris 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	Yes	Colony B South	Mack C.Colt, Inc.	(W) Colony B South Unit	Colony B South Unit	21,22,27-23S-18E	150	0	Squir	815	25	24	0	3	0	Yes
4401	No	Colony West & Iola (Allen-Anderson Counties)	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
6814	--	Davis-Bronson	Harold T.Beck	(W) Allen County Flood	Steiner	10,15-24S-21E	--	--	Bartl	650	15	--	--	-	-	Yes
9546	--	Davis-Bronson	Harold T.Beck	(W) Allen County Flood	Crowder	34-24S-21E 3,4-25S-21E	320	--	Bartl	650	15	30	14	0	0	Yes
17800	Yes	Elsmore Shoestring	Don Daniels Oil Lease*	(D) Don Daniels Oil Lease	Larson Brandenburg†	15-26S-21E 10,15-26S-21E	160	--	Bartl	667	20	5	14	0	0	Yes
18297	--	Elsmore Shoestring	Geo. A.Hoffman Oil Co.	(W) Elsmore Project	Sisson, Ludlum	22-25S-21E	160	0	Bartl	700	12	7	0	0	0	Yes
17350	No	Elsmore Shoestring	Rainbow Oil, Inc.	(W) East Elsmore	Marvin Sander, Carrol Daniels Don R Nelson	16-26S-21E 21-26S-21E	140	0	Bartl	700	12	50	0	28	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	3	0	Yes
3802	Yes	Humboldt-Chanute	Jones & Campbell, Inc.*	(W) Wolfe-Tebay Unit	Wolf Wolf-Tebay, Benson	19-26S-18E 24-26S-18E	640	--	Bartl	820	18	9	--	-	-	Yes
8170	Yes	Humboldt-Chanute	Jones & Campbell, Inc.	(W) Monarch	Monarch Unit	9-26S-18E	40	--	Bartl	800	10	4	10	0	0	Yes
8647	No	Humboldt-Chanute	Layton Oil Co	(W) Project 503	Project 503	1,12,13-26S-18E 6,7-26S-19E	60	0	Bartl	820	0	25	46	0	0	Yes
18163	--	Humboldt-Chanute	Renflow Oil	(W) Becker	Larson Manson Campbell	28-26S-20E 29-26S-20E 32-26S-20E	400	--	Tuck	815	14	36	--	0	-	Yes
1858	--	Humboldt-Chanute	Texaco Inc.*	(W) Henrichs Block	Henrichs Block	22,23,26,27-26S-18E	464	--	Bartl	725	0-40	33	6	0	0	--
16718	--	Humboldt-Chanute	Wimsett Production	(W) C.Johnson	Stadler C.Johnson	13-26S-19E 18-26S-20E	239.5	132	Bartl	725	10	26	--	-	-	Yes
13992	Yes	Iola	Beckett Oil Co.*	(W) Miller, Ling, Teats, & Dolecek	Esther Dolecek R.R.Miller, Homer L.Teats†	31-24S-18E 36-24S-17E	520	80	Squir	801-813	12	8	0	0	0	Yes
8717	No	Iola	Layton Oil Co.	(W) Cross	Cross	3-24S-18E	--	0	Bartl	860	50	2	31	0	0	No*
9017 9089	No	Iola	Layton Oil Co.	(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*
7469	No	Iola (LaHarpe)	Tech-American Resources Corp*	(W) Scott-Sallee	Otis Sallee, H.E.Scott	14-25S-19E	320	0	Bartl	808	35	12	15	0	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	0	0	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	9	3	0	0	Yes
14897	No	Iola (LaHarpe)	Tech-American Resources Corp.*	(W) D L.Jarred & A.H.Setter "B"	D.L Jarred A.H.Setter	21-25S-19E 22-25S-19E	320	0	Bartl	800	25	6	1	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
3091	64	48	0	0	Line	450	49	Prod + Miss Lm	980	--	T	1951	Grav	1/0	30	--	1,137,325	34,744.492	23,436	3.063,786	23,436	3.063 786	
9440	0	14	0	0	5-Spot	0	0	Prod + Miss Lm	940	--	T	1962	Grav	1/0	26	--	0	998,536	68	--	68	75,164	*Injection shut off.
15815	11	0	5	0	Line	250	31	Sh Lm above Big Shale	350	35	T	1971	Grav	1/0	32	--	181,710	847.527	20.503	105.700	20,503	105,700	
4401	12	47	0	0	Line	650	14	Prod + Miss Lm	1260	--	T	1955	Grav	1/0	32	--	60,784	7,243.507	5.336	--	5,336	1,332,089	
6814	13	0	0	0	Irreg	--	--	None	--	--	U	--	--	--	28	--	--	--	180	--	180	--	
9546	10	0	0	0	Irreg	--	--	None	--	--	U	--	--	--	24	--	--	--	72	--	72	--	
17800	1	15	0	0	Irreg	50	10	Return water	667	20	U	1950	Grav	--	30	--	3,000	--	1,825	--	1,825	--	*Was William Daniels †Inactive
18297	3	0	0	0	Irreg	70	200	Prod + lake water.	--	--	M	1973	--	--	30	--	48,258	251,633	1,281	14,058	1,281	14,058	
17350	39	0	19	0	5-Spot	650	60	Prod + Miss Lm	864*	436	T+S	1974	Grav	4/1	30	--	555,035	983,901	55.464	97,991	55,464	97,991	*Casing @ 916'
17819	16	0	0	0	5-Spot	350	60	Prod + Miss Lm	903	496	T	1975	S Gas	--	30	--	459,268	862,489	16,373	41,525	16,373	41,525	
3802	6	--	-	-	Irreg	550	500	Prod + Oswego	525	100	T	--	S Gas	--	28	--	125,000	--	1,339	--	1.339	--	*Was Overland Energy Inc
8170	6	8	0	0	Irreg	400	40	Prod + Oswego	500	25	T	--	Wat	--	31	--	14,600	--	1,777	--	1,777	--	
8647	27	34	0	0	5-Spot	310	37	Prod + Miss Lm	1061	--	T	1970	S Gas	1/5	32	--	367,448	2,385,639	17,731	158,372	17,731	158,372	
18163	21	--	2	-	5-Spot + Irreg	500	861	Miss	801	--	M	1975	Wat	--	--	--	314,460	678,215	26,010	65,145	9,103	--	
1858	14	13	2	0	5-Spot	750	28	Prod + Arb	1500	--	M	1974	S Gas	--	29.1	--	140,545	261,392	3,860	13,441	3,731	13.312	*Was Ross Keas Oil Inc
16718	12	--	-	-	5-Spot	500	20	Prod + KC Lm	200	15	M	1972 1976	Grav	1/1	32	--	3,000	26,600	11.344	67,775	5,672	--	
13992	1	0	0	0	Peri	600	38	Prod + Recycled Wat	137	360	U	1968	Grav	9/1	28	--	11,400	138,800	1,280	12,260	300	3.820	*Was Fabco Oil Co Inc †Ling lease abandoned
8717	--	--	0	0	Irreg	--	--	Prod + Surface Wat	--	--	F	1974	S Gas	--	18	1006	0	31,250 20,980 Mcf	477	2,043	477	2,043	*Shut down for evaluation Injection intermittent in producing wells
9017 9089	0	5	0	0	Irreg	--	--	--	--	--	-	1963	S Gas	--	--	--	0 0	1,145,300 4.188,850†	3.637	122,454	0	0	*Thermal Project shut down while evaluating other recovery methods †Gas or air injected
7469	1	16	0	0	Irreg	100	7	Prod	--	--	U	1968	S Gas	99/1	19.8	--	2,474	81,463	2,617	126,795	0	0	*Was Tenneco Oil Co
14322	3	2	0	0	Irreg	424	35	Prod + KC	170	30	M	1968	S Gas	99/1	20.2	--	38,384	435,746	8,350	129.713	8.350	87,464	*Was Tenneco Oil Co
14357	6	1	0	0	Irreg	509	51	Prod + KC	170	30	M	1968	S Gas	99/1	23.7	100	111,761	1.142,300	7,870	165,203	7,870	98,440	*Was Tenneco Oil Co
14897	3	1	1	0	Irreg	598	39	Prod + KC	170	30	M	1969	S Gas	99/1	23.5	--	42,528	597,758	10,127	84,106	10,127	50.210	*Was Tenneco 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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
ALLEN COUNTY (Concl.)																
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
9952	No	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
18507	No	Moran	Ensminger Oil Co.*	(W) Iola Fireflood	McFadden Stewart Johnson Switzer Brown	1,12-25S-19E 5,7-25S-20E 6-25S-20E 7-25S-20E 8-25S-20E	1100	--	Bartl	820	0-50	31	--	-	-	Yes
10334	No	Moran-LaHarpe	Marvin E.Boyer Oil Co.	(W) LaHarpe Unit #2	Knox-Wade, Coltrane-Jones Wolfe-Foust	23-25S-19E 24-25S-19E	95	0	Squir	860	10	64	0	0	0	Yes
11082	--	Savonburg	Walter Duncan	(W) Walquist	Walquist	32-26S-21E	100	0	Bartl	670	30	3	6	0	0	Yes
11361	--	Savonburg	Geo. A.Hoffman Oil Co.	(-) Savonburg	Donald Nelson et ux Joseph Lowe (Nelson) Guy Shirley et ux	21,29-26S-21E 28-26S-21E 29-26S-21E	640	--	Bartl	690	13	22	--	5	-	Yes
		ALLEN COUNTY TOTALS (Reported)					7214	487				573	309	39	1	
ALLEN-BOURBON COUNTIES																
37-01-No 02A 153		Davis-Bronson (Formerly Markham Oil, C-4430)	Mack C.Colt, Inc.	(W) 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	1	0	No*
ALLEN-NEOSHO COUNTIES																
11183	Yes	Humboldt-Chanute	Bucane Oil & Research*†	(P) Bucane	Francis Yount, McCune Hayworth	1-27S-18E 31-26S-19E	300	--	Bartl	840	8	5	31	0	0	No#
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	11	0	0	Yes
		ALLEN-NEOSHO COUNTIES TOTALS (Reported)					1045	--				70	42	0	0	
ANDERSON COUNTY																
18135	--	Bush City Shoestring	C.K.Oil Co.	(P) C.K.Oil Co.	Kirk	8,9,16,17-21S-20E	120	80	Squir	800	40	14	0	3	0	Yes
3151	--	Bush City Shoestring	Glacier Petroleum Co.Inc.	(W) Reed Group	Reed Group	4,5-21S-21E	--	--	Squir	620	20-40	130	--	-	-	--
3177	--	Bush City Shoestring	Glacier Petroleum Co.Inc.	(W) Connelly & Loreaux	C & L Unit	4,5-21S-21E	--	--	Squir	620	20-30	125	--	-	-	--
852 1111	No	Bush City Shoestring	Kewanee Oil Co.	(W) Dengo W.F.	Brownrigg, Jackson, Bandy, Daniel McCrabb, Little & Oko Woods, Cleveland, Kretchmer, Victor	4-20S-21E 28-20S-21E 33-20S-21E	354	27	Squir	614	5	123	6	0	0	Yes
5985	No	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.	(W) East & 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 Sd	800	30	129	0	1	0	Yes
CR5772	No	Colony North	James E.Russell Petroleum, Inc.	(-) Burke	Burke	26-22S-19E	20	--	Squir	800	8	9	0	0	0	No*

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
16534	2	1	0	0	Irreg	497	39	Prod + KC	170	30	M	1972	S Gas	99/1	22.4	--	28,820	222,775	485	15.584	485	3,884	*Was Tenneco Oil Co
9952	6	1	0	0	5-Spot	600	46	Prod + Miss	960	--	T	1953	Grav	1/0	22	--	99,915	1,467,677	2,698	89.490	2,698	89.490	
18507	5	--	-	-	5-Spot	300	8-10	Prod	--	--	U	1976	Grav	1/90	18-20	--	14,600	19,800	1,760	2,210	760	--	*Was Sun Oil Co
10334	41	0	0	0	5-Spot	500	14.8	Prod + Miss	1010	65	T	1963	Grav	98/2	24.6	--	221,381	--	32,278	--	32,278	--	
11082	7	1	0	0	Line	630	39	Prod + Miss	950	68	F	1964	S Gas	--	32.5	--	52,313	1,967,344	1,942	135,790	1,942	135,790	
11361	6	--	0	-	Irreg	600	400	Prod + Arb	--	16	T	--	S Gas	--	30	--	117,498	12,979,333	13.372	762,966	13,372	762,966	
	336	207	29	0													4,151,507	69,513,477	273,492	5,276,407	242,550	6,136,104	
37-01-02A 153	0	0	0	0	Line	--	--	Prod + Miss Lm	960	--	T	1952	Grav	1/0	28.5	--	0	8,326,899	704	--	0	457,409	*Shut down because of low price; expect to reactivate as material and manpower available.
11183	6	12	0	0	Irreg	250	10	Prod + Miss	1100	--	U	1958	Grav	99/1	33	--	7,430	--	623	--	0	--	*Was F Merton Jeannes †Sold to Specific Systems 12/27/77 #Used injection well as disposal well.
4919	16	50	0	0	5-Spot	700	53	Prod + Arb	1500	--	M	1974	S Gas	--	32.5	--	308,593	945.765	8,146	24,802	8.335	24.991	*Was Ross Keas Oil Inc
	22	62	0	0													316,023	945,765	8,769	24,802	8,335	24,991	
18135	1	--	-	-	--	700	5	Prod	--	--	U	1975	S Gas	--	36	6.5	1,825	4,745	12,926	46,307	--	--	
3151	130	--	-	-	Line	580	1495	Prod	--	--	U	--	Wat	--	37	--	478,400	--	--	--	--	--	
3177	100	--	-	-	Line	600	1200	Prod	--	--	U	--	Wat	--	37	--	396,000	--	--	--	--	--	
852 1111	114	5	0	1	5-Spot	600	8	Prod + Arb + Miss	907+ 1451	--	T	1944	S Gas	--	36	--	355,065	11,220,114	18,859	2,187,997	18,859	1,547,956	
5985	0	0	0	0	Irreg	0	0	Prod + Arb + Miss	907+ 1451	--	M+ T	1958	S Gas	--	38	--	0	86,882	0	--	0	0	*No water injected.
3098	104	0	0	0	Irreg	800	16	Prod + Arb + Miss	1625+ 1450	--	T	1951	S Gas	--	36	--	545,595	20,140,358	38,114	1,876,847	38,114	1,876.847	
CR5772	0	0	0	0	--	0	0	--	--	--	-	--	--	--	29	--	0	0	870	870	0	0	*Redevelopment for waterflood

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
ANDERSON COUNTY (Concl.)																
6421	No	Colony Welda	Brecheisen Oil Co.	(W) Summers and Cameron	Summers Summers, Cameron	34-21S-19E 35-21S-19E	70	0	Squir	820	20-30	19	1	0	0	Yes
6436	No	Colony Welda	Brecheisen Oil Co.	(W) R.W.Brecheisen and Rocky Roost	Roy 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 and Settle	Buchanan, Settle	2-22S-19E	25	5	Squir	820	20	5	1	0	0	Yes
11406	No	Colony Welda	Brecheisen Oil Co.	(W) Kattenhorn-Kellstadt	Kattenhorn Kellstadt	22,27,35-21S-19E 3,4-21S-19E	180	10	Squir	825	24	56	0	19	0	Yes
5363	Yes	Colony Welda	James E.Russell Petroleum, Inc.	(W) Unit No.3	Unit No.3	2,3-22S-19E	146	0	Squir	800	19	37	0	0	0	No*
10781	No	Colony Welda	James E.Russell Petroleum, Inc.	(W) Martin, Strain	Martin Strain	4-22S-19E 9-22S-19E	120	0	Squir	800	14	17	5	0	0	Yes
11165	Yes	Colony Welda	James E.Russell Petroleum, Inc.	(W) Unit No.1 Unit No.2	Unit No.1 Unit No.2	21,22,27,28,33-22S-19E 28,29,32,33-22S-19E	320 116	0 0	Squir Squir	800 800	15 16	2 6	88 17	0 0	0 0	No* No†
8945	No	Colony West	James E.Russell Petroleum, Inc.	(W) West Colony	West Wolfe, Mcghee Brecheisen, Lacy Kelley	36-22S-17E 31-22S-18E 5-23S-18E 6-23S-18E	214	0	Squir	850	18	44	21	0	0	Yes
10327	No	Colony West	James E.Russell Petroleum, Inc.	(W) Charles M.Hill	Charles M.Hill	25-22S-17E	16	0	Squir	885	15	0	5	0	0	No*
7361	--	Garnett Shoestring	Caldwell	(P) Caldwell	Caldwell	32-20S-20E	30	--	Squir	660	20	6	--	0	-	Yes
16816	No	Kincaid	Richard Engineering Co.	(W) Kincaid	Miller "B" C-R-F, Miller "A", Lockwood McCaslin-Van Buskirk, Gaddis McCaslin-Van Buskirk	29-22S-21E 32-22S-21E 4-23S-21E 5-23S-21E	1240	0	Bartl	750	23	43	--	-	-	Yes
581	No	Selma	Mack C.Colt, Inc.	(*) Selma	Steele Cochran, Monroe	4-22S-21E 9-22S-21E	0	0	Bartl	850	18	3	0	0	0	No†
ANDERSON COUNTY TOTALS (Reported)							3417	157				777	149	23	0	
BARBER COUNTY																
13209	No	Amber Mills	Reed Oil Co.	(W) House & Lawrenz	Emma House Emma House, Ella Lawrenz	15-30S-12W 16-30S-12W	210	0	Viola	4500	8	3	0	0	0	Yes
5362	--	Bloom	American Petrofina Co. of Texas	(D) Bloom	Bloom	23-32S-12W	20	20	Miss	4321	17	1	0	0	0	Yes
18484	No	Hardtner	Okmar Oil Co.	(P) Achenbach	Achenbach Achenbach, Meyer	2,11-35S-13W 12-35S-13W	1440	--	Miss	4900	30	7	0	0	0	Yes
6939	No	Highway	Aylward Drilling Co.	(P) Gilbert	Stone	23-32S-11W	80	10	Doug	3586	6	2	0	0	0	Yes
17369	--	Medicine Lodge-Boggs	Continental Oil*	(P) G.R.Smith "A"	G.R Smith "A"	20-33S-12W	150	0	Simp	4963	31	4	1	-	-	Yes
15010	No	Medicine Lodge-Boggs	Getty Oil Co.*	(W) Boggs "C"	Boggs "C"	17-33S-12W	160	0	Simp Sd	4794	12	6	4	0	0	Yes
CPM-5771	No	Medicine Lodge-Boggs	Kewanee Oil Co.	(P) Holmes C	Holmes C	15-33S-13W	80	40	Mise	4858	10	1	1	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	4450	15	12	0	0	0	Yes
16556	Yes	Medicine Lodge North	Robert R.Price*	(W) Kirkbride	Kirkbride et al	20-32S-12W	252	0	Miss	4450	15	1	0	1	1	Yes
15630	No	Rhodes	Bowers Drilling Co.,Inc.	(D) Gilmore-Chapin	Gilmore-Chapin, Groendycke Fitzgerald	19-33S-11W 30-33S-11W	480	200	Miss	4480	12	3	0	0	0	Yes
10102	No	Rhodes	Gulf Oil Corp.	(W) W.A.Newkirk	W.A.Newkirk	17-33S-11W	160	0	Miss	4450	--	7	1	0	0	Yes
10266 9123	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	1200	800	Miss	4550	20	23	7	3	0	--
15203	No	Moffett West	Tenneco	(D) L M.Lee "A"&"B"	L.M.Lee "A" & "B"	8,9-30S-15W	40	--	Viola	4646	30	2	1	0	0	Yes
16259	No	Salt Fork	Braden-Deem Inc.	(P) Davis Ranch	--	11,12-35S-15W	320	0	Miss	4970	30	4	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
6421	16	0	1	0	Irreg	700	20	Prod + KC Shale	400	4	-	1958	S Gas	49/1	35	--	102,000	862,900	8,268	51,543	8,268	51,543	
6436	2	0	0	0	Irreg	700	20	Prod + KC Shale	400	4	M	1958	S Gas	49/1	34	--	54,000	336,250	1,626	8,598	1,626	8,598	
9179	4	3	0	0	Irreg	600	20	Prod + KC Shale	400	4	M	1962	S Gas	49/1	35	--	42,000	472,670	1,294	8,451	1,294	8,451	
11406	26	0	7	0	Irreg	700	40	Prod + KC Oswego + Fresh rural water	400	5	M	1959	S Gas	9/1	34-35	--	285,000	1,159,170	46,406	77,562	36,816	77,562	
5363	42	0	0	0	5-Spot	486	14	Prod + Miss	1200	--	T	1957	S Gas	--	36	7.5	204,485	2,553,991	27,047	285,865	27,047	146,618	*Converted to injection wells
10781	17	2	0	0	5-Spot	632	24	Prod + Oswego	700	60	T	1964	S Gas	--	36	7.5	151,557	1,845,036	9,728	268,546	9,728	174,331	
11165	0	41	0	0	5-Spot	0	0	Prod + Miss	1200	--	T	1948	S Gas	--	33.1	13	0	6,458,240	373	1,321,704	373	580,773	*Under redevelopment
	0	17	0	0	5-Spot	0	0				-	1955		1/0	33	13		2,502,786	969	320,894	969	193,755	†Under development
8945	14	74	0	0	Line	640	44	Prod + Salt Sd	1100	35	T	1961	S Gas	--	30	22	223,756	6,692,048	7,531	687,201	7,531	512,490	
10327	0	5	0	0	5-Spot	0	0	Prod + Hertha	500	--	T+S	1963	S Gas	--	27	38	0	87,600	0	2,610	0	2,511	*No production. Lease shut-in
7361	5	--	0	-	--	--	7	Prod	--	--	U	1959	S Gas	--	35	--	13,000	741,625	1,228	77,068	1,228	--	
16816	28	--	-	-	Line	500	37	Prod + Miss	1000	200	T	--	S Gas	--	27	30	182,000	350,000	23,601	--	20.000*	--	*Estimated
581	0	0	0	0	Line	--	--	Prod + Miss Lm	1100	--	M	1952	Grav	1/0	26	--	0	985,000	0	--	0	263,780	*Studying for possible tertiary recovery †Retesting for tertiary
	603	147	8	1													3,034,683	56,499,415	198,840	7,222,063	171,853	5,445,215	
13209	1	0	0	0	Irreg	200	826	Prod	--	--	T	1967	Wat	9/1	38	--	301,465	3,181,315	3,178	136,222	3,178	--	
5362	1	0	0	0	Irreg	315	31	Prod	--	--	U	1957	S Gas	1/2	33	--	11,351	232,527	8,005	155,468	0	0	
18484	1	0	0	0	Irreg	Vac	500	Prod	--	--	U	1977	Wat	3/25	22	19	155,125	155,125	18,615	18,615	0	0	
6939	1	0	0	0	Irreg	Grav	50	Prod	--	--	U	--	Wat + Gas Exp	4/1	26	--	18,250	458,699	2,281	78,459	2,281	--	
17369	3	0	-	-	Irreg	0	550	Prod	--	--	U	1975	S Gas	--	26	--	501,528	6,469,121	8,554	1,720,951	8,554	1,720,951	*Sold 10/1/77
15010	4	0	0	0	Irreg	0	396	Prod	--	--	U	1969	S Gas	73/352	26.2	--	578,612	2,530,370	15,460	2,915,214	15,460	109,980	*Merger 2/1/77 Was Skelly Oil Co.
CPM-5771	1	0	0	0	Irreg	0	6	Prod	--	--	U	1977	S Gas	49/4	38	--	2,122	2,122	7,719	62,123	0	0	
14776	3	0	0	0	Peri	1800	200	Prod + KC	4000	--	T	1969	--	9/7	30	--	273,750	2,527,275	11,575	664,532	11,575	83,606	*Was Barbara Oil Co.
16556	1	0	0	0	Peri	1800	300	Prod + KC	4000	--	T	1972	S Gas	9/7	30	--	109,500	450,000	496	4,581	496	1,309	*Was Barbara Oil Co.
15630	1	0	0	0	Irreg	Grav	150	Prod	--	--	U	1971	Gas Exp	2/3	34	--	55,000	291,000	9,089	174,996	3,500	15,000	
10102	2	0	0	0	Irreg	1000	150	Prod	--	--	U	1963	S Gas	59/38	25.4	--	112,140	9,382,986	6,529	354,834	6,529	354,834	
10266	13	8	0	1	Peri	1850	506	Prod + Medicine Lodge River	14	16	M	1962	Gas Exp	1/13.3	27	--	2,398,858	69,723,284	133,111	5,750,460	133,111	2,150,296	
9123																							
15203	1	0	0	0	Irreg	50	42	Prod	--	--	T	1969	S Gas	--	34.6	--	15,500	114,000*	2,976	93,154	0	0	*Estimated
16259	4	0	0	0	Irreg	300	110	Prod	--	--	U	1971	S Gas	35/30	26	--	40,150	187.900	5,504	221,108	1,500	4,700	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
BARBER COUNTY (Concl.)																
17372	No	Rhodes	Kewanee Oil Co.	(W) Forester A	Forester A	28-33S-11W	120	0	Miss	4433	20	1	0	0	0	No*
15863	--	Skinner	Robert F.White	(D) --	Skinner B	17-31S-17W	40	--	Viola	4400	30	1	0	0	0	Yes
		BARBER COUNTY TOTALS (Reported)					5352	1070				78	15	4	1	
BARTON COUNTY																
15252	Yes	Ames	Energy Reserves Group, Inc.	(W) Ames Unit	Feist, Feist "A", Henry L & Margaret Feist, Zink, Allen Isern Musenberg, Feist "B", Robl, Feist "C"	26-18S-11W 34-18S-11W 35-18S-11W	800	0	LKC	3150	30	8	0	0	0	No*
17142	No	Ames	Kaiser Francis	(P) Drews	Drews A, Drews B	15-18S-11W	60	0	Lans	3036	189	4	0	0	0	Yes
6929	Yes	Ames	Pioneer Operations Co., Inc.	(P) Robl Unit	Robl Unit	22,23,26,27-18S-11W	480	0	LKC	2925	155	6	0	0	0	Yes
11512	Yes	Bailey	NCRA	(W) Bailey LKC Unit	Bailey, Bock, Robl	30-18S-11W	50	0	Lans	3278	16	5	0	0	1*	Yes
16938	No	Beaver	Gas Producing Enterprises	(D) Kramer	Kramer	15-16S-12W	±20	±60	LKC	3051	181	2	0	0	0	Yes
11244 2259	No	Beaver	Keener Oil Co.*	(W) Feltes	N.Feltes	8-16S-12W	50	--	Lans	3050	8	2	1	0	0	Yes
14631	No	Beaver	Phillips Petroleum Co.*	(P) Christian D	Christian D	10-16S-12W	40	--	LKC	3060	12	1	0	0	0	Yes
15418	Yes	Bernard	Graybol-Patton Co.*	(W) Musenberg Unit	Musenberg Unit	10-19S-11W	60	0	Lans	3192	8	5	0	0	0	Yes
CR-77711	No	Birzer West	TGT Petroleum Corp.	(P) Koester	Jenish, Koester C Birzer Koester A,B. Hoffman	21-17S-12W 22-17S-12W 28-17S-12W	1200	--	Arb	3440	60	1	0	0	0	Yes
8376	--	Bottoms	Hillenburg Oil Co.	(W) Zink A	Zink A Birzer	35-18S-12W 36-18S-12W	20	0	LKC	3130	10	3	0	0	0	Yes
15841	No	Boyd	Energy Reserves Group, Inc.	(W) Frieb	C.Frieb	4-18S-14W	80	0	LKC	3230	20	5	0	0	0	Yes
7810	--	Carroll	Everett Swander	(P) Meitner "A"	Meitner "A"	28-17S-14W	0	30	LKC	3100	6	3	0	0	0	No*
17564	No	Carroll North	Phillips Petroleum Co *	(P) Borchers A	Borchers A Demel "A"†	8-17S-14W 17-17S-14W	20	0	Lans-Arb	3400	--	1	0	0	0	Yes
14333	No	Chaffee	Chapman Exploration, Inc.	(W) Panning-Russell, Gruenwald	Panning, Russell, Gruenwald	31-19S-13W	40	200	LKC	3252	6	2	0	0	0	Yes
14048	Yes	Chaffee	Four-Way Operating, Inc.	(W) Vaughan-Russell	Russell	36-19S-14W	80	0	Lans	3187	235	3	0	0	0	Yes
11715	No	Chase-Silica	Okmar Oil Co.	(W) Burmeister	Burmeister A, Isern A	25-19S-11W	40	0	LKC	3080	7	2	0	0	0	Yes
15218	No	Cheyenne	NCRA	(W) Lucas	Lucas	4-19S-12W	30	0	Lans	3104	15	2	0	0	0	Yes
16052	No	Cheyenne	NCRA*	(D) Miller "A"	Miller "A"	4-19S-12W	10	0	Lans	3100	15	1	0	0	0	Yes
5561	No	Cheyenne View	Aladdin Petroleum Corp.	(P) Rinker B	Rinker B	12-19S-12W	40	--	KC	3060	30	2	2	0	0	Yes
CR-10775	No	Cheyenne View	Aladdin Petroleum Corp.	(P) Schartz	Schartz	14-19S-12W	--	--	KC	3050	30	4	0	0	1	Yes
17269	No	Cheyenne View	Energy Reserves Group, Inc.	(W) Apel	Apel, M.	14-19S-12W	360	180	LKC	3140	150	1	0	0	0	Yes
5387	No	Cheyenne View	George H.Hannum (Isern Petroleum Co.)	(W) Lanterman Waterflood	Lanterman "A"	23-19S-12W	160	--	KC	3142	49	6	1	0	-	Yes
3272	--	Cheyenne View	Sohio Petroleum Co.	(W) Heinz "A"	Heinz "A"	12-19S-12W	30	--	LKC	3100	17	1	1	0	0	Yes
3421 7208	No	Cheyenne View	Southern States Oil Co.	(P) Kultgen	Achatz Kultgen	11-19S-12W 12-19S-12W	240	--	LKC	3100	19-20	14	0	0	2	Yes
14846	Yes	Northwest Cheyenne View	Nadel and Gussman	(W) Cheyenne View Unit	Lucas, Schartz, Wess, Eppstein	10-19S-12W	140	0	LKC	3100	15	2	1	0	0	Yes
12012	No	Clarence	K.R.M.Petroleum Corp.*	(D) Button	Button	35-19S-15W	160	0	LKC	3246	4	1	0	0	0	Yes
8476	--	Ellinwood North	American Petrofina Co. of Texas	(W) Schwamborn	Schwamborn	28-19S-11W	100	40	LKC	3065	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	--	LKC	3300	10	7	0	0	1	Yes
8604	No	Erna Southeast	Carl W.Boxberger	(D) Russell B	Russell B	29-18S-14W	160	0	LKC	3258	60	2	0	0	0	Yes

Oros, Saile, and Sherman—Enhanced Oil-Recovery Operations in Kansas, 1977

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17372	1	0	0	0	Irreg	0	40	Prod	--	--	U	1974	S Gas	0/50	0†	--	7,300	27,740	0	0	0	0	*Preparing to P&A input well. †Water produced by gas well.
15863	1	0	0	0	Irreg	0	40	Prod	--	--	U	1971	S Gas	1/2	40	--	15,000	105,000	4,600	532,600	0	0	
	39	10	0	1													4,595,651	95,838,464	237,692	12,883,317	186,184	4,440,676	
15252	3	0	0	0	Irreg	779	171	Ced H	545	10	U	1971	S Gas	1/8	31.8	--	187,760	1,363,879	13,286	721,055	13,286	129,214	*Source well recompleted May 1977. Down 60 days.
17142	1	0	0	0	Irreg	Vac	400	Prod	--	--	T+S	1974	--	18/224	--	--	120,800	558,815	5,588	687,518	1,000	4.000	
6929	2	0	0	0	Irreg	595	155	Prod + Red Bed	375	80	M	1971	S Gas	1/1	40	--	56,575	694,652	5,253	--	3,850	--	
11512	2	1	0	0	Irreg	685	145	Prod + Sh River Gr Fr Wat	40	20	M	1972	S Gas	52/45	42.5†	--	105,780	368,654	18,246	106,090	9,996	39,445	*Converted †@60
16938	1	0	0	0	Irreg	271	460	Prod	--	--	U	1973	S Gas	16/369	39	--	167,902	517,196	5,406	381,692	--*	--	*Unable to determine.
11244 2259	1	1	0	0	Irreg	350	625	Prod	--	--	T	--	Wat	--	38	--	228,125	--	8,577	--	8.577	--	*Was Mobil Oil Corp
14631	1	0	0	0	Irreg	0	100	Prod	--	--	U	1968	S Gas	1/4	39	--	36,476	177.323	1,050	81.283	822	2,738	*Was Thomas H. Allan
15418	3	0	0	0	4-Spot	850	77	Prod + Sh Well	80	20	M	1970	S Gas	16/70	40	3.2	84,734	1,021.377	5,663	136,779	5,663	136,779	*Was Graybol Oil Corp.
CR-77711	1	0	0	0	Irreg	0	93	Prod	--	--	U	1977	Wat	1/9	34	--	31,155	31,155	2,493	2,493	0	--	
8376	1	0	0	0	Irreg	18	125	Prod	--	--	T	1961	S Gas	73/27	39	--	45,625	--	2,079	--	2.079	--	
15841	1	0	0	0	Irreg	0	690	Prod	--	--	U	1971	S Gas	1/4.6	38.6	--	251,795	1,009.981	9,853	989,789	9,853	72,755	
7810	0	1	0	0	Irreg	0	0	Prod	--	--	T	1960	S Gas	1/9	38.7	--	14,780	--	4,895	--	0	--	*Not injecting
17564	1	0	0	0	Irreg	0	110	Prod	--	--	U	1974	Grav	1/63	--	--	40,226	180,047	894	209,224	0	0	*Was Birmingham-Bartlett Drilling Co. †Plugged
14333	2	0	0	0	Peri	Vac	48	Prod + Fr	50	65	M	1968	S Gas	15/1	36	--	35,284	370,462	3.453	204,004	3.453	58.197	
14048	1	0	0	0	Irreg	900	17	Prod + Lans	3187	235	U	1971	S Gas	1/1	34	--	6,165	21.766	531	65,729	531	9.452	
11715	1	0	0	0	Peri	330	284	Prod + Arb	3300	5	T	1966	S Gas	--	34	34	88,111	1.008,918	2,100	238.076	2,100	10.971	
15218	1	0	0	0	Irreg	800	190	Prod + Grav Bed	60	30	T	1969	S Gas	1/1	44*	--	69,340	608.052	6,222	103.856	2.629	32,633	*@60
16052	1	0	0	0	Irreg	0	68	Prod	--	--	T	1972	S Gas	10/5	40†	--	24,975	197,648	2,751	18,285	1,053	3 368	*Was Thunderbird Drlg.
5561	1	0	0	0	Irreg	200	240	Prod	--	--	T	1959	S Gas	--	38	--	80,810	2,204,670	3,983	349,471	3,983	--	†@60
CR-10775	1	--	0	0	Irreg	200	300	Fr Wat + Sd	50	30	F	1972	--	--	38	--	90,650	595.745	5,001	57,182	5,001	--	
17269	1	0	0	0	Irreg	0	82	Prod	--	--	U	1974	S Gas	1/4	38.6	--	30,029	111,806	4,524	58,442	4,524	18,244	
5387	1	--	-	-	Irreg	200	134	Prod	--	--	T	1966	S Gas	1/1	40	--	48,894	327.070	4,913	446,001	557	16.506	
3272	1	0	0	0	Irreg	0	34	Prod	--	--	T	1960	S Gas	1/5.1	39.7	--	98,634	1,572,014	1.329	84.137	1,329	80,122	
3421 7208	3	0	0	0	Irreg	700	406	Prod	--	--	T	--	Grav	--	39	--	444,408	3,056,757	40,845	--	40,845	--	
14846	3	1	0	0	Peri	0	71	Prod + Shallow Fr Wat	50-100	50	M	1969	S Gas	54/46	42	2.5	103,909	1,090,621	1,658	--	1,658	63.471	
12012	1	0	0	0	Irreg	Vac	180	Prod	--	--	U	1965	S Gas	1/49	25.3	--	96,725	810,725	1,800	183.668	1,800	86,700	*Was Crown Oil Co
8476	2	1	0	0	Peri	0-Vac	156	Prod	--	--	U	1966	S Gas	1/2	42	--	113,629	3.712,381	3,304	70.589	3,304	70.589	*Was El Dorado Ref. Co.
17067	2	0	0	0	Irreg	0-50	450	Prod	--	--	U	1973	Gas Exp	--	40	--	164,250	675,558	9,898	99,295	2,000	24,080	
8604	1	0	0	0	Irreg	40	240	Prod	--	--	U	1961	S Gas	2/1	39	--	87,600	557.185	2,153	163,220	2,153	15.506	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
BARTON COUNTY (Cont.)																
11427	--	Fort Zarah	W.L.Hartman	(W) Harris	Harris	30-19S-12W	30	0	LKC	3139	60	2	--	-	-	Yes
17192	--	Fort Zarah	W.L.Hartman	(W) Kohler	Kohler	30,31-19S-12W	--	--	LKC	3118	240	4	--	0	0	Yes
17199	No	Fort Zarah	Ladd Petroleum Corp.	(W) Harris "A"	Harris "A"	30-19S-12W	80	--	LKC	3128	70	2	1	0	0	Yes
15942	--	Frank	Raymond Oil Co., Inc.	(W) Hammeke-Neeland	Hammeke-Neeland	7,8-19S-12W	120	--	LKC	3160	22	2	--	-	-	Yes
5366	--	Great Bend Airport	Petroleum Management,Inc.	(W) Great Bend Airport	Essmiller "A", Opie	26-19S-14W	320	100	LKC	3188	240	2	1	0	0	Yes
8335	No	Hammeke West	Nadel and Gussman	(W) Hammeke	Hammeke	18-19S-11W	20	10	LKC	3142	10	2	2	0	0	Yes
17845	--	Hammer	Fell & Wolfe Oil Co.	(D) Dewerff	Dewerff, Sessler	1-20S-12W	450	--	Arb	3340	20	7	0	0	0	Yes
					Dewerff	2-20S-12W										
9812	No	Hammer	Ladd Petroleum Corp.	(W) Hammer W.F.	Hammer "B", Johanning	35-19S-12W	160	20	LKC	3100	220	10	1	0	0	Yes
					Birzer	36-19S-12W										
6983	No	Heizer SW	Four-Way Operating, Inc.*	(W) Hall	Hall	28-19S-14W	160	120	Lans	3198	236	2	0	0	0	No†
					Harrison	29-19S-14W										
12894	--	Hiss	Baruch-Foster Corp.	(W) McGreevy	McGreevy	30-20S-13W	80	0	Lans	3290	20	3	0	0	0	Yes
13421	No	Hiss	Wayne L.Brown*	(P) McGreevy	McGreevy	30-20S-13W	80	0	LKC	3214	40	2	0	0	0	Yes
10802	No	Klepper	C.L.Hanes*	(D) Klepper	Klepper	2-19S-11W	20	0	KC	3040	5	1	0	0	0	Yes
16524	No	Knop	Energy Reserves Group	(W) Knop WFS	Knop, Fox-Rusco "B", Wess	9-19S-12W	470	0	LKC	3130	20	5	0	0	0	Yes
11520	No	Kraft-Prusa	Four-Way Operating Inc.*	(W) Ney	Ney	17-16S-11W	40	20	Lans	3006	304	1	0	0	0	No†
9560	No	Kraft-Prusa	Gas Producing Enterprises	(D) Esfeld	Esfeld	29-16S-11W	±60	±100	Doug	2960	15	4	1	0	0	Yes
13453	No	Kraft-Prusa	Getty Oil Co.*	(W) E.F.Esfeld	E F Esfeld	30-16S-11W	±50	0	Doug-Lans	2965	15	3	3	0	0	Yes
12275	No	Kraft-Prusa	Gulf Oil Corp.	(W) Joseph	Joseph	29-16S-11W	160	0	Doug	2995	--	7	5	0	0	Yes
9163	No	Kraft-Prusa	NCRA	(W) Dolechek Estate	Dolechek Estate	24-16S-12W	30	10	Gorham Sd.	3339	20	3	0	0	0	Yes
16846	--	Kraft-Prusa	Petroleum Management, Inc.	(W) North Oeser	North Oeser	30-16S-11W	160	--	LKC	3057	--	8	1	0	0	Yes
12991	No	Kraft-Prusa	Samson Resources Co.*	(W) Krier WF	Krier A, Krier C	30-16S-11W	160	0	Doug	2980	8	5	0	0	0	Yes
15196	No	Kraft-Prusa	Tenneco	(D) John Riemann "B"	John Riemann "B"	22-16S-12W	40	--	LKC	3108	85	1	0	0	0	Yes*
13046	No	Kimpler	Icer Addis	(W) Kimpler Waterflood	Kimpler "C"	31-18S-11W	80	--	LKC	3150	5	0	2	0	0	No*
13853	No	Lanterman	Lario Oil & Gas Co.	(P) Rehme	Rehme	15-19S-11W	40	0	LKC-Arb	3050	--	2	0	0	0	Yes
14887	No	Mary Axman	Murfin Drilling Co.	(W) Mary Axman W.F.	Mary Axman	23-17S-15W	80	40	LKC	3414	14	1	1	0	0	Yes
17144	No	Mater	Murfin Drilling Co.	(W) Mater WF	Ed Mater, Max Mater	11-17S-15W	160	23	LKC-Tor	3142	20	5	1	0	0	Yes
11059	--	Ney Southwest	BLG Co.*	(D) Rude	Rude "E"	2-16S-13W	20	15	Lans	3100	5	1	--	-	-	Yes
CR-5773	No	Nuss South	L.G.Stephenson & Co, Inc.	(P) Popp	Popp A	3-16S-14W	240	0	Lans	3181	5	1	0	0	0	No*
					Popp	4-16S-14W										
4418	--	Prairie	Texaco Inc.	(-) Prairie View	J.Schartz	20-19S-11W	160	--	Lans	3406	--	1	0	0	0	No*
13049	No	Prairie View	Icer Addis	(W) John Schartz Water-flood	John Schartz, Kowalsky, Ahrens	20-19S-11W	160	--	LKC	3200	150	4	0	0	0	Yes
7104	Yes	Pritchard	Phillips Petroleum Co.	(W) West Hiss LKCU	West Hiss LKC Unit	36-20S-14W	130	0	LKC	3350	50	4	1	0	0	Yes
18207	--	Pritchard	Texaco Inc.	(W) --	R.Taylor, L.Pritchard	34-20S-14W	440	--	Lans	3450	0-80	4	1	0	0	Yes
					A.Wright, E.G Wright	35-20S-14W										
17155	No	Putnam West	Murfin Drilling Co.	(W) Williams	Williams	12-17S-14W	160	0	LKC	3214	30	3	0	0	0	Yes
13249	No	Roesler	Nadel and Gussman	(W) Bieberle	Bieberle	15-18S-11W	30	0	KC	3025	10	2	0	0	0	Yes
16593	No	Roesler West	Energy Reserves Group	(W) Kaiser WFS	Kaiser	15-18S-11W	160	0	LKC	3025	225	5	0	0	0	Yes
15193	No	Rolling Green East	Southern States Oil Co.	(P) Lonnon B	Lonnon B	25-20S-13W	160	--	KC	3258	32	2	0	0	0	Yes
11630	Yes	St. Peter	Shelley Oil Co.	(D) Robl Unit	Robl	32-18S-11W	240	60	Lans-Platt	2912	216	8	--	0	0	Yes
					Musenberg	33-18S-11W										
					Hickel	5-19S-11W										
11909	--	St. Peter	Texaco Inc.	(W) St.Peter Unit	H.Schlochtermeir, T.Schlochtermeir	32-18S-11W	240	--	Lans-Platt	2900	--	5	3	0	0	Yes
12861	No	St. Peter East	Nadel and Gussman	(W) Johanning	Johanning	34-18S-11W	110	10	KC	3060	10	5	2	0	0	Yes
14055	No	St. Peter East	Nadel and Gussman	(W) Birzer	Birzer	3,4-19S-11W	80	0	LKC	3100	20	3	1	0	1	Yes

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Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abnd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
11427	1	--	-	-	Irreg	60	55	Wat Sd	20	15	M	1964	S Gas	--	40	--	19,870	301,573	1,645	41,415	1,000	21,320	
17192	1	--	-	-	--	400	705	Prod	--	--	T	1974	S Gas	--	36.5	--	257,500	882,022	4,685	10,660	500	850	
17199	1	0	0	0	Irreg	Vac	288	Prod	--	--	T	1974	S Gas	1/32	43	--	70,500	281,463	2,616	170,099	2,616	170,099	
15942	2	--	-	-	Irreg	60	190	Prod + Dak	360	--	U	1971	S Gas	1/0	41	--	139,065	891,107	2,696	43,734	2,696	43,734	
5366	1	0	0	0	Irreg	Vac	170	--	--	--	-	1957	S Gas	--	--	--	59,500	1,500,775	2,096	61,419	2,096	60,769	
8335	1	0	0	0	Irreg	0	35	Prod	--	--	F	1961	S Gas	4/1	38	--	12,775	462,885	2,597	--	650	66,081	
17845	1	0	1	0	--	300	300	Prod	--	--	U	1975	Wat	--	38.5	--	--	--	14,569	61,919	--	--	
9812	0	6	0	0	Irreg	0	0	Ground	50	--	F	1963	S Gas	58/549	38	--	0	3,835,881	9.940	340,384	9,940	323,804	
6983	1	0	0	0	Irreg	0	180	Prod	--	--	U	1959	Partial Wat	14/106	35	--	54,000	529,221	80	110,102	80	25,744	*Was Clarence J Mermis †Mechanical problems
12894	1	0	0	0	Irreg	0	30	Prod	--	--	U	1966	S Gas	5/6	34	--	10,950	90,300	3,200	214,671	200	800	
13421	1	0	-	-	Irreg	0	286	Prod	--	--	U	1971	Grav	6/30	39	--	104,390	688,166	2,236	15,654	1,118	9,307	*Was Phillips Petroleum
10802	1	0	0	0	Line	0	325	Prod	--	--	U	1964	Grav	2/3	42	--	97,500	456,175	48,410	1,479,910	--	--	*Sold to T.J.Enterprises 1/20/78
16524	2	2	0	0	Irreg	720	289	Prod + Dak	95	155	U	1971	S Gas	1/3	39.6	--	210,732	1,234,563	8,205	624,992	8.205	121,240	
11520	1	0	0	0	Irreg	0	62	Prod + Arb	3310	10	U	1965	S Gas + Wat	1/0	33	--	18,600	244.662	1,311	178,124	1,311	15.305	*Was NCRA. †Mechanical problems with well.
9560	1	0	0	0	Irreg	467	615	Prod	--	--	U	1963	S Gas	16/19	36	--	18,172	1,981.161	5.347	1,280,577	--	--	
13453	1	0	0	0	Irreg	400	612	Prod	--	--	T	1967	S Gas	--	40	--	223,463	2,532,950	8,282	623.529	8,282	130,223	*Merger: Was Skelly Oil Co. 2/1/77.
12275	1	0	0	0	Irreg	950	550	Prod	--	--	U	1966	S Gas	86/1845	40.1	--	216,876	2,323,706	3,261	251,783	3,261	251,783	
9163	1	0	0	0	Irreg	Vac	245	Prod + Chey Sd	525	50	M	1962	S Gas	1/3.2	42.1*	--	89,599	1,839,886	5,659	179,669	0	91,119	*@60.
16846	1	--	-	-	Irreg	Vac	141	Prod	--	--	U	1972	S Gas	2/1	--	--	51,445	343,869	21,513	1,120,430	21,513	1,056,472	
12991	1	0	0	0	Irreg	600	318	Prod	--	--	T	1966	S Gas	--	36	--	116,136	2,264,146	5,655	806,760	4,241	88,087	*Was Kathol Petroleum.
15196	1	0	0	0	Irreg	100	275	Prod	--	--	U	1969	S Gas	8/15	42.9	--	100,000	880,000	249	208,835	0	0	*P & A 3/31/78.
13046	0	1	0	0	Irreg	0	0	Prod	--	--	T	1961	S Gas	--	41	--	0	536,900	0	9,347†	0	64,956	*Casing cratered on injection well. †Since 1971.
13853	1	0	0	0	Irreg	Grav	297	Prod	--	--	U	1967	S Gas	14/145	37	--	108,287	1,060,617	2,009	39,124	0	0	
14887	1	0	0	0	Irreg	250	300	Prod	--	--	T	1969	S Gas	99/1	40	--	79,119	1,232,785	4,742	48,235	4,742	32,435	
17144	2	0	0	0	Irreg	200	300	Prod	--	--	T	1974	S Gas	9/1	37	--	218,911	726,626	4,471	303,999	1,491	11,609	
11059	1	--	-	-	Irreg	0	20	Prod	--	--	U	1964	S Gas	1/4	38	--	7,300	286,650	1,280	13,913	--	--	*Was Ralph R. Rhyne.
CR-5773	1	0	-	0	Peri	100	30	Prod	--	--	U	1977	S Gas + Wat	1/4	39.9	--	8,626	8,628	3,026	3,026	--	--	*Commenced 5/18/77.
4418	0	1	0	0	--	0	0	None	--	--	-	--	--	--	--	--	0	--	1,931	--	1,931	--	*No injection since 5/1/74.
13049	1	1	0	0	Irreg	900	460	Prod + Surface Wat	40	10	M	1956	S Gas	--	38	--	167,900	2,231,430	6,400	61,164*	5,100	48,438*	*Since 1971.
7104	2	1	0	0	Irreg	0	539	Prod + Fr Wat Sd	150	--	M	1959	S Gas	1/4.3	40	5.5	393,661	6,961,628	13,900	1,146,925	10,204	177,205	
18207	5	0	0	0	Irreg	1155	367	Prod + Arkansas Gr	100	--	M	1976	S Gas	22/49	33.6	--	669,825	808,061	26,030	31,970	19,906	19,906	
17155	1	0	0	0	Irreg	400	351	Prod + Dak	250	20	M	1973	S Gas	4/15	36	--	128,202	417,651	6,222	62,144	6,222	23,575	
13249	1	0	0	0	Irreg	900	25	Sh Fr	100	40	F	1967	S Gas	9/1	45	--	9,270	240,822	3,030	--	3,030	32,021	
16593	2	1	0	0	Irreg	0	255	Prod + Dak	35	168	U	1972	S Gas	1/1.2	42.3	--	186,024	1,487,335	9,140	361,525	9,140	139,189	
15193	1	0	0	0	Irreg	--	25	Prod	--	--	T	1969	Grav	--	37	--	9,125	107,564	2,574	32,918	2,574	32,918	
11630	1	--	0	0	Irreg	0	236	Prod	--	--	T	1965	S Gas	--	37	--	86,273	1,996,580	16,659	--	15,400	322,918	
11909	4	0	0	0	Peri	Vac	64	Prod	--	--	U	1962	--	2384/3649	42	--	93,570	4,511,225	6,754	366,267	6,754	213,457	
12861	3	0	0	0	Peri	0	27	Prod + Sh	100	20	M	1966	S Gas + Wat	85/15	40	--	29,700	1,558,290	9,488	--	9,488	146,828	
14055	3	0	0	0	Peri	0	121	Prod + Sh Fr	100	0-100	M	1968	S Gas + Wat	1/4	41	--	132,225	1,482,325	1,661	--	1,661	34,957	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
BARTON COUNTY (Concl.)																
12586	No	Sandrock	Kewanee Oil Co.	(W) Engleman-McDonald	Engleman McDonald	27-20S-13W 34-20S-13W	60	20	KC	3261	54	3	1	0	0	Yes
6478 13215	Yes	Sandrock	Phillips Petroleum Co.	(W) Pursel	Pursel Unit	28-20S-13W	55	0	LKC	3300	15	3	0	0	0	Yes
9838	Yes	Sandrock	Shenandoah Oil Corp.*	(W) Sandrock Unit	Weathers Morrison, Jackson	27-20S-13W 28-20S-13W	60	0	LKC	3400	20	4	0	0	0	Yes
18613	No	Schenk	Energy Reserves Group, Inc.	(W) Schenk WF	Schenk	29-17S-14W	320	0	LKC	3149	214	3	0	0	0	No*
18106	No	Sunny Valley	Carl W. Boxberger	(D) Batchman	Batchman	18-20S-12W	160	0	LKC	3177	10	1	0	0	0	Yes
18247	No	Trapp	Thornton E. Anderson	(W) Putnam	Putnam	26-16S-13W	40	0	LKC	3123	145	1	0	0	0	Yes
16089	No	Trapp	Gas Producing Enterprises	(D) Siemsen	Siemsen	24-16S-14W	+20	+10	LKC	3127	14	2	1	0	0	Yes
14759	No	Trapp	John S. Martin*	(W) Oltmanns	Oltmanns	15-17S-13W	30	10	KC	3230	4	2	1	0	-	Yes
16882	Yes	Trapp	Petroleum, Inc.	(W) Trapp Unit	Sausen "B", Nettleingham, Reif "I" Karst "B"	13-16S-14W 14-16S-14W	440	0	LKC	3130	27	2	1	0	0	Yes
11517	No	Trapp	Samson Resources Co.*	(D) Schneider "C" WF	Schneider "C"	2-16S-14W	160	0	Lans	3082	0	1	0	0	0	Yes
16787	Yes	Trapp	Sierra Petroleum Co., Inc.	(W) Wilborn LKC Unit	Thorne "E" Wilborn	22-16S-13W 27-16S-13W	360	--	LKC + Top	3121	64	5	0	0	0	Yes
15821	--	Two-Eighty-One	Cities Service Co.	(D) Eveleigh "C"	Eveleigh "C", Streck "A"	27-16S-14W	32	0	LKC	3188	12	3	0	0	0	Yes
15842	No	Workman North	Petroleum, Inc.	(P) Hulme "G-I"	Hulme "G-I"	16-20S-12W	160	0	LKC	3160	52	6	0	0	0	Yes
11972	No	Workman Northwest	Kewanee Oil Co.	(W) Buckbee	Buckbee	14-20S-12W	20	10	Arb	3373	28	1	0	0	0	Yes
17247	No	Workman Northwest	Murfin Drilling Co.	(P) Buckbee-Hulme	Buckbee, Hulme	15-20S-12W	240	0	Arb	3370	51	5	0	0	0	Yes
		BARTON COUNTY TOTALS (Reported)					12587	1088				273	37	0	6	
BARTON-RICE COUNTIES																
9151	Yes	Mary Ida	Sohio Petroleum Co.	(W) Mary Ida Unit	Reif "B", Reif "A", Mauke, Mooney, Mauke Musenberg, Doll	31-18S-10W 36-18S-11W	370	--	LKC	3100	21	8	4	0	0	Yes
BARTON-RUSSELL COUNTIES																
14582	Yes	Hall Gurney	NCRA	(W) Northwest Beaver Unit	Hilgenberg "A" Hofmeister, Hilgenberg, Hilgenberg "B", Staudinger "A", Staudinger "E" Staudinger "D", Staudinger "B", Depiesse	32-15S-12W 5-16S-12W 6-16S-12W	400	40	Lans + Top	2980 2835	15	16	0	0	0	Yes
BARTON-STAFFORD COUNTIES																
13810	No	Shaeffer Northeast	Kewanee Oil Co.	(W) Sharp A & B	Sharp A Sharp B	35-20S-13W 3-21S-13W	100	40	KC	3267	206	3	0	0	0	Yes
10131	No	Bart-Staff	NCRA	(W) Dorfshaffer-McGreevy	McGreevy "A", McGreevy "B" Dorfshaffer	33-20S-14W 5-21S-14W	70	60	Lans	3330	15	5	0	0	1*	Yes
		BARTON-STAFFORD COUNTIES TOTALS (Reported)					170	100				8	0	0	1	
BOURBON COUNTY																
12914	--	Bronson	Hillenburg Oil Co.*	(W) Woodward A	Woodward A	12,13-25S-21E	90	0	Bartl	661	18	17	0	0	0	Yes
14503	--	Bronson	Hillenburg Oil Co.*	(W) --	Humphrey	36-24S-21E	80	0	Bartl	661	18	21	0	3	0	Yes
14061 14355	No	Bronson-Xenia	T.E. Bird	(W) Collins Unit	John Camac, Audrey Collins	25-24S-21E	320	5	Cattle	610	16	6	18	4	2	No*
5545	--	Bronson-Xenia	Kanalta Resources Ltd.	(-) Ziegler	Arthur Ziegler	7,8,17-24S-22W	160	--	Bartl	600	15	0	7	-	-	--
8780	--	Hepler	Walter Duncan	(W) Hepler	Freeman, Jackson Shireman, Johnson	24-27S-21E 19-27S-22E	140	0	Tuck	675	14	35	0	0	0	Yes
		BOURBON COUNTY TOTALS (Reported)					790	5				79	25	7	2	

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
12586	2	0	0	0	Irreg	0	218	Prod	--	--	U	1966	S Gas	68/59	30	--	158,864	1,480,957	3,500	291,989	0	28,665	
6478	2	1	0	0	Line	270	270	Prod + Sh Fr	60	--	M	1967	S Gas	1/0.5	30	18	197,340	2,232,224	6,391	372,054	4,927	110,361	
13215 9838	2	0	0	0	Irreg	50	125	Prod + Ter Sd	60	16	M	1962	S Gas	--	30	--	45,605	1,844,203	3,484	--	3,484	153,954	*Was Apco Oil Corp.
18613	1	0	0	0	Irreg	407	281	Prod + Arb	3378	10	U	1977	S Gas	1/4.1	36.5	--	85,687	85,687	3,855	11,625	1,313	1,313	*Since 2/10/77.
18106	1	0	0	0	Irreg	0	190	Prod + Fr	60	20	M	1976	S Gas	2/1	36	--	69,350	115,350	1,870	30,074	1,870	3,070	
18247	1	0	0	0	Irreg	0	100	--	--	--	U	1976	S Gas	5/95	36	--	19,000	40,000	1,250	150,338	150	150	
16089	1	1	0	0	Irreg	176	305	Prod	--	--	U	1971	S Gas	6/70	35	--	102,400	1,304,115	2,339	440,640	--	--	
14759	1	1	0	0	Irreg	Vac	225	Prod	--	--	T+S	--	S Gas	--	38.6	--	82,125	--	7,192	--	7,192	--	*Was Lee Phillips Oil Co.
16882	1	0	0	0	Line	17	52	Prod + Ced H	247	44	T	1973	S Gas	17/36	41	4	18,975	121,222	3,781	201,572	3,781	22,490	
11517	1	2	0	0	Irreg	0	50	Prod	--	--	U	1965	S Gas	1/10	37	--	18,250	410,892	2,275	922,131	1,200	9,987	*Was Shell.
16787	1	0	0	0	Peri	317	445	Prod + Dak	312	30	M	1973	Wat	34/66	39	--	158,068	553,423	4,443	26,552	--	--	
15821	1	0	0	0	Irreg	0	33	Prod	--	--	U	1970	--	55/28	37.6	--	15,000	163,000	9,792	281,164	0	0	
15842	1	0	0	0	Line	576	352	Prod	--	--	T	1971	S Gas	61/163	40.1	5	128,593	565,020	10,736	580,781	10,736	96,152	
11972	1	0	0	0	Irreg	0	7	Prod	--	--	U	1965	Wat	10/16	39	--	2,379	87,504	844	50,667	0	0	
17247	1	0	0	0	Irreg	Vac	113	Prod	--	--	T	1974	S Gas	1/4	38	--	41,197	147,122	6,229	248,696	3,714	--	
	111	23	1	0													8,297,070	81,214,804	519,301	19,371,384	335,765	5,078,061	
9151	8	6	0	0	Peri	623	154	Prod + Fr	130	10	M	1962	S Gas	1/4.25	39.6	--	450,040	9,837,546	26,297	1,014,148	26,297	850,285	
14582	7	0	0	0	Peri	600	333	Prod + Dak	360	40	T	1968	S Gas	130/700	41.3*	--	851,793	7,538,244	39,734	572,299	20,022	293,612	*@60.
13810	1	0	0	0	Irreg	200	187	Prod	--	--	U	1967	S Gas	40/46	34	--	65,360	880,767	5,081	315,843	1,778	16,378	
10131	2	0	0	1	Irreg	650	338	Prod	3550	--	T	1963	S Gas	1/2.6	30.5†	--	123,280	3,051,814	9,890	373,086	1,128	226,387	*Converted. †@60.
12914	11	0	0	0	Line	600	125	Miss Lm	832	--	F+T	1966	S Gas	32/68	31	--	501,875	--	19,602	--	19,602	--	*Was Terra Resources Inc.
14503	8	0	0	0	Line	600	100	Miss	840	--	F+T	1966	S Gas	30/0	30	--	292,000	--	19,637	--	19,637	--	*Was Terra Resources Inc.
14061	0	9	0	0	Line	0	0	--	--	--	-	1968	Gas Exp	1/0	32	15	0	923,060	994	76,972	--	--	*Revising injection system.
14355 5545	--	1	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	0	--	0	--	
8780	36	6	0	0	5-Spot	560	15	Prod + Miss	830	30	F	1961	S Gas	--	26	--	185,596	4,631,004	5,785	479,696	--	--	
	55	16	0	0													979,471	5,554,064	46,019	556,668	39,240	--	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
BUTLER COUNTY																
9719	--	Augusta	Cities Service Co.	(W) Skaer-Starkey	Skaer, Starkey	35-27S-4E	165	100	KC Lime	2030	5	10	0	0	0	Yes
10415	--	Augusta	Cities Service Co.	(W) Augusta Unit	Augusta Unit	2,10,11,14,15-28S-4E	732	28	KC	2050	6	17	6	0	0	Yes
17901	--	Augusta	Cities Service Co.	(W) Augusta Unit (Simpson)	Augusta Unit	2-28S-4E	70	0	Simp	2568	11	3	0	0	0	Yes
12240	--	Augusta	Hammer & Maclean	(P) Ambler & Moyle	Moyle Ambler	35-27S-4E 2-28S-4E	160	0	KC Lime	2062	10	7	2	0	0	Yes
16242	--	Augusta	Hammer & Maclean*	(D) Safford-Mann and Safford	--	26-27S-4E	160	0	KC	2032-2040	10	3	0	0	0	Yes
2187	No	Augusta North	Jimmy Razook*	(D) Razook	Razook	10-27S-4E	160	--	Arb + Simp + KC	2000-2500	--	10	0	5	0	Yes
2120	No	Augusta North	Robert F. White	(D) Foster	Foster	21-27S-4E	160	80	KC	2000	20	5	0	0	1	Yes
15390	No	Berndsen	J.A.Allison	(P) Berndsen, Heatherington, Turner	Berndsen, Hetherington, Turner	15-26S-4E	100	60	Simp	2448	28	8	0	0	0	Yes
2672	No	Blankenship	Hank Martell Oil Co.	(P) Dunne	Dunne	9-26S-8E	80	0	Bartl	2400	20	2	1	0	0	Yes
6105	No	Brandt-Sensenbaugh	J.E.Morris	(D) Brewer	Brewer, Seeley	23-28S-7E	60	0	Peru	2350	10	3	0	0	0	No*
15259	No	Brandt-Sensenbaugh	White & Ellis Drilling, Inc.	(D) Ramp	Ramp	23,26-28S-7E	160	0	Peru	2450	10	2	0	0	0	Yes
7926	No	Combs Northeast	Kewanee Oil Co.	(W) Gate	Gate	34-29S-5E	40	0	Bartl	2817	8	1	0	0	0	Yes
11136	No	De Moss	Rex & Morris Drilling Co.	(W) De Moss	De Moss "A", De Moss "B" Sutter De Moss "A", Farner	5-28S-7E 7-28S-7E 8-28S-7E	400	--	Bartl	2650	40	10	0	0	0	Yes
13958	No	Eckel Northeast	Rex & Morris Drilling Co.	(W) Henn	Vernon, Lill Henn	5-27S-7E 6-27S-7E	110	0	KC "A"	2025	10	6	0	0	0	Yes
--	No	Elbing	D A Oil Co.	(W) Webreck	Webreck	18-23S-4E	80	--	Miss	2400	35	1	1	0	-	Yes
7145	No	Elbing	Hillenburg Oil Co.*	(P) North Lathrop	North Lathrop	17-23S-4E	80	0	KC	2000	80	4	0	0	0	Yes
8005	No	Elbing	Hillenburg Oil Co.*	(P) South Lathrop	South Lathrop	17-23S-4E	80	0	KC	2000	80	5	1	0	0	No†
13622	No	Elbing	Richard B.Morris*	(P) Everrt-Ferrier	Everrt-Ferrier, Neer-Ferrier Parris	29-23S-4E 20-23S-4E	70	0	KC	2020	30	3	0	0	0	Yes
4575	No	El Dorado	R.R.Abderhalden	(P) Pollard	Pollard	25-25S-4E	80	0	El Dor Sh Sd	700	20	1	4	0	0	Yes
6672	No	El Dorado	R.R.Abderhalden	(W) Deming W.F.	Deming	19-25S-5E	80	0	El Dor Sh Sd	650	13	0	--	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	0	2	0	0	No*
2577 5493 6586 6888	--	El Dorado	Cities Service Co.	(W) Finney Simpson	Finney, Graham "C", Fulkerson, Millheisler "A", D.L.Howe, Millheisler "B", Thompson Pierpoint	4-26S-5E 32-25S-5E	251	370	Simp	2460	27	20	5	0	0	Yes
6351	--	El Dorado	Cities Service Co.	(W) Chesney-Hegberg MP Chesney Kansas City Chesney White Cloud	Chesney, Chesney "A" Knox & Mills Hegberg	21-25S-5E 22-25S-5E 28-25S-5E	51 347 50	0 100 0	Admire KC White Cld	650 1900 860	20 32 10	8 20 5	0 4 0	- 0 0	0 0 0	Yes
7869 10002	--	El Dorado	Cities Service Co.	(W) Enyart LKC	Abraham Ralston, Porter Paulson Brack "B", Brack "C", Hamilton Enyart "A"	1-26S-4E 2-26S-4E 11-26S-4E 12-26S-4E	568	268	LKC	1600-2000	22	44	1	0	1	Yes
9803	--	El Dorado	Cities Service Co.	(W) Stokes K.C.	B.Stokes & Hegberg Stapleton Pierpoint Stokes	28-25S-5E 29-25S-5E 32-25S-5E 33-25S-5E	600	0	KC	2000	20	32	3	0	1	Yes
13973	--	El Dorado	Cities Service Co.	(W) Stapleton Simpson	Stapleton Moler	29-25S-5E 32-25S-5E	135	20	Simp	2440	19	4	1	0	0	Yes
16163	--	El Dorado	Cities Service Co.	(W) Empire Lansing	Empire	17-26S-5E	103	0	Lans	1700	20	8	0	0	0	Yes

Project no.	Injection Wells: Active	In-active	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
9719	12	2	0	0	5-Spot	244	321	Prod + Arb	2600	--	U	1962	S Gas	43/ 143	36	--	1,119,994	17,556,868	14,333	714,087	14,333	711,687	
10415	17	2	0	0	5-Spot	305	300	Prod	--	--	T	1963	S Gas	69/ 232	36	--	1,789,682	30,613,708	22,444	2,991,155	22,444	1,062,126	
17901	1	0	0	0	Irreg	320	179	Prod	--	--	-	1974	S Gas	--	--	--	74,352	251,282	4,971	246,244	2,592	3,596	
12240	4	1	0	-	Irreg	--	121	Prod + KC Lime	2062	10	U	1965	Grav	7/3	35	0	176,424	4,652,416	6,324	140,620	6,324	--	
16242	2	1	0	0	Irreg	0	301	Prod	--	--	U	1971	Grav	96/4	32	0	219,615	884,123	3,583	15,785	3,583	--	*Was Wilbur Skaer.
2187	1	-	0	-	Irreg	Vac	900	Prod	--	--	T	1975	Gas Exp	--	38	--	280,000	--	17,500	--	--	--	*Was Robert White.
2120	1	0	0	0	Irreg	400	1100	Prod	--	--	U	1941	S Gas *	1/9	36	--	400,000	--	3,800	1,000,000	3,400	141,000	* + Wat
15390	3	0	0	0	Irreg	Vac	250	Prod	--	--	T	1970	Wat	1/4	39	--	91,000	1,005,816	7,044	1,012,227	7,044	81,856	
2672	2	1	0	0	Irreg	0	50	Prod	--	--	T	--	S Gas	3/2	35	--	18,250	150,900	2,435	--	--	--	
6105	1	0	1	1	Irreg	230	236	Prod + Miss Dolomite	2700	20	U	1958	S Gas	--	--	--	63,720	--	--†	--	--	--	*Shut down 10/77 because of failure of input well. †Oil production in same battery with Miss. production.
15259	1	0	0	0	Irreg	0	4	Prod	--	--	T	1969	S Gas	3/2	38	--	1,000	9,940	2,279	71,243	0	0	
7926	1	0	0	0	Irreg	0	40	Prod	--	--	U	1960	S Gas	1/15	38	0	14,600	776,585	0	63,896	0	20,280	
11136	2	0	0	0	Irreg	120	300	Prod	--	--	U	1964	S Gas	--	40	--	216,000	--	5,084	--	--	--	
13958	1	1	0	0	Irreg	200	348	Prod	--	--	U	1967	S Gas	110/ 90	37	--	125,280	1,264,162	6,673	190,235	5,338	38,429	
--	1	--	0	-	Line	--	--	Prod + Miss Chat	40	35	T	1962	Grav	2.5/ 60	40	--	40	--	998	--	--	--	
7145	1	0	0	0	Irreg	0	300	Prod + Hunt	2300	15	U	1959	S Gas	--	32	--	109,500	1,858,500	3,600	--	1,000	--	*Was Terra Resources
8005	0	1	0	0	Irreg	0	0	--	--	--	-	1960	S Gas	--	32	--	0	2,083,500	4,500	--	0	--	*Was Terra Resources
13622	1	0	0	0	Irreg	0	200	Prod + Fr	20	5	M	1967	S Gas	--	33	--	73,000	623,000	3,844	--	2,200	--	†Injection well shut in
4575	1	0	0	0	Irreg	500	70	Prod	--	--	U	--	S Gas	--	35	--	25,500	--	593	---	593	--	*Was James A. Cook
6672	0	--	0	0	5-Spot	--	0	Prod	--	--	T	1958	S Gas	11/ 28	34	6.5	0	994,496	118	79,594	118	79,594	*Temporarily abandoned.
7084	--	1	0	0	Irreg	--	--	Prod	--	--	T	--	S Gas	1/10	33	--	--	52,950	0	1,654	0	1,654	*Temporarily abandoned.
2577 5493 6586 6888	12	3	0	0	Irreg	161	323	Prod + Arb	2426	11	T	1950	S Gas	5/0	34.5	--	1,652,421	52,138,270	44,267	4,622,550	44,267	2,871,796	
6351	19	0	-	0	5-Spot	183	28	Lake Bluestem	--	--	F	1975	S Gas	--	37	--	442,695	1,038,521	3,242	7,707,802	3,242	8,089	
	23	1	0	0	5-Spot	499	260	Prod + Arb	2500	31	T	1958	S Gas	135/441	36	--	2,287,322	37,311,687	38,884	2,474,519	38,884	2,427,165	
	4	0	0	0	Peri	480	162	Prod	--	--	T	1972	S Gas	17/109	35	--	249,885	1,326,997	4,768	74,010	4,768	33,230	
7869 10002	25	0	0	0	5-Spot	479	585	Prod + Arb	2400	193	T	1963	S Gas	0/0	36	--	4,513,409	51,083,290	92,184	1,885,397	92,184	1,854,168	
9803	23	0	0	0	5-Spot	521	360	Prod + Arb	2500	--	T	1962	S Gas	45/ 190	36	--	2,860,355	35,418,921	74,688	1,694,714	74,688	1,227,817	
13973	4	1	0	0	5-Spot	527	497	Prod + Arb	2404	672	T	1967	S Gas	0/0	36	--	703,909	6,414,426	13,300	1,511,553	13,300	257,944	
16163	4	0	0	0	Irreg	183	274	Prod + Viola Simp	2500	--	T	1971	S Gas	3/2	36.1	--	376,263	2,136,599	11,261	467,014	11,261	80,230	

County Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location S—T—R	Acres in project Prod.	Abd.	Oil producing zone Name	Depth, ft.	Thick., ft.	Oil producing wells (1977) Active	Inactive	Drilled	Abd.	Has inj. been continuous?
BUTLER COUNTY (Cont.)																
3016	No	El Dorado	Dunne Equities, Inc.	(D) M.A.Koogler	Koogler	25-26S-4E 29,30,32-26S-5E	265	--	Simp + Viola	2400	40	26	0	0	0	Yes
2551	--	El Dorado	Gear Petroleum Co.	(W) Page	--	9-26S-5E	30	--	Simp	3000	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	1975	--	16	8	0	0	Yes
13161	No	El Dorado	Okmar Oil Co.*	(W) Fowler	Fowler	1-26S-4E	20	0	KC	2040	20	3	0	0	0	Yes
15109	No	El Dorado	Okmar Oil Co.	(W) Baker Coop	Baker West	16-26S-5E	20	20	Lans	1650	10	1	0	0	0	Yes
12221	--	El Dorado	Ramsey, Et Al	(W) Ramsey, Et Al	Ramsey	6-26S-5E	50	0	White Cld.	760	10	5	0	0	0	Yes
7484	--	El Dorado	Saco Oil Co.	(P) Belton	Belton	3-25S-5E	40	--	Peru	2130	14	1	1	-	-	Yes
6333 8192 8336 8386	No	El Dorado	Southern States Oil Co.	(P) Mills	Mills	27-25S-5E	160	--	El Dor+ KC + Doug	700 2000 2500	--	15	0	0	0	Yes
7096	No	El Dorado	Southern States Oil Co.	(P) W.E.Brown	W.E.Brown	32-26S-5E	--	--	Viola	2692	12	1	1	0	0	Yes
17692	No	El Dorado	Southern States Oil Co.	(P) Cook	Cook	4-26S-5E	40	--	Viola	2611	18	1	1	0	0	Yes
3454	--	El Dorado	Stelbar Oil Corp., Inc.	(W) Stone	Stone	2-25S-5E	80	--	Peru	2150	20	1	2	0	1	Yes
4099	No	El Dorado	White & Ellis Drilling*	(D) Wilson	Wilson	7-25S-5E	160	0	Miss	2560	15	3	0	0	0	Yes
16481	No	El Dorado	Wilson Production Co., Inc.	(P) Wilson-Hawkins	Robison	17-25S-5E	100	0	Miss Chat	2500	35	10	0	0	0	Yes
17950	--	Entz	Cities Service Co.	(W) Entz-Gamble	Entz, Gamble	23-26S-4E	80	0	Simp	2491	10	2	0	0	0	Yes
5287	--	Ferrell	Midwest Supply Co.	(W) Ferrell	Ferrell	21-28S-8E	400	--	Miss	2750	30	11	0	0	0	Yes
16942	No	Ferrell	K.T.Wiedemann Trust	(D) Mary Jane Fouts	Fouts #5	16-28S-8E	80	0	Miss Lm.	2725	--	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	2800	5-55	12	2	0	2	Yes
18231	--	Fox-Bush	Santa Robin Oil	(D) --	Santa Robin	25-29S-5E	320	--	Bartl	2750	40	5	--	-	-	Yes
1650	No	Fox-Bush	Southern States Oil Co.	(P) Brown (North)	Brown A	25-29S-5E	72	--	Bartl	2735	45	2	0	0	1	Yes
5496	No	Fox-Bush-Couch	Tomlinson Oil	(D) Speer & Bunnell	Bunnell Speer	25-28S-5E 27-28S-5E	80	0	Bartl	2790	25	2	1	0	0	Yes
2903	Yes	Fox-Bush North	James Webster	(P) North Fox Bush	Craig Kingsley Bowyer, Mill, Speedling Molter, Bunnel Shawyer	23-28S-5E 24-28S-5E 25-28S-5E 26-28S-5E 35-28S-5E	--	--	Bartl	2750	50	4	--	0	-	Yes
10457	Yes	Harlan	Adair Oil Co.	(P) Harvey	Harvey	26,35-23S-4E	280	40	K.C.	2140	7	4	0	0	0	Yes
16646	--	Hazlett	Range Oil Co., Inc.	(P) Sommers	Sommers	5-25S-5E	120	--	Congl. Sd	2375	10	1	--	-	-	Yes
17052	No	Hazlett	Rex & Morris Drilling Co.	(D) Fannie	Fannie	29-23S-5E	40	0	Miss Osage	2450	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	--	Miss	2459	24	22	--	0	3	Yes
4656	No	Keighley	Musgrove Producing*	(D) Worrell	Worrell	12-27S-7E	160	--	Bartl	2750	30	2	0	0	0	Yes
15654	No	Keighley	Musgrove Producing*	(D) Barnhill	Barnhill	12-27S-7E	160	--	Bartl	2750	20	1	--	1	1	Yes
16166	--	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	2700	42	11	0	0	0	Yes
17561	No	Keighley Northeast	Dick Hess	(D) Keighley N.E.	Pike, Gray Estate	31-26S-8E	240	100	Bartl	2670	50	3	3	0	1	Yes
37-05-05	No	Kramer	Dunne Equities, Inc.	(D) Blakeman	Blakeman, Clay B	4-28S-6E	240	0	Viola	3089	10	3	0	0	0	Yes
13408	--	Kramer-Stern	Hammer & Maclean	(D) Leon Unit	Tabing, Poindexter, Sontag, Holt Stern & Stern	21-27S-6E 22-27S-6E	230	0	Viola Lm.	3006	12	10	2	0	3	Yes
16178	No	Kramer-Stern	Rex & Morris Drilling Co.	(W) Lucas "A" & "B" Waterflood Unit	Lucas "A", Lucas "B"	11-28S-6E	160	0	Simp	3000	6	9	0	0	0	Yes
17260	--	Kramer-Stern	Saco Oil Co.	(D) Kramer	Kramer, Gilliland	3-28S-6E	--	--	Viola	3070	10	5	0	0	0	Yes
976 3074 6984 8301	No	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 Lm	3080	40	19	6	0	0	Yes
3218	--	Kramer-Stern	Texaco Inc.	(P) Tabing	F.Tabing	28-27S-6E	--	--	Viola	3075	16	1	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
3016	10	0	0	0	Irreg	0	5900	Prod	--	--	U	1951	Gas Exp	--	33.9	--	21,535,000	904,880,524	24,349	3,372,265	--	--	
2551	2	0	0	0	Irreg	175	142	Prod	--	--	U	--	S Gas	--	36	--	51,830	455,365	1,638	--	1,638	--	
4830	6	0	0	0	5-Spot	650	432	Prod	--	--	U	1963	S Gas	21/143	33.5	--	963,852	13,634,756	28,545	709,109	28,545	709,109	
13161	1	0	0	0	Peri	340	811	Prod + Arb	2440	5	U	1966	S Gas	--	33	--	251,613	3,536,583	2,593	60,099	2,253	22,717	*Was L.Lamb.
15109	1	0	0	0	Peri	275	355	Prod + KC	1750	10	U	1969	S Gas	18/158	34	--	110,139	1,207,472	1,551	39,780	1,551	14,873	
12221	1	0	0	0	5-Spot	100	100	Prod	2160	3	T	1965	S Gas	4/1	36	--	54,750	--	1,142	--	--	--	
7484	1	--	-	-	--	50	25	Prod	--	--	U	1958	Grav	1/9	34	--	--	--	1,221	180,906	1,221	19,853	
6333	2	0	0	0	Irreg	400	1177	Prod	--	--	T	1959	Grav	--	35	--	859,008	13,614,386	12,818	716,668	12,818	716,668	
8192																							
8336																							
8386																							
7096	1	0	0	0	Irreg	--	285	Prod	--	--	T	1959	Grav	--	31	--	104,025	2,207,526	1,154	89,562	1,154	89,562	
17692	1	0	0	0	Irreg	150	313	Prod	--	--	T	1975	Wat	--	34	--	114,245	706,275	2,798	10,675	2,798	10,675	
3454	1	0	0	0	Irreg	800	200	Prod	--	--	T	1951	S Gas	--	35	--	73,000	1,652,850	26,686	425,764	26,686	--	
4099	1	0	0	0	Irreg	50	60	Prod	--	--	U	1954	Wat	--	40	--	21,600	1,994,000	5,171	--	0	0	*Was Henderson Oil Co.
16481	1	0	0	0	Irreg	100	500	Prod	--	--	U	1972	Grav	15/85	43	--	180,000 25,000*	1,223,450 481,727*	31,400	1,007,400	15,700	503,700	*MCF
17950	2	0	0	0	Irreg	0	230	Prod	--	--	U	1975	S Gas	--	0	--	171,539	283,845	11,495	308,654	8,351	12,417	
5287	5	0	0	0	Irreg	500	400	Prod	--	--	T	1955	Grav	--	37	--	631,000	--	14,608	--	--	--	
16942	1	0	0	0	Irreg	0	90	Prod	--	--	T	1973	Wat	--	35	--	32,850	44,126	1,160	174,098	--	--	
1909	5	3	0	2	5-Spot	--	--	Prod	--	--	T	--	--	--	--	--	667,950	--	9,070	--	9,070	--	
18231	2	--	-	-	4-Spot	0	600	Prod	--	--	U	1976	Gas Exp	1/9	39	--	200,000	400,000	--	--	--	--	
1650	1	0	0	0	Irreg	--	299	Prod	--	--	T	1959	Grav	--	39	--	109,135	1,606,621	2,112	111,770	2,112	111,770	
5496	1	0	0	0	Line	120	650	Prod	--	--	U	1957	Gas Exp	--	37.8	--	237,250	9,493,196	1,728	514,957	1,728	105,211	
2903	6	0	0	-	Irreg	Grav	250	Prod	--	--	T	--	S Gas	--	39	--	--	--	3,453	--	--	--	
10457	1	0	0	0	Irreg	250	3.5	Prod	--	--	U	1963	Wat	--	32	--	5,000	181,012	3,064	87,967	1,112	--	
16646	1	--	-	-	Irreg	0	34	Prod	--	--	U	1972	Wat	1/1	40	--	16,425	--	2,269	32,631	567	8,158	
17052	1	0	0	0	Irreg	0	210	Prod	--	--	U	1973	S Gas	9/210	41	--	75,600	--	2,373	126,100	0	0	
16357	2	0	0	0	Irreg	300	423	Prod	--	--	T	1971	Grav	--	40	--	309,052	1,994,465	17,766	151,548	--	--	
4656	1	0	0	0	Irreg	0	40	Prod	--	--	U	1960	Wat	5/95	39	--	--	15,000	--	900	0	0	*Was White and Ellis
15654	1	0	1	1	Irreg	0	10	Prod + Bartl	2750	20	U	1965	Wat	5/95	39	--	--	4,000	--	700	0	0	*Was White and Ellis
16166	2	0	0	0	Irreg	0	700	Prod + Doug Sd	1580	20	U	1971	S Gas	11/89	37	--	255,500	3,315,795	32,009	887,554	--	--	
17561	2	--	-	-	Irreg	0	50	Prod + Bartl	3300	200	T	1975	Grav	4/50	38	--	18,250	45,250	4,577	36,616	4,577	15,267	
37-05-05	2	0	0	0	Irreg	0	500	Prod	--	--	U	--	Gas Exp	--	33.7	--	365,000	--	13,334	--	--	--	
13408	3	0	0	0	Irreg	--	207	Prod	--	--	U	1966	Grav	3/2	34	--	228,929	959,411	15,940	222,249	15,940	--	
16178	1	0	0	0	Irreg	150	709	Prod + Miss Osage	2750	50	U	1971	S Gas	7.5/12.5	34	--	255,240	1,202,334	9,467	423,265	3,787	15,904	
17260	1	--	-	-	Irreg	Vac	800	Prod	--	--	U	1974	Grav	5/95	33	--	--	--	10,772	--	10,772	--	
976	6	0	0	0	Irreg	875	730	Prod + Viola	--	--	M	1959	Grav	--	34	--	2,131,544	28,503,654	38,401	1,055,433	38,401	1,055,433	
3074																							
6984																							
8301																							
3218	1	0	0	0	Irreg	Vac	330	Prod	--	--	U	1952	--	5/9	--	--	120,450	1,085,796	2,801	112,382	0	0	

County — Project no.	Is proj. unitized?	Field	Operator	Type and project name	Lease name	Location — S—T—R	Acres in project — Prod.	Abd.	Oil producing zone — Name	Depth, ft.	Thick., ft.	Oil producing wells (1977) — Active	Inactive	Drilled	Abd.	Has inj. been continuous?
BUTLER COUNTY (Cont.)																
17267	No	Kramer-Stern	Woodward Oil Account	(D) --	N & S Blakeman	3-28S-6E	160	--	Viola	3050	4	5	1	1	0	Yes
13911	--	Leon	Hammer & Maclean	(D) Maclean	Maclean	17-27S-6E	160	0	Viola Lm	3129-3136	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	2800	20	2	2	0	0	Yes
6853	No	Muddy Creek	R.R.Abderhalden	(W) No. Muddy Creek Waterflood	E.Fresh, C.Williams	7-29S-5E	60	0	Bartl	2730	13	3	1	0	0	Yes
6099	No	Muddy Creek	Tomlinson Oil Co.	(W) Stewart A	Stewart A	6-29S-5E	20	0	Bartl	2700	9	1	0	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	2460	28	19	4	-	-	Yes
13254	--	Paulson	American Petrofina Co. of Texas*	(P) Paulson Waterflood Station #2	Paulson "C"	25-23S-3E	160	0	Miss	2460	28	2	1	0	0	Yes
16335	--	Paulson Northeast	I.O.Miller, Inc.*	(D) Hinz	Hinz	13-23S-3E	160	--	Miss	2464	2492	9	--	-	-	Yes
15596	No	Pierce	Baker Oil Inc.	(D) Jones	Jones	33-25S-4E	20	--	Miss Ch	2525	40	2	0	0	0	Yes
16947	No	Pierce	White & Ellis Drilling,Inc.	(D) Albers	Albers	21-25S-4E	320	0	Miss	2550	10	9	0	0	0	Yes
CR-7772	No	Potwin	Ainsworth Oil Co.	(D) Quinn	Quinn	2-25S-3E	160	--	Miss	--	--	1	0	1	0	Yes
11186	Yes	Potwin	Kansas Petroleum, Inc.*	(P) Potwin-Moore	Mulnix Moore "A", Moore "B", McCraner McCraner	35-24S-3E 36-24S-3E 1-25S-3E	320	--	Miss Dolo	2750	10	8	4	0	0	Yes
18194	--	Potwin	Ray Law*	(W) Potwin Unit	McCraner D	2-25S-3E	--	--	Miss Dolo	2671	9	2	0	0	0	Yes
11095	No	Potwin	Rex & Morris Drilling Co.*	(D) Maxwell	Maxwell "A", Maxwell, McGill Penner	31-24S-4E 32-24S-4E	410	0	Miss Dolo	2670	9	12	0	0	0	Yes
9368	--	Reynolds-Shaffer	American Petrofina Co. of Texas*	(D) Brewer	Brewer	33-26S-6E	80	0	Miss	2784	12	5	0	0	0	Yes
17763	No	Reynolds-Shaffer	Murfin Drilling Co.	(W) Reynolds Shaffer Waterflood	Daugherty, Maclean Beadles Maclean Tatum, Edwards	33-26S-6E 34-26S-6E 3-27S-6E 4-27S-6E	560	220	Miss	2794	21	12	4	0	0	Yes
4039	--	Reynolds-Shaffer	Yuma Oil Co.	(D) Doughty & Palmer	Doughty, Palmer	6-27S-6E	40	--	Bartl	2700	10	3	0	0	0	Yes
12229 12310	--	Rosalia	Continental Oil	(P) Rosalia	Zimmerman	11-25S-7E	480	0	Squir Sd	2560	30	5	1	-	-	Yes
12310	No	Rosalia	Dianne McCarthy	(P) Rosalia	Roy Gish	11-25S-7E 12-25S-7E	320	0	Squir	2560	30	6	0	0	0	Yes
4169	No	Sallyards	Okmar Oil Co.*	(W) Drumm-Bitler	Drumm	20-26S-8E	200	--	Bartl	2660	25	5	0	0	0	Yes
1319	No	Seward	W.R.Gross	(D) Seward	Seward	12-27S-7E	50	--	Bartl	2700	30	1	0	0	0	No*
10166	--	Shinn	K.T.Wiedemann Trust	(W) Shinn Waterflood	Shinn	19-29S-8E	120	0	Miss Dolo	2760	16	13	0	0	0	Yes
2096	No	Smock-Sluss	Bisagno Bros. Inc. & Bisagno Six Oil Co.,Inc.	(D) Bisagno	Bisagno Bros. Inc., Bisagno #17, Bisagno Six Oil Co. Inc.	35-26S-5E	90	10	Bartl	2700	40	4	2	0	0	Yes
13206	No	Smock-Sluss	Rex & Morris Drilling Co.	(D) Knutson	Knutson, Irvine	11-27S-5E	320	--	Bartl	2700	30	3	1	0	0	Yes
17996	No	Snowden-McSweeney	Price Oil Co.	(-) --	Woods Bros.	16-29S-6E	160	--	Peru	2480	20	5	--	1	-	Yes
3430	No	Snowden-McSweeney	Earl F.Wakefield, Inc.	(D) Wakefield "Fee"	Wakefield "Fee"	9-29S-6E	200	0	Bartl	2800	20	7	4	0	0	Yes
4029 6580	No	Towanda	Kewanee Oil Co.	(W) Rice-Wait	Rice & Wait	5-26S-4E	240	80	Viola Simp	2445 2476	30 30	12	2	0	0	Yes
16406	No	Whitewater East	White & Ellis Drilling, Inc.*	(D) Edmiston	Edmiston	33-25S-4E	240	0	Miss	2460	8	5	0	0	0	Yes
15546	No	Whitewater West	Robert E. Davis*	(P) Hamilton-Scully	Scully Hamilton	28-25S-3E 33,34-25S-3E	400	--	Miss	2725	22	5	0	0	0	Yes
17962	--	Womack	Continental Oil	(W) Womack	Womack Unit	17-28S-6E	130	0	Bartl	2772	9	6	0	-	-	Yes
1318	No	Young	Dunne Equities, Inc.	(D) Willhite	Willhite	27-26S-7E	80	--	K.C.	2108	28	3	0	0	3	Yes
5932	No	Young	Rex & Morris Drilling Co.	(D) Guenther	Johnson, Rex & Morris Guenther "A", Guenther "B"	20-26S-7E 29-26S-7E	440	160	Miss Dolo	2750	20	9	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17267	1	--	-	-	Irreg	Vac	200	Prod	--	--	U	1960	--	5/95	35	--	--	--	5,775	--	--	--	
13911	1	0	0	0	Irreg	0	200	Prod	--	--	U	1968	Grav	5/95	36	--	73,000	730,000	2,141	13,112	2,141	--	
6426	1	0	0	0	Line	700	150	Prod + Doug Sd	800	70	T	1962	S Gas	3/1	38	3.0	54,750	1,467,761	2,343	91,968	2,343	91,968	
6853	2	1	0	0	Irreg	350	50	Prod + Doug Sd	560	--	T	1963	S Gas	3/0	36	--	36,500	581,335	3,392	84,901	3,392	84,901	
6099	1	0	0	0	Peri	500	80	Prod + Doug	1599	30	T	1958	S Gas	--	38.4	--	29,187	549,189	1,948	119,976	1,948	59,665	
11990	3	2	0	0	Irreg	650	602	Prod	--	--	U	1965	Wat	1/5	41	--	659,952	5,363,450	25,514	965,019	25,514	965,019	*Was El Dorado Refining Co.
13254	1	0	0	0	5-Spot	50	349	Prod	--	--	U	1967	Wat	1/20	39.9	--	127,469	4,207,393	1,087	45,817	1,087	44,745	*Was El Dorado Refining Co.
16335	1	--	-	-	--	Grav	--	Prod	--	--	†	1971	--	--	--	--	90,000	470,000	9,855	251,692	4,000	32,000	*Was I.O.Miller Estate. †All produced water is from Mississippi Lime.
15596	1	0	0	0	Irreg	0	30	Prod	--	--	U	1970	Grav	--	--	--	10,950	83,850	571	37,064	0	0	
16947	1	0	0	0	Irreg	0	20	Prod	--	--	T	1973	S Gas	3/1	40	--	7,200	33,000	4,163	247,144	--	--	
CR-7772	1	0	1	0	Irreg	Vac	200	Prod	--	--	U	1977	Wat	1/3	42	--	--	27,200	--	7,000	--	--	
11186	1	0	0	0	Irreg	50	75 602†	Prod + Miss	2725	10	U	1974	Wat	--	42.5	--	219,621	844,263	10,799	41,579	--	--	*Was Goering & Hedrick †MCF
18194	1	0	0	0	--	0	80	Prod	--	--	U	--	--	1/2	42	--	18,250	--	1,230	--	1,230	--	*Was Clinton Oil Co.
11095	2	1	0	0	Irreg	350	232	Prod	--	--	U	1964	Wat	--	43	--	167,040	880,217	7,598	--	3,800	--	*Was Clinton Oil Co.
9368	1	0	0	0	Irreg	0-Vac	98	Prod	--	--	U	1962	S Gas	1/5	34	--	35,795	403,124	3,705	124,287	3,705	28,136	*Was El Dorado Refining Co
17763	1	0	0	0	Irreg	400	525	Prod	--	--	T	1975	Other	1/4	35	--	191,625	521,888	9,289	582,915	4,500	7,787	
4039	1	0	0	0	--	Vac	50	Prod	--	--	U	1951	Wat	4/96	--	--	18,250	--	5,522	--	5,522	--	
12229	1	0	-	-	Irreg	0	241	Prod	--	--	U	1965	S Gas	--	40	--	87,979	496,981	0	--	--	--	
12310	1	1	0	0	7-Spot	Grav -450	290	Prod	2560	30	T+ *	1965	Gas Exp	4/96	38	--	100,000	1,000,000	8,518	--	8,518	--	*Occasionally acid, e-mulsion breaker or co-rosion inhibitor.
4169	1	0	0	0	--	75	205	Prod	--	--	U	1954	S Gas	--	36	--	63,601	835,971	5,238	128,046	5,238	22,877	*Was H.C.Bennett.
1319	1	0	0	0	Irreg	0	150	Prod	--	--	U	--	Grav	--	33	--	4,500	773,030	169	83,583	--	--	*Well inactive most of year.
10166	6	0	0	0	Irreg	850	444	Prod	--	--	T	1963	Other	--	39	--	972,766	8,619,099	24,949	381,775	--	--	
2096	3	0	0	-	Irreg	90	250	Prod	--	--	T+ S	1955	Grav	10/1	37.9	--	225,000	15,483,000	10,031	107,174	9,529	--	
13206	1	0	0	0	--	0	283	Prod	--	--	U	1967	S Gas	3/20	39	--	101,880	980,065	7,013	141,139	2,805	10,521	
17996	1	--	-	-	4-Spot	200	300	Prod	--	--	U	1975	Gas Exp	1/1	36	--	90,000	135,000	9,858	22,314	4,000	--	
3430	2	0	0	0	5-Spot	0	32	Prod	--	--	U	1960	S Gas	--	39	--	81,760	4,005,202*	2,156	227,839	1,078	113,920	*Since 1960
4029	2	2	0	0	Irreg	380	1225	Prod	--	--	U	1954	Wat	--	38	--	821,846	17,510,215	25,776	4,299,288	0	0	
6580																							
16406	1	0	0	0	Irreg	0	25	Prod	--	--	T	1972	S Gas	1/2	40	--	9,000	51,875	2,579	133,845	0	0	*Was Kimray Inc.
15546	1	0	0	0	Irreg	0	130	Prod	--	--	T	1970	S Gas	2/3	43	--	47,450	755,550	5,150	121,489	0	0	*Was Indian Wells.
17962	5	0	-	-	Irreg	0	176	Prod	--	--	T	1976	S Gas	--	--	--	321,719	574,676	3,688	6,979	3,688	6,390	
1318	1	0	0	1	Irreg	0	150	Prod	--	--	U	--	Gas Exp	--	32.2	--	54,750	--	2,012	--	--	--	
5932	1	0	0	0	Irreg	0	550	Prod + Squir Sd	2494	50	U	1957	S Gas	36/ 420	33	--	198,000	--	8,505	--	4,250	--	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
BUTLER COUNTY (Concl.)																
3258	No	Young	Okmar	(W) Young Coop	Young A, Young B, Young Inger, Willhite AR, Willhite A & B	27-26S-7E	110	0	KC	2140	37	9	0	0	0	Yes
19282	--	Young Southwest	Crowe Drilling Co., Inc.	(P) PMA Ranch	PMA Ranch	32-26S-7E	80	0	Miss	2724	8	5	0	0	0	Yes
		BUTLER COUNTY TOTALS (Reported)					17349	2866				660	85	9	18	
BUTLER-COWLEY COUNTIES																
5547	--	Fox Bush	Stelbar Oil Corp., Inc.	(W) Brown & Shawver Atlanta Ranch	Brown Shawver Atl Ranch	36-29S-5E 1-30S-5E 31-29S-6E 6-30S-6E	620	320	Bartl	2800	30	3	0	0	0	Yes
16114 CR-9773	Yes	Rock Northeast	Stelbar Oil Corp., Inc.	(W) Rock NE Unit	Rock NE Unit	6-30S-5E 29,31,32-29S-5E	550	--	Bartl	2832	18	11	0	0	0	Yes
		BUTLER-COWLEY COUNTIES TOTALS (Reported)					1170	320				14	0	0	0	
BUTLER-MARION COUNTIES																
6185	Yes	Elbing	Bayes Oil Co.	(-) Bayes Oil Co.	Evans Aires	33-22S-4E 3-23S-4E	81	--	KC Lime	2060	40	3	0	0	0	--
CHASE COUNTY																
14909	--	Browning	American Petrofina Co. of Texas*	(W) Browning "C"	Browning "C"	24-22S-9E	30	0	Bartl	2550	28	1	1	0	0	Yes
16856	No	Teeter-Scott	Glacier Petroleum Co., Inc.	(P) Hartley "A"	Hartley "A"	35-22S-9E	50	--	Bartl	2451	36	4	--	-	-	Yes
		CHASE COUNTY TOTALS (Reported)					80	0				5	1	0	0	
CHASE-GREENWOOD COUNTIES																
15055	Yes	Atyeo-Pixlee	The Buckeye Corporation Aztec Oil Co.: Division	(W) Evans Unit	Evans	12-22S-9E 7-22S-10E	250	0	Miss Lime	2400	30	13	0	0	0	Yes
CHASE-LYON COUNTIES																
519	No	Atyeo-Pixlee	E.W.Sauder*	(P) Annie & H.W.Hughes	Annie Hughes H.W.Hughes	24-21S-9E 19-21S-10E	80	--	Bartl	2200	25	11	1	0	0	Yes
CHAUTAUQUA COUNTY																
17641	No	Cedar Vale	Mendenhall Oil Properties	(W) Leedy	Leedy	10-34S-8E	80	--	Pawnee-Oswego-Altamont	1900	20	5	--	1	-	Yes
14002	Yes	Cloverdale	Olympic Petroleum Co.	(W) Cloverdale Field	F.McConaghy, J.H.Haden, Haden "G", Ruby Haden R.O.Hawkins	12-33S-8E 13,14-33S-8E	243	0	Cattle Sd	2030	15	14	3	0	0	Yes
465	--	Elgin	John M.Denman Oil Co.	(D) Bird Unit	Bird Bird, Lemmon Johnson Keenan	25-34S-10E 26-34S-10E 27-34S-10E 34-34S-10E	1320	0	Peru	1360	40	35	4	1	0	Yes
469	--	Elgin	John M.Denman Oil Co.	(D) Fleisher-Newman	Newman Fleisher Kygar Fleisher, Kygar, Newman, Whartenby	12,13-35S-9E 7-35S-10E 17-35S-10E 18-35S-10E	1560	0	Peru	1540	40	13	0	0	0	Yes
6086	Yes	Elgin	Kewanee Oil Co.*	(D) Northwest Elgin Unit	Tract 1 Tract 2	32,33-34S-10E 9-35S-10E	670	--	Wayside	1550	15	4	2	4	0	Yes
18336†	No	Hale-Inge	Robert T.Goodwin*	(P) McKay	McKay Dyer	4-32S-12E 33-31S-12E	160	0	Big Salt Sd	430	122	9	0	1	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
3258	4	1	0	0	Peri	310	1766	Prod + Miss	2700	10	U	1952	S Gas	--	34	--	547,902	4,508,599	16,635	1,104,026	14,972	193,147	
19282	5	0	0	0	Peri	10	90	Prod	--	--	-	1966	--	--	--	--	--	900	--	--	--	--	
	302	26	3	5													53,501,734	1,315,787,482	957,391	47,193,322	655,604	15,973,054	
5547	1	0	0	0	Line	200	35	Prod	--	--	T	1957	S Gas	--	38	--	12,775	974,685	1,668	146,580	1,668	--	
16114 CR-9773	3	0	0	0	Line	200	50	Prod + Stal	1808	179	U	1977	S Gas	--	37	--	54,750	134,950	10,044	281,563	0	--	
	4	0	0	0													67,525	1,109,635	11,712	428,143	1,688	--	
6185	2	0	0	0	--	0	20	Prod	2060	40	U	1954	--	1/5	31	--	19,200	--	1,400	--	100	--	
14909	1	1	0	0	Peri	400	180	Prod + Doug	1421	50	U	1966	S Gas	1/1	40	--	65,528	1,157,350	963	253,136	963	80,788	*Was El Dorado Refining Co.
16856	1	--	-	-	Irreg	100	80	Prod	--	--	U	--	S Gas	--	40	--	27,200	--	14,200	--	--	--	
	2	1	0	0													92,728	1,157,350	15,163	253,136	963	80,788	
15055	2	0	0	0	5-Spot	300	400	Prod	--	--	U	1960	S Gas	--	38	--	143,000	--	10,339	--	3,500	---	
519	2	2	-	-	Irreg	450	70	Prod	--	--	-	1939	Grav	1/4	39	--	50,000	2,025,000	9,000	493,000†	3,000	210,100	*Was Ohio. †Since 1955.
17641	1	--	0	-	Irreg	150	140	Prod	--	--	U	1975	Gas Exp	1/1	38	--	50,000	64,975	16,802	650,808	10,602	--	
14002	4	4	0	0	Line	700	172	Sh Fr Wat Wells	20	4-6	F	1968	S Gas	1/9	38.9	103*	203,953	2,835,365	13,909	864,053	13,909	--	*Reservoir Temperature.
465	5	0	0	0	Irreg	0	45	Prod	--	--	U	--	Grav	--	38	--	69,702	636,182*	11,617	133,414†	11,617	133,414	*Since 10/1/68. †Since 10/1/67.
469	3	0	0	0	Irreg	0	25	Prod	--	--	U	--	Grav	--	38	--	21,240	2,961,200	3,540	731,971	3,540	439,193	
6086	2	0	1	0	5-Spot	0	40& 20	Prod	--	--	U	--	S Gas	--	39	--	9,780	--	673	--	--	--	*Was Kan Okie Oil Corp.
18336	3	0	0	0	Irreg	200	800	Prod	--	--	U	--	S Gas	--	25	--	200,750	--	--	--	--	--	*Was P & M Oil Co. †Also in Elk County

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
CHAUTAUQUA COUNTY (Cont.)																
10744	No	Hale-Inge	Layton Oil Co.	(W) Hale Flood	Monroe, Harmon, Krusky Sweeney, Alexander, Fee, Vaughn	18-32S-13E 19-32S-13E	200	0	Wiser	1130	12	10	8	0	0	Yes
18612	No	Holroyd	Southern States Oil Co.	(W) Holroyd	Carter-Hankins Holroyd	15-35S-9E 16-35S-9E	460	--	Miss Ch	2118	6	2	0	0	0	No
9072	--	Landon-Floyd	Patteson Bros. Inc.*	(D) Shaffer	Nile McNee	14,23-32S-10E	220	--	Miss	1950	8	4	2	-	-	Yes
5161	--	Leniton	John M.Denman Oil Co.	(P) R.L.Mendenhall Unit	Eggen, Goode "A", Goode "B", McCall, J.Smith Burden J.Smith, W.W.Smith	17-33S-10E 18,19-33S-10E 20-33S-10E	1040	0	Peru	1040	50	26	2	2	0	Yes
6721	No	Leniton	Charles J.Martin*	(W) Staats Chautauqua Unit	Campbell & Webb	21,28-33S-10E	40	--	Peru	1300	20	4	0	0	0	Yes
4746	--	Lowe	John M.Denman Oil Co.	(D) Lowe Unit	Keith, McAfee, Mattocks	20-33S-10E	320	0	Peru	1440	25	13	0	1	0	Yes
2207	--	Niotaze	Steinberger Bros.	(W) Hyder Field	Hyder, Guier Buckles & Stough	5-35S-13E 6-35S-13E	250	0	Redd	700	15	21	2	0	0	Yes
11863	--	Oliver	Adair Oil Co.	(P) McNee	Oliver, McNee	2-32S-10E	95	10	Miss	2000	6	1	0	0	0	Yes
36-01-28	No	Peru-Sedan	Burlington Oil Co.*	(D) Gardner	Gardner	26-33S-11E	160	--	Peru	1100	25	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 Sd	1177	22	3	2	0	0	Yes
10903	--	Peru-Sedan	Walter & Bernice Darnell	(D) Paullus Heirs	Paullus Heirs	6-35S-12E	102	--	Peru Sd	1100	55	4	0	0	0	No*
3221	--	Peru-Sedan	Deck Oil Co.*	(W) McMillan	McMillan	27-34S-12E	160	--	Peru	1100	15	12	--	0	-	Yes
15	--	Peru-Sedan	John M.Denman Oil Co.	(P) Blundell	Blundell	36-34S-11E	80	0	Peru	1000	36	4	0	0	0	Yes
139	--	Peru-Sedan	John M.Denman Oil Co.	(P) Bellman Unit	D J.Moore	3-34S-11E	150	0	Peru	1073	16	3	3	0	0	Yes
388	--	Peru-Sedan	John M.Denman Oil Co.	(P) Peru Farm	Swallow Peru Farm	3-34S-11E 31-33S-12E 6-34S-12E	490	0	Peru	980	38	13	10	0	0	Yes
462	--	Peru-Sedan	John M.Denman Oil Co.	(D) Hann Unit	Hann Ellexson, Hatfield Pennell Alexander, Spurlock	35-34S-11E 36-34S-11E 1-35S-11E 31-34S-12E	930	0	Peru	1100	30	41	0	0	0	Yes
463	--	Peru-Sedan	John M.Denman Oil Co.	(D) Albright	Albright	15,16-34S-11E	680	0	Peru	1165	40	7	0	0	0	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	0	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	1125	50	31	0	1	0	Yes
1029	--	Peru-Sedan	John M.Denman Oil Co.	(P) Casement	A.Casement, C.Casement	33-33S-11E 5-34S-11E	350	0	Peru	---	16	10	0	0	0	Yes
1473	--	Peru-Sedan	John M.Denman Oil Co.	(P) Gregg	Gregg	14,15,21,22,23, 26,27-33S-11E	2300	80	Peru	1224	33	12	16	0	0	Yes
17030	--	Peru-Sedan	John M.Denman Oil Co.	(P) C.C.Poor Farm	C.C.Poor Farm, Haney-Johnson Conley, Haney-Johnson H.W.Moore	10-34S-12E 15-34S-12E 22-34S-12E	629	0	Peru	984	20	23	9	4	0	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	1220	40	21	1	0	0	Yes
17033	--	Peru-Sedan	John M.Denman Oil Co.	(P) Hartzell-Rodgers	Rodgers Hartzell, Rodgers	18-34S-12E 19-34S-12E	320	0	Peru	1000	16	6	7	0	0	Yes
16970	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Stafford	Stafford	9-34S-12E	200	0	Peru	1027	35	8	8	0	0	Yes
16971	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	Bowen, Winchell Winchell	20-34S-12E 29-34S-12E	240	0	Peru	1055	15	20	5	0	0	Yes
16972	No	Peru-Sedan	Doric Petroleum, Inc.	(P) Peru-Sedan	DeArmond, Inglefield 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	Brooks, Hills	28-34S-12E	200	0	Peru	1020	19	8	5	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	1055	15	27	6	0	0	Yes
18386	No	Peru-Sedan	Bill Farris	(W) Farris	Farris	11-34S-12E	80	0	Peru	1000	7	4	0	0	0	No
4134	No	Peru-Sedan	Farris & Loyd	(W) Logsdon	Logsdon	26-34S-11E	240	0	Peru	1150	--	10	--	-	-	Yes
14682	No	Peru-Sedan	Farris & Loyd	(D) Parker	Parker	26-34S-11E	80	0	Redd	978	9	3	3	0	-	Yes
CR-9778	Yes	Peru-Sedan	McCann Drilling, Inc.	(D) McCann Project #1	--	33-33S-11E	990	--	Peru	1225	25	9	--	7	-	--

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
10744	3	1	0	0	5-Spot	350	30	Prod	--	--	T	1974	S Gas	--	33	--	43,800	257,150	889	4,229	889	4,229	
18612	1	0	1	0	Irreg	0	173	Prod	--	--	T	1977	S Gas	--	28	--	57,855	57,855	1,174	1,174	1,174	--	
9072	2	--	0	0	Irreg	0	900	Prod	--	--	†	1962	Grav	1/10	30	--	340,000	--	6,732	--	--	--	*Was C.C.Whittaker †Tretolite GK 4455
5161	2	0	0	0	Irreg	260	60	Prod	--	--	U	--	S Gas	--	31	--	46,224	1,409,524	7,704	340,094	7,704	340,094	
6721	1	0	0	0	5-Spot	175	50	Prod	--	--	U	--	Gas Exp	1/3	30	--	18,000	--	600	--	0	--	*Was C.W.Staats.
4746	1	1	0	0	Irreg	275	45	Prod	--	--	U	--	S Gas	--	32	--	30,468	168,743	5,078	21,649	5,078	21,649	
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	545,000	6,086	139,929	6,086	139,929	
11863	1	0	0	0	Irreg	0	6	Prod	--	--	U	1965	Wat	--	29	--	2,000	137,235	496	17,815	0	0	
36-01 -28	2	0	0	0	Irreg	Grav	--	Prod	--	--	U	1953	Grav	3/1	34	--	1,825	--	2,067	--	700	--	*Was Sinclair Oil.
289	1	0	0	0	5-Spot	0	10	Prod	--	--	U	--	Grav	--	33.6	--	3,650	--	388	--	0	--	*Was Little Nick Oil Co.
10903	1	1	0	0	Irreg	50	75	Prod	--	--	U	--	--	--	35.5	--	27,300	--	730	--	--	--	*Power broke down once.
3221	1	--	0	-	--	150	230	Prod	--	--	U	1952	S Gas	--	34	--	60,950	--	2,916	490,824†	--	--	*Was G.B.Suppes. †Estimated.
15	1	0	0	0	Irreg	250	15	Prod + Salt Sd	450	60	U	--	S Gas	--	34	--	4,032	35,732*	672	5,257*	672	5,257*	*Since 1/1/72.
139	1	2	0	0	Irreg	300	15	Prod + Salt Sd	450	60	U	1955	S Gas	--	32	--	9,354	240,104	1,559	39,221	1,559	39,221	
388	3	7	0	0	Irreg	250	150	Prod + Salt Sd	450	60	U	1955	S Gas	--	33	--	45,492	1,179,242	7,582	211,116	7,582	211,116	
462	15	0	0	0	Irreg	0	30	Prod	--	--	U	--	S Gas	--	35	--	114,546	14,317,074	19,091	3,528,402	19,091	2,117,041	
463	1	0	0	0	Irreg	0	25	Prod	--	--	U	--	Grav	--	35	--	8,202	99,722*	1,367	21,798*	1,367	21,798*	*Since 10/1/68
467	1	0	0	0	Irreg	0	40	Prod	--	--	U	--	Grav	--	34	--	12,060	167,240*	2,010	36,335*	2,010	36,335*	*Since 10/1/68.
468	8	0	0	0	Irreg	0	10	Prod	--	--	U	--	Grav	--	34	--	55,422	762,272*	9,237	163,385*	9,237	163,385*	*Since 10/1/68.
1029	4	0	0	0	Irreg	0	20	Prod + Salt Sd	450	60	U	1955	S Gas	--	32	--	20,874	2,742,333	3,479	337,223	3,479	337,223	
1473	3	8	0	0	Irreg	300	22	Prod + Salt Sd	460	60	U	1955	S Gas	--	34	--	22,914	1,781,614	3,819	1,757,313	3,819	1,757,313	
17030	4	0	0	0	Irreg	275	50	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	88,158	1,349,238	14,693	1,132,053	14,693	1,132,053	
17031	3	1	0	0	Irreg	0	65	Prod	--	--	U	--	--	--	35	--	59,394	334,944*	9,899	68,121*	9,899	68,121*	*Since 10/1/68.
17033	3	3	0	0	Irreg	350	15	Prod + Salt Sd	450	50	U	1955	S Gas	--	34	--	10,122	950,922	1,687	699,486	1,687	699,486	
16970	5	4	0	0	Irreg	200	25	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	45,700	1,178,629	2,726	168,373	2,726	168,373	
16971	4	3	0	0	Irreg	200	50	Prod + Salt Sd	450	60	U	1965	S Gas	--	34	--	72,322	500,607	23,332	146,241	--	--	
16972	3	13	0	0	Irreg	250	37	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	40,103	2,447,740	6,629	596,012	--	--	
16973	3	5	0	0	Irreg	150	25	Prod + Salt Sd	450	60	U	1955	S Gas	--	34	--	26,966	1,508,698	4,939	205,364	--	--	
16974	7	7	0	0	Irreg	245	31	Prod + Salt Sd	450	60	U	1966	S Gas	--	34	--	79,172	1,155,560	19,383	317,705	--	--	
18386	1	--	-	-	5-Spot	150	10	Prod	--	--	U	1976	Grav	1/1	22	--	365	2,165	365	730	--	--	
4134	1	--	-	-	5-Spot	50	50	Prod	--	--	-	1967	Grav	1/10	34	--	18,200	200,200	2,200	24,200	--	--	
14682	1	--	-	-	Irreg	120	20	Prod	--	--	U	1968	Wat	7/18	37	--	7,300	109,823	1,000	17,087	--	--	
CR-9778	4	--	2	-	Irreg	75	75	Prod + Peru	1225	25	U	1977	Grav	3/17	31.5	--	70,000	70,000	3,285	3,285	3,285	3,285	*Since 10/11/77

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
CHAUTAUQUA COUNTY (Concl.)																
18364 --		Peru-Sedan	Clyde R.Jones	(-) Winder	Winder	15-34S-12E	--	--	Peru	924	13	--	0	0	0	No*
905 --		Peru-Sedan	Lee R.Jones Jr.	(-) Crane Fee	Crane	1-35S-11E	320	--	--	---	--	14	--	-	-	No*
6133 --		Peru-Sedan	Lee R.Jones Jr.	(-) Smith Lee	C.W.Smith, Lee	12-35S-11E	320	--	Peru	1160	25	14	--	-	-	No*
10679 --		Peru-Sedan	Lee R.Jones Jr.	(D) Witham	O.R.Witham	18-35S-12E	220	--	Peru	1150	30	6	--	-	-	No*
18248	No	Peru-Sedan	Eddie & Dwight Keen	(P) Ray Hardy	Ray Hardy	17,20-33S-12E	398	--	Peru	900-1000	30	5	--	-	-	Yes
17888	No	Peru-Sedan	Liberty Hill Oil Corp.	(P) MacFarlane-DeLong	MacFarlane-DeLong, Smith-Lolly, Flossie White	23-34S-11E	550	--	Peru	1120	20	25	0	2	0	Yes
CR-8772	No	Peru-Sedan	Liberty Hill Oil Corp.	(P) Laraway	Laraway Laraway, Spur Ranch "A" Laraway	15-34S-11E 16-34S-11E 21-34S-11E	440	0	Peru	1250	25	4	0	6	0	No*
556	No	Peru-Sedan	Nunneley & Powell	(D) Kimbrell	Kimbrell	4-34S-12E	40	20	Peru	1050	18	4	0	0	0	Yes
5477	No	Peru-Sedan	Nunneley & Powell	(P) Violet Stafford	Violet Stafford	8-34S-12E	80	0	Peru	1050	20	18	0	2	0	Yes
6132	No	Peru-Sedan	Nunneley & Powell	(D) Big Turner	Big Turner	3-35S-12E	80	0	Peru	1000	10	3	0	-	0	Yes
6170	Yes	Peru-Sedan	Nunneley & Powell	(P) J.R.Chance	J.R.Chance	34-34S-12E	160	40	Peru	1035	12	15	0	0	0	Yes
--		Peru-Sedan	Nunneley & Powell	(D) Blount	Blount	34-34S-12E	160	0	Peru	1035	20	4	--	0	0	Yes
6320 --		Peru-Sedan	Petroleum Enterprises	(P) --	Hills	22-34S-12E	--	--	Peru	1000	15	9	--	-	-	--
14956 --		Peru-Sedan	Petroleum Enterprises	(P) --	Heath	27-34S-11E	60	--	Peru	1130	15	9	--	-	-	Yes
3556	No	Peru-Sedan	Shannon Brothers	(D) Turner-Johnson	Johnson Turner	6-35S-12E 7-35S-12E	80	40	Peru Sd	1180	40	3	0	0	0	Yes
4135	No	Peru-Sedan	Whitworth & Farris	(W) Coulter Rayman	Coulter Rayman	15-34S-12E	240	0	Peru	1150	7	8	2	1	-	Yes
		CHAUTAUQUA COUNTY TOTALS (Reported)					~~2035~~ 1	~~190~~				~~610~~	~~116~~	~~33~~	~~0~~	
CHAUTAUQUA-COWLEY COUNTIES																
18164	Yes	Cedar Vale	Gemoco, Inc.	(W) West Cedar Vale Waterflood Unit	Jarboe A, McEwen Zimmerman B Jarboe A, Zimmerman A	9-34S-8E 15-34S-8E 16-34S-8E	480	--	Pawnee	2045	22	4	--	0	-	Yes
CHEYENNE COUNTY																
18584	No	Cherry Creek	Shakespeare Oil Co., Inc.	(P) M.Orth	Orth Robert Walter Rudolph Walter, Robert Walter Orth Robert Walter	3-3S-41W 4-3S-41W 9-3S-41W 10-3S-41W 16,21,22-3S-41W	2480	--	Lans E	4669	7	5	0	1	0	Yes
CLARK COUNTY																
6764 --		Harper Ranch	Union Oil Co. of California	(W) Harper Unit	J.C.Harper "A" K.C.Harper	2-34S-21W 11-34S-21W	1280	--	Morr	5450	9	5	1	0	0	Yes
COFFEY COUNTY																
15677	No	Crandall	Reed Oil Co.	(D) Leroy	Sutherland, Wright "B"	31-22S-16E	10	0	Squir	1065	6	4	0	0	0	Yes
17764 --		Hatch	Kraft Oil Co.*	(D) Bashaw-Bick	Bashaw-Bick	35-21S-13E	160	--	Simp	2151	4	5	0	0	0	Yes
18102 --		Leroy	Winn Oil*	(D) --	Kenneth R.Winn	21-22S-16E	160	--	Squir	900	10	24	0	0	0	Yes
17175 --		Leroy North	C & C Oil Co.	(D) --	Klaus Lease	22-22S-16E	80	--	Squir	1015	12-18	4	0	0	0	Yes
12184	No	Neosho Falls-Leroy	Erbert Oil Co.*	(W) Erbert Unit	Pinnon	1-23S-16E	80	0	Squir	950	9	4	3	-	-	Yes
14942 --		Neosho Falls-Leroy	Erbert Oil Co.*	(W) Erbert	Beard	12-23S-16E	80	--	Squir	920	9	3	--	-	-	Yes
17356 --		Ottumwa	Teichgraeber Oil Operations	(P) Metzler	Metzler	22-20S-14E	190	0	Miss	1600	10	1	1	-	-	Yes
199 --		Virgil	French & Winterscheid, Inc.	(P) Kelly	Kelly	14-23S-13E	90	20	Miss	1800	6	9	0	0	0	Yes
5633 --		Virgil	French Oil Co.	(P) Pilcher	Pilcher	16-23S-14E	20	0	Miss Lime	1700	0	2	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
18364	0	0	0	0	Irreg	70	50	Peru Sd	--	13	T	1976	Wat	1/1	32.3	--	9,125	--	1,825	--	--	--	*Too cold.
905	--	--	-	-	Irreg	100	50	Prod	--	--	U	--	Grav	1/10	34	--	15,000	--	1,839	--	--	--	*Only pumps 50 bbl. a day.
6133	2	--	-	-	Irreg	150	60	Prod	--	--	U	--	--	1/10	33	--	21,900	--	2,820	--	--	--	*Only pumps 60 bbl. a day.
10679	--	--	-	-	Irreg	160	80	Prod	--	--	U	--	Grav	1/10	33	--	29,200	--	2,000	--	--	--	*Only pumps 80 bbl. of water a day.
18248	1	--	-	-	Irreg	Grav	87.6	Prod	--	--	U	1976	Grav	5/95	29-31	--	31,992	--	1,333	--	1,066	--	
17888	6	0	1	0	Irreg	150	102	Prod + Redd	920	20	U	1975	Wat + Gas Exp	3/20	34	--	185,000	622,600	75,759	163,083	0	0	
CR-8772	1/4	0	1	0	Irreg	15	125	Prod	--	--	U	1977	--	1/5	31	--	11,250	11,250	6,735	8,368	0	0	*Returning produced water - no make-up water.
556	1	--	-	-	Irreg	0	10	Prod	--	--	U	1941	Grav	1/3	34	--	3,000	--	926	--	0	--	
5477	2	--	-	-	Irreg	150	40	Prod	--	--	U	1957	Grav	1/3	34	--	36,000	--	12,729	--	3,000	--	
6132	1	--	-	-	Irreg	0	10	Prod	--	--	U	--	Grav	1/7	33	--	3,000	--	580	--	0	--	
6170	2	--	-	-	Irreg	200	30	Prod	--	--	U	1958	Grav	1/5	34	--	12,000	--	2,739	--	--	--	
	1	--	-	-	Irreg	0	20	Prod	--	--	U	1958	Grav	1/5	34	--	8,000	--	1,355	--	--	--	
6320	1	--	-	-	Irreg	75	110	Prod	--	--	T	--	S Gas	--	34	--	40,000	--	1,500	--	--	--	
14956	1	--	-	-	Irreg	200	75	Prod	--	--	T	--	S Gas	--	35	--	27,000	--	2,850	--	--	--	
3556	1	0	0	0	Irreg	0	10	Prod	--	--	U	1953	Grav	1/3	35	--	3,600	49,600	1,029	11,729	500	11,200	
4135	1	4	1	-	5-Spot	50	50	Prod	--	--	U	1967	Grav	1/10	34	--	18,200	200,200	3,600	39,600	--	--	
	138	66	7	0													2,482,462	41,090,738	339,974	13,097,447	146,971	7,849,715	
18164	2	--	0	-	Irreg	90	100	Prod + Way + Pawnee	1950	12	T+S	1975	Wat	1/4	38	--	73,000	150,000	13,053	--	--	--	
18584	1	0	0	0	Irreg	0	96.9	Prod	--	--	U	1976	Wat	1.7/.6	33	--	35,368	36,168	33,978	35,438	--	--	
6764	1	5	0	0	Irreg	0	488	Prod	--	--	U	1959	S Gas	12/1	36	3	178,701	5,551,612	11,744	1,163,637	11,744	568,362	
15677	2	0	0	0	--	0	14.5	Prod	--	--	U	1970	S Gas	1/0	23	--	10,625	53,425	2,031	4,987	--	--	
17764	1	0	0	0	Irreg	0	400	Prod	--	--	T	1975	Grav	1/9	26	--	146,000	--	14,600	--	--	--	*Was Little George Oil.
18102	--	--	-	-	--	0	--	Prod	900	10	U	1975	Grav	9/1	24	--	192	--	1,920	--	0	--	*Was Can-Co.
17175	0	0	0	0	4-Spot	0	5-10	--	--	--	U	1973	--	1/1	25	25	1,750	--	2,040*	--	--	--	*Oil production about the same as 1976.
12184	1	1	0	0	Irreg	390	61	Prod + KC	387	15	U	1974	S Gas	97/3	25	46	22,265	77,280	1,502	--	--	--	*Was White & Ellis.
14942	3	--	2	-	Irreg	370	26	KC	340	15	U	1970	S Gas	97/3	25	46	26,970	128,000	1,434	--	--	--	*Was Ensminger Oil.
17356	--	--	-	-	Irreg	350	450	Prod	--	--	U	1976	Wat	6/350	35	--	36,500	132,750	830	1,801	--	--	
199	1	0	0	0	Irreg	90	350	Prod	--	--	T	1945	Wat	9/11	38	--	99,000	--	5,645	--	4,233	195,334	
5633	1	0	0	0	Irreg	75	90	Prod	--	--	T	1955	Wat	48/52	36	--	12,000	420,000	576	--	576	45,766	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
COFFEY COUNTY (Concl.)																
5835	--	Virgil	French & Winterscheid, Inc.	(P) Olinger & Olinger B	Olinger	14-23S-13E	90	0	Miss Lm	1800	5	5	0	0	0	Yes
202																
17368	No	Virgil	French & Winterscheid, Inc.	(-) Bahr	Henry Bahr	14-23S-13E	20	--	Viola	2100	--	--	--	-	-	Yes
8745	--	Virgil Northeast	Sun Production Co.	(-) Chris A.Bahr and Joseph B.Bahr	Joseph B.Bahr Chris A.Bahr	14-23S-13E 23-23S-13E	140	25	Miss Lm	1700	125	7	0	0	0	No*
13346	--	Winterscheid	Kraft Oil Co.	(W) Scott, Wiley, Cochran	Scott, Wiley, Cochran	14-23S-14E	80	0	Miss Lm	1600	15	7	0	0	2	Yes
13052	--	Winterscheid	Kraft Oil Co.	(W) Vastrez, Shotwell, McCartney	Vastrez, Shotwell, McCartney	14-23S-14E	40	0	Miss Lm	1600	15	7	0	0	1	Yes
		COFFEY COUNTY TOTALS (Reported)					1240	45				82	4	0	3	
COFFEY-WOODSON COUNTIES																
2863	No	Neosho Falls	Newland Oil*	(W) Neosho Falls Flood Unit	Murray Remlinger, Wolf, Maynard	13-23S-16E 24-23S-16E	80	0	Squir	940	12	20	1	2	1	Yes
COMANCHE COUNTY																
17128	Yes	Collier Flats	Halliburton Oil Producing Co.	(P) Collier Flats Unit	Thornhill Norton, Schweitzer*	24-33S-20W 26-33S-20W	480	240	LKC	4777	5	2	0	-	-	Yes
COWLEY COUNTY																
10481	--	Albright	Deck Oil Co.*	(P) Albright	Albright "A"	2-34S-5E	160	0	Miss Ch	3100	12	7	0	0	0	Yes
16740	No	Albright	W.D.Short*	(W) Albright	Hart Brown Rahm	1-34S-5E 2-34S-5E 10,11-34S-5E	560	--	Miss	3100	15	19	1	0	0	Yes
5563	Yes	Biddle Northwest	Stewart Bros.	(W) Biddle NW	Long "A", Holt	36-31S-4E	80	190	Cattle	2900	18	2	1	0	-	Yes
7358					Long "B", Defore-Roberts, Morris Hawkins, Holt CSP-Holt	1-32S-4E 6-32S-5E 31-31S-5E										
9844	Yes	Bolack	R.R.Abderhalden	(W) Bolack WF Unit	--	21-32S-6E	200	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	2854	30	8	0	0	0	Yes
16770	No	Brandenburg	Aylward Drilling Co.	(-) Brandenburg	Brandenburg	3-35S-3E	160	0	Miss	3355	3370	3	0	0	0	Yes
16081	No	Branson	Gralapp and Everly	(W) Branson	Branson-Gralapp and Everly	29,32-32S-7E	150	--	Bartl	2900	20	2	4	0	-	Yes
9593	--	Burden	Texaco Inc.	(W) Burden Unit	N.Brewer, J.I.Lauppe	19-31S-6E	1124	--	Bartl	2950	30	11	21	0	0	--
					A.S.Hill, N.Brewer, J.Fitzgerald	20-31S-6E										
					A.Sitton, L.Higginbottom, Hall-Higginbottom Unit, E.Sitton	29-31S-6E										
					F.Weigle, R.Smith, O.P.Pierce, Sisters of St.Joseph, A.F.Sitton, C.C.Sitton, J.C.Ore	30-31S-6E										
					B.J.Drury, Sanders, D.J.McMinn	31-31S-6E										
16342	No	Burden	Wilson Drilling Co.	(P) Keesey-Blanchet	Blanchet Weigle Keesey	17-31S-6E 18-31S-6E 20-31S-6E	1040	0	Bartl	2820	80	15	0	0	0	Yes
4028	No	Combs	Tomlinson Oil Co.	(D) Combs	Combs	5-30S-5E	40	0	Bartl	2830	9	3	2	0	0	Yes
18533	No	Copeland	Dawson-Markwell Exploration Co.	(P) Bossi Unit	Bossi, Buzzi Bossi	33-34S-4E 4-35S-4E	513	0	Miss Ch	3194	20	9	0	0	0	Yes
16632	No	Daniels	Lee Phillips Oil Co.	(P) Daniels Flood Project	Knowles Holt	7-30S-5E 8-30S-5E	100	0	Bartl Sd	2950	40	4	0	0	1	Yes
8007	--	David	Gear Petroleum Co.	(W) North David Unit	--	25,26-30S-4E	273	--	Bartl	2975	18	4	0	0	4	Yes
16403	No	David	Merlin Hickman	(P) Kurtz	Kurtz (Wilcox)	26-30S-4E	80	--	Bartl	2945	16	1	--	-	-	Yes
11853	No	Dillard	Rex & Morris Drilling Co.	(W) Graham	Graham Saxton Swain	5-30S-5E 7-30S-5E 8-30S-5E	160	0	Bartl	2875	25	2	0	0	0	Yes
13509	--	Estep	Texaco Inc.	(P) C.W.Estep	C.W.Estep	21-34S-6E	160	--	Stal	1802	16	1	0	0	0	Yes
16839	No	Estep West	Clyde Becker	(P) --	Dunn Dunn, Goatley, Potter, Waldschmidt	19-34S-6E 20-34S-6E	410	--	Miss	3070	15	9	0	2	0	Yes
7841	--	Estes	Texaco Inc.	(P) --	G.O.Brooks M.M.Spangler, E.G.Jabara E.G.Jabara	1-32S-6E 6-32S-7E 31-31S-7E	--	--	Cott Gr	2136	12	4	2	0	0	Yes
5863	No	Frog Hollow	Merlin Hickman	(W) J.W.Gardner	J.W.Gardner (Eastman)	16-32S-5E	80	--	Bartl	3040	60	2	--	-	-	Yes
18180	No	Frog Hollow	Merlin Hickman	(P) Bloomfield	Bloomfield Dunlap	15-32S-5E 21-32S-5E	240	--	Bartl	3124	25	3	--	-	-	Yes
7136	No	Frog Hollow	Phillips Petroleum Co.	(W) Lena	Lena	17-32S-5E	25	0	Bartl	3035	25	4	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
5835	2	0	0	0	Irreg	Vac	150	Prod	--	--	T	1960	Wat	3/2	36	--	36,500	523,000	3,362	--	2,218	61,632	
202																							
17368	1	0	0	0	Irreg	Grav	10	Prod	--	--	T	1974	Wat	9/1	--	--	0	0	0	0	0	0	
8745	0	0	0	0	--	0	0	--	--	--	-	1961	S Gas	--	30.8	5.4	0	13,365,501	4,498	415,454	4,498	415,454	*No inj. into lime. Water disposed into Arbuckle.
13346	3	1	0	1	5-Spot Peri	350	180	Prod	--	--	F+ T	1966	Wat	1/9	38	--	65,700	401,500	4,745	14,235	1,095	3,605	
13052	1	0	0	0	4-Spot Peri	250	65	Prod	--	--	U	1966	Wat	3/1	38	--	23,725	118,625	2,555	8,030	730	2,555	
	16	2	2	1													481,227	15,220,081	45,738	444,507	13,350	724,346	
2863	7	3	0	1	5-Spot	300	20	Prod + KC	320	20	U	1952	S Gas	--	26-27	--	51,000	2,039,634	7,651	375,966	7,651	--	*Was Susmio Oil.
17128	2	0	-	-	Irreg	0	60	LKC	4644	16	U	1973	S Gas	1/0	44	--	43,800	208,875	5,286	139,724	5,286	25,486	*Baker, 25-33S-20W
10481	1	0	0	0	Irreg	50	200	Prod	--	--	U	1964	S Gas	1/1	39	--	53,000	418,475	16,226	304,204	--	--	*Was Harbor Oil & Gas Co.
16740	2	0	0	0	Irreg	0	50	Prod	--	--	U	1963	Gas Exp	1/1	37	1.8	36,500	467,200	17,046	503,135	3,409	--	*Was Sun Oil Co
5563	2	1	0	0	Line	50	60	Prod	--	--	U	1961	Gas Exp	4/1	39	--	13,921	9,546,602	568	327,308	--	--	
7358																							
9844	2	0	0	0	Line	900	450	Prod + Lay Sd + Miss Lm	1900 3150	80 7	T	1963	S Gas	5/2	37	8	328,500	4,276,464	4,882	379,322	4,882	379,322	
17807	1	0	0	0	Irreg	0	99	Prod	--	--	T	1975	Other	--	39	--	36,308	236,607	6,537	307,051	--	--	
16770	1	0	0	0	Irreg	100	66	Prod	--	--	T	1973	S Gas	38/ 62	35	--	24,151	98,059	4,839	135,809	4,839	14,222	
16081	3	0	0	1	Irreg	200	95	Prod	--	--	T	1970	Wat	1/1	39	--	34,675	359,067	3,104	279,317	1,552	1,552	
9593	5	1	0	0	5-Spot	600	309	Prod	--	--	U	1963	S Gas	868/ 372	38	--	564,320	28,254,326	25,081	1,367,140	25,081	1,070,114	
16342	2	0	0	0	Irreg	450	200	Prod	--	--	T	1968	Gas Exp	15/2	38.4	--	170,000	1,578,500	33,000	326,750	10,000	50,000	
4028	1	0	0	0	Peri	100	150	Prod	--	--	U	1954	S Gas	--	40	--	54,750	873,554	1,739	407,433	1,739	110,382	
18533	1	0	0	0	Peri	0	200	Prod	--	--	T	1977	S Gas	1/2	--	--	18,400	18,400	92,877	92,877	0	0	
16632	1	0	0	0	Irreg	0	180	Prod	--	--	U	1971	S Gas	12/ 79	39	--	65,700	1,586,323	5,519	159,200	0	0	
8007	2	1	0	5	Irreg	400	185	Prod + Stal	1950	100	U	1960	S Gas	2/1	39	--	67,525	121,910	2,620	807,185	2,620	--	
16403	1	--	-	-	Irreg	0-Vac	125	Prod	--	--	U	1972	S Gas	1/4	39	--	24,000	55,000	1,388	105,000	--	--	
11853	1	0	0	0	Irreg	170	270	Prod	--	--	U	1965	S Gas	30/ 110	40	--	97,200	--	2,530	238,529	--	--	
13509	1	0	0	0	Irreg	Vac	148	Prod	--	--	U	--	S Gas	48/9	41	--	53,958	358,886	4,359	129,056	3,072	95,990	
16839	2	--	0	-	Peri	0	105	Prod + Lay	2288	100	T	1973	S Gas	1/1	40	--	76,000	185,250	20,178*	86,157	0	--	*Increase due to new drilling.
7841	1	1	0	0	Irreg	Vac	510	Prod	--	--	U	1961	Wat	--	38.2	--	186,150	240,687	4,696	8,318	--	--	
5863	1	--	-	-	Irreg	Grav	43	Prod	--	--	U	1969	S Gas	1/4	38	--	32,000	62,592	373	105,159	--	--	
18180	1	--	-	-	Irreg	Grav	130	Prod	--	--	U	1976	S Gas	--	41	--	146,000	--	6,633	--	--	--	
7136	1	0	0	0	--	0	1113	Prod	--	--	U	1959	S Gas + Wat	1/ 5.6	41	5	34,503	982,979	4,014	127,837*	4,014	187,674	*Cumulative beginning 3/1/59.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
COWLEY COUNTY (Cont.)																
14230	Yes	Frog Hollow East	Merlin Hickman	(P) East Frog Hollow	Josephine Devore Glenn Miller T.E.Allen, C.L.Miller et ux G.F.Miller et ux, Mabel C.Miller, R.H.Miller et ux	11-32S-5E 12-32S-5E 14-32S-5E 15-32S-5E	427	--	Bartl	3000	13	5	--	-	-	Yes
3549	No	Geuda Springs	Earl F.Wakefield, Inc.	(D) Hower	Hower	32-33S-3E	40	0	Bartl	3300	34	1	0	0	0	Yes
4538	No	Gibson	McNeish Oil Operations	(W) Wilson	Wilson	29-34S-3E	40	10	Bartl	3380	18	1	0	0	0	Yes
15017	--	Graham	Berger Oil Co.*	(W) --	Nixon	10-33S-3E	100	--	Miss Ch	3241	10	3	0	0	0	Yes
13495	No	Graham	Crest Petroleum, Inc.	(W) Bradbury, Miller, Wright "A"	Bradbury Miller, Wright "A"	10-33S-3E 15-33S-3E	273	0	Miss Ch	3255	30	10	--	-	-	Yes
15536	Yes	Graham	Crest Petroleum, Inc.	(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	3233	26	16	0	0	0	Yes
16280	No	Graham	Crest Petroleum, Inc.	(-) Nelson	Nelson, Winters	2-33S-3E	80	0	Miss Ch	3268	30	4	0	0	0	Yes
16692	--	Graham	Crest Petroleum, Inc.	(P) Wright "B"	Wright "B"	10-33S-3E	80	0	Miss Ch	3251	16	1	0	0	0	Yes
8938	No	Graham	Earl F.Wakefield, Inc.	(P) Boyles	Boyles	11-33S-3E	160	0	Bartl	3275	15	4	0	0	0	Yes
4843	No	Harvey	Aylward Drilling Co.	(D) Harvey Unit	Harvey	23-34S-3E	10	9	Bartl	3278	20	1	0	0	0	Yes
14142	No	Harvey	Aylward Drilling Co.	(P) Fussell W.F.	Fussell, Pearson	14-34S-3E	80	0	LKC	2839	6	3	0	0	0	Yes
4536	No	Harvey	McNeish Oil Operations	(W) Snyder	Snyder	15-34S-3E	40	--	Bartl	3270	18	3	0	0	0	Yes
16022	No	Higbee	Landers & Musgrove*	(P) Higbee-Woods	Higbee-Woods	31-34S-6E	320	--	Miss	3140	20	2	0	0	0	Yes
18569	--	LFJ	Range Oil Co., Inc.	(P) Jarvis "B"	Jarvis "B"	33-32S-5E	320	--	Miss	3129	15	1	--	-	-	No*
14558	Yes	Maddix North	Wheeler Oil Co.	(W) No.Maddix Unit	Andes A, Andes B Yadon Yadon, Maddix, Groene Andes, Rockwell, Richardson, Groene Jarvis	1-33S-5E 2-33S-5E 11-33S-5E 12-33S-5E 14-33S-5E	240	0	Miss	3000	15	18	3	0	0	Yes
5328 6722	--	McKay	W.J.Lamberton	(W) McKay	Bergkamp, Moore Broce Broce, Klink "A", Klink "B"	6-35S-4E 7-35S-4E 8-35S-4E	170	60	Bartl	3300	25	11	--	1	-	Yes
17596	Yes	Murphy	Stelbar Oil Corp., Inc.	(W) Jones	Jones, Collinson, McLaughlin, Weir McMillin, Peters	30-34S-3E 31-34S-3E	880	--	Bartl	3395	20	17	0	0	0	Yes
18482	--	Nigger Creek	Range Oil Co., Inc.	(P) Peters	Peters	21-34S-3E	320	0	Cleve	2963	15	13	--	-	-	No*
10928	--	Posey	Moran Oil Co.*	(W) Muret	Muret	21-33S-4E	160	0	Miss	3150	10	4	0	0	0	Yes
3427	--	Rahn	Rance Arnold	(D) --	Jesse Rahn	13-34S-5E	100	--	Bartl	2900	20	1	1	0	0	Yes
2844	Yes	Rahn	Landers & Musgrove*	(D) Rahn	M.Waldschmidt George Rahn Rowe D.Kavanah, Thompson, W.Kavanah	12-34S-5E 13-34S-5E 6-34S-6E 7-34S-6E	630	--	Bartl	2900	22	4	0	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 + Lay	2800 2100	15	3	3	1	0	Yes
3239 9696	--	Rainbow Bend	Mead Production Co.	(D) Hunt Unit	J.U.Hunt	16-33S-3E	160	80	Bartl	3200	20	2	0	0	0	Yes
2999	Yes	Rainbow Bend	W.D.Short*	(W) West Rainbow Bend Unit	West Rainbow Bend Unit	17,20-33S-3E	360	--	Bartl	3240	6-30	8	4	0	0	Yes
7468	Yes	Rainbow Bend West	McNeish Oil Operations	(W) Rainbow Bend West	Hesket, Halman, Nelson	19-33S-3E	85	--	Bartl	3180	12	4	2	0	0	Yes
3085	Yes	Rock	Stelbar Oil Corp., Inc.	(W) Rock Unit	Gamble Stelbar (Apco & Mobil) Starkey	11-30S-4E 14,15-30S-4E 16-30S-4E	760	--	Cattle Sd	2750	20	4	10	0	0	Yes
15895	Yes	Rock Creek	Steve Cowan*	(D) Rock Unit I	Rock Unit I	11-30S-4E	420	260	Bartl	2705	40	1	--	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
14230	1	--	-	-	Irreg	Grav	25	Prod	--	--	U	1968	Gas Exp	--	38	--	44,000	--	4,317	--	--	--	
3549	1	0	0	0	Irreg	0	400	Prod	--	--	-	1954	S Gas	--	39	--	146,000*	3,061,000*	1,117	71,124	559	35,562	*Since 1954
4538	1	0	0	0	5-Spot	0	1	Prod	--	--	U	1959	S Gas	--	34	--	365	1,394,643	1,188	105,469	--	--	
15017	1	0	0	0	Line	0	36	Prod + Lay Sd	2550	75	U	1969	Gas Exp	4/8	41	--	13,140	128,312	8,458	80,400	--	80,400	*Was Maggard.
13495	5	1	0	0	--	Vac	60	Prod + Stal Sd	2190	50	T	1967	S Gas	40/56	41	--	104,380	1,697,650	10,521	193,022	10,521	193,022	
15536	6	0	0	0	Peri	Vac	71	Prod + Stal Sd	2180	68	T	1970	S Gas	43/50	40	--	157,420	1,513,172	18,735	151,971	--	--	
16280	1	0	0	0	3-Spot	Vac	87	Prod	--	--	T	1971	S Gas	18/100	40	--	33,920	236,460	5,910	33,653	--	--	
16692	1	0	0	0	Line	Vac	45	Prod	--	--	T	1972	S Gas	1/5	41	--	16,280	82,939	4,039	20,821	--	--	
8938	1	0	0	0	Irreg	0	60	Prod	--	--	U	1961	S Gas	--	40	--	87,600	1,679,300*	2,623	126,529	656	31,633	*Since 1961
4843	1	0	0	0	Irreg	Vac	113	Prod	--	--	T	1961	Grav	1/1	37	--	41,353	281,323	1,720	48,409	1,720	47,724	
14142	1	0	0	0	Irreg	550	144	Prod	--	--	T	1968	S Gas	--	37	--	52,445	289,245	4,903	143,697	4,903	31,800	
4536	2	--	-	-	Irreg	0	10	Prod + Arkansas River underflow	8	20	F	1955	S Gas	--	--	--	3,650	1,128,052	2,661	154,377	--	--	
16022	1	0	0	0	Line	80	270	Prod	--	--	U	1959	Wat	7/40	39	--	98,550	422,100	2,190	48,045	--	16,500	*Was Maggard Supply.
18569	1	--	-	-	Irreg	0	30	Prod	--	--	U	1976	S Gas + Wat	3/7	36	--	990	1,980	4,042	7,428	0	0	*Started December 1976.
14558	4	0	0	0	Irreg	415	273	Prod + Stal	2662	35	T	1969	S Gas	76.7/86.7	38	20	394,946	3,482,021	45,446	1,055,542	41,606	256,778	
5328 6722	11	--	-	-	Line	300	100	Prod + Arkansas River	10	26.5	F	1959	S Gas	1/0	40	--	--	380,000	--	14,894	14,894	--	
17596	4	1	0	0	4-Spot	150	300	Prod + Stal	2400	150	U	1974	S Gas	--	40	--	438,000	1,623,000	6,717	31,852	0	--	
18482	0	1	0	-	Irreg	0	300	Prod	--	--	U	1976	S Gas	1/1	40	--	81,900	99,380	13,335	91,367	0	0	*Stopped injection 10/77.
10928	1	0	0	0	--	160	250	Prod + Stal	2000	70	U	1964	S Gas	1/1	42	--	89,955	964,996	6,052	97,530	--	--	*Was Bedell-Catt Drilling Co.
3427	1	1	0	0	Irreg	--	--	Prod + Elgin Sd	1200	25	U	1952	S Gas	--	36	--	86,400	--	2,377	--	2,377	--	
2844	3	0	0	0	Line	458	--	Prod	--	--	U	1952	S Gas	1/0	38	--	154,999	2,724,124	6,570	763,050	--	--	*Was Rance Arnold.
3386	1	5	0	0	Irreg	150	650	Prod	--	--	U	1945	Gas Exp	10/1	40	--	237,250	--	14,422	1,264,644	7,211	--	*Was Continental Oil Co.
3239 9696	1	--	-	1	Irreg	0	170	Prod	--	--	T	1952	Wat	3/2	41	--	62,000	2,277,800	3,182	314,411	3,182	314,411	
2999	1	0	0	0	Irreg	0	1000	Prod	--	--	U	1952	Gas Exp	99/1	41	2.5	365,000	48,387,000	13,361	2,528,317	9,761	2,524,717	*Was Sun Oil Co.
7468	2	2	0	0	Peri	0	142	Prod + Arkansas River underflow	16	20	U + F*	1960	S Gas	--	40	--	47,825	3,878,661	2,639	237,227	--	--	*In seperate wells.
3085	2	14	0	0	Line	920	136	Prod	--	--	T	1951	S Gas	--	38	--	99,845	28,889,320	9,198	1,293,363	9,198	--	
15895	1	0	0	0	Irreg	0	Grav 20	Prod	--	--	U	--	S Gas	--	40	39	6,400	--	840	--	500	--	*Was Satin Supply 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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
COWLEY COUNTY (Concl.)																
12366	Yes	Rock North	Stelbar Oil Corp., Inc.	(W) Rock North	Shawver Davis Hornaday, Daves	2,3-30S-4E 9-30S-4E 10-30S-4E	680	--	Cattle Sd	2800	20	20	1	0	0	Yes
6951	--	School Creek	Petroleum Enterprises	(P) --	Beamer, Davis Miller	10-32S-7E 11-32S-7E	60	--	Lay	2140	30	15	--	1	-	Yes
6985	--	School Creek North	Petroleum Enterprises	(P) --	Barger	3-32S-7E	--	--	Lay	2021	15-25	8	--	-	-	Yes
17416	No	Slick-Carson	W.D.Short*	(W) Slick Carson	Carson, Waite	19-32S-3E	240	--	Lay	2600	30	4	0	0	0	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	3000	16	7	3	1	0	Yes
8457	--	Stayton South	S.J.Roark	(-) --	A.R.Husted	5-33S-4E	80	0	Bartl	3200	--	4	--	-	-	No*
10811	Yes	Trees	Braden-Deem Inc.	(W) Trees Waterflood	Tracts 1,2,3 Tracts 4,5,6	30-30S-4E 19-30S-4E	100	180	Bartl	2860	12	3	2	0	3	Yes
17207	--	Turner North	Hammer & Maclean	(D) Hammer	Hammer	18-32S-6E	160	--	Bartl	2800	75	8	0	1	0	Yes
16946	No	Waldschmidt	Crest Petroleum, Inc.	(P) Waldschmidt Rahn	Waldschmidt, Rahn Waldschmidt	7-34S-6E 8-34S-6E	720	0	Miss	3065	20	7	0	1	0	Yes
18305	No	Waldschmidt	Landers & Musgrove*	(D) --	Jerry	17-34S-6E	240	--	Miss	3050	14	1	0	0	0	Yes
8340	No	Werner	E.T.Lindsay Estate	(D) Feaster Unit	Cranston, Feaster, Kadau, Wahlenmaier-Turner	30-32S-6E	240	40	Lay	2240	7.2	9	2	-	-	Yes
15713	No	Wilmot-Floral	Dawson-Markwell Exploration Co.*	(W) Nora King Unit	Aubry Peters, W.J.Pendergraft, John Jarvis Nora King	17-31S-5E 20-31S-5E	460	100	Bartl	2884	12	0	2	0	0	Yes
18069	No	Wilmot-Floral	Dawson-Markwell Exploration Co.	(P) N.Winfield Lake	Drake, Stuber, Groom	33-30S-5E	2060	400	Miss	2910	20	3	0	2	1	Yes
1857	No	Winfield	Gulf Oil Corp.	(D) M.Shannon	M.Shannon	24-32S-4E	30	0	Bartl	--	--	3	0	0	0	Yes
9975	No	Winfield	Earl F.Wakefield, Inc.	(D) B.G.Thirsk	B.G.Thirsk	26-32S-4E	80	0	Bartl	2900	7	5	0	0	0	Yes
		COWLEY COUNTY TOTALS (Reported)					18070	1459				358	64	10	9	
CRAWFORD COUNTY																
14980	No	Farlington	G.N.Babcock	(W) Granneman	Granneman	3-28S-23E	65	0	Peru	185	20	19	10	6	5	No*
11453	--	Farlington	Walter Duncan	(W) Burge	Burge	2-28S-23E	85	0	Peru	175	20	30	2	0	0	Yes
18552	--	Farlington	George A.Hoffman Oil	(W) Russell Baber	Russell Baber	4-28S-23E	240	--	Bartl	179	81	9	--	0	-	Yes
18553	--	Hepler	George A.Hoffman Oil	(W) Albert Elmer	Albert Elmer	30-27S-22E	420	--	Bartl	601	15	15	--	4	-	Yes
9856	--	Farlington	Wel-Kan Oil Co.	(W) Holtman	Esther M.Holtman Est.	2-28S-23E	60	0	Peru	160	20	25	0	0	0	Yes
3105	No	Walnut Southeast	Morris Stephens*	(W) Walnut Waterflood	Mein Engel	27-28S-22E 28-28S-22E	207	--	Bartl	370	12	43	2	0	0	Yes
		CRAWFORD COUNTY TOTALS (Reported)					1077	0				141	14	10	5	
DECATUR COUNTY																
15099	--	Adell Northwest	Continental Oil	(W) Adell Northwest	Adell Northwest	26,27,34,35-5S-27W	333	0	Lans	3703	23	8	2	-	-	Yes
15829	--	Altory	Raymond Oil Co., Inc.	(W) Steffen	Steffen	34-3S-27W	60	--	LKC	3520	32	2	--	-	-	Yes
17018	No	Blees	A.L.Abercrombie, Inc.	(D) Blees	Blees "A" Blees, Huff "B"	5-1S-26W 8-1S-26W	340	100	LKC	3250	10	3	0	0	0	Yes
10845	Yes	Decatur Center	Halliburton Oil Producing Co.	(W) Decatur Center Unit	Witt Harmon, Ruzicka, Witt	16-3S-28W 21-3S-28W	800	70	LKC	3744	30	5	1	0	0	Yes
8190	--	Jennings	Texaco	(W) Jennings Unit	E.B.Jennings, M.Tacha, R.L.Skubal, E.J.Keenam, Keenan-Noone, M.T.Munson	25-4S-27W	614	--	Howard-Lans	3715 3500	8.7	10	4	-	-	Yes
17441	Yes	Olive	John O.Farmer, Inc.	(P) Olive Flood	Anna Miller, Reeves Barrett	12-2S-28W 14-2S-28W	480	--	LKC	3468	5	4	--	0	-	Yes
16181	Yes	Paddock	Donald C.Slawson	(W) Paddock Unit	Paddock Unit	28,29,32,33-2S-28W	740	0	LKC	3600	4	7	0	0	0	Yes
17588	No	Petracek	Okmar Oil Co.	(W) Petracek	Kasper Petracek	4-4S-27W 9-4S-27W	320	0	LKC	3559	15	3	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
12366	7	2	0	0	Line	925	478	Prod + Stal	1800	100	T	1966	S Gas	--	39	--	1,221,701	12,781,871	59,772	1,536,785	59,772	--	
6951	3	--	-	-	Irreg	175	250	Prod	--	--	T	1963	S Gas	--	39	--	150,000	--	16,548	--	--	--	
6985	4	--	-	-	Line	100	200	Prod	--	--	T	--	S Gas	--	38	--	288,000	--	11,590	--	--	--	
17416	1	0	0	0	Irreg	100	600	Prod	--	--	U	1959	Gas Exp	10/1	38	--	219,000	4,051,500	4,112	--	2,056	--	*Was Sinclair Oil Co.
12927	4	0	0	0	Irreg	1300	440	Prod + Stal	2150	100	U	1966	--	9/60	37	--	642,535	6,698,728	18,959	514,633	--	--	
8457	1	0	0	0	Irreg	Vac	2250	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Return water only.
10811	1	0	0	3	Irreg	1040	300	Prod	--	--	U	1964	S Gas	--	40	60	79,435	2,132,811	3,562	354,712	3,562	354,712	
17207	2	0	0	0	Irreg	--	210	--	--	--	-	1975	--	3/17	36	--	76,500	202,272	22,932	55,479	--	--	
16946	1	0	0	0	4-Spot	Vac	6	Prod	--	--	T	1973	S Gas	1/2	38	--	2,260	11,040	10,237	51,503	--	--	
18305	1	0	0	0	Line	0	70	Prod + Miss	3050	14	U	1976	Wat	6/70	39	--	25,550	44,450	2,190	3,810	0	--	*Was White & Ellis.
8340	3	--	-	-	Irreg	Grav	300	Prod + KC Lime	2450	6	T	1961	S Gas	--	37	--	109,500	799,430	9,617	--	--	--	
15713	3	2	0	0	Irreg	300	200	Prod + Miss Ch	3000	20	T	1970	S Gas	10/1	40.5	5	72,000	615,303	11,668	88,007	11,668	28,237	*For Ray Mark Assoc. Ltd.
18069	1	0	0	0	Irreg	10	100	Prod	--	--	T	1977	S Gas	1/3	39	--	36,500	36,500	--	--	0	0	
1857	1	0	0	0	Irreg	--	--	Prod	--	--	U	1948	S Gas	10/29	41	--	6,000	765,971	5,573	754,731	--	--	
9975	1	0	0	0	Peri	20	23	Prod	--	--	T	1963	Wat	--	38	--	41,975	836,685	2,511	71,776	628	17,944	
	123	33	0	10													7,953,130	183,319,920	634,043	18,505,365	245,982	5,842,696	
14980	10	5	3	0	Irreg	150-180	15	†	--	--	-	1967	Grav	10/1	29	19	18,800	--	1,000	--	666	--	*Not enough pressure. †Buy water from Walter Duncan.
11453	22	3	0	0	5-Spot	180	15	Prod + Miss	628	67	F	1965	S Gas	--	31.8	18.9	99,547	1,680,861	4,777	133,077	--	--	
18552	5	--	0	-	Irreg	150	12	Prod + Miss	--	--	-	1976	--	--	28	--	--	--	84	--	--	--	
18553	1	--	0	-	Irreg	250	25	Prod + Miss	--	--	-	1976	--	--	25.8	--	--	--	5,428	7,210	--	--	
9856	18	0	0	0	5-Spot	175	15	Prod + Burg	610	7	F	1962	Wat	--	31.5	18.9*	97,000	1,459,650	4,272	147,391	--	--	*@62F.
3105	59	1	1	-	7-Spot	370	6	Prod + Arb	950	--	F	1959	--	--	28	--	131,400	3,242,540	4,903	226,394	4,903	226,394	*Was General American Oil Co.
	115	9	4	0													346,747	6,383,051	20,464	514,072	5,569	226,394	
15099	4	9	-	-	Irreg	310	544	Prod + Ced H	1900	40	U	1970	S Gas	--	34.7	--	794,875	5,962,702	43,857	568,359	43,857	495,074	
15829	1	--	-	-	Irreg	600	278	Prod	--	--	U	1971	S Gas	1/0	34	--	101,470	572,485	3,784	44,457	--	--	
17018	2	0	0	0	Irreg	1300	170	Prod + Ced H	1608	100	U	1973	S Gas	--	32	--	122,660	558,239	7,548	130,377	5,300	20,638	
10845	3	0	0	0	Line	1300	236	Prod + Ced H	2150	70	T + S	1964	S Gas	2/1	36	16.7*	257,977	1,764,486	17,293	613,497	17,293	127,900	*@40.
8190	1	3	0	0	Irreg	1230	760	Prod + Ced H	1680	--	U	1961	S Gas	510/1770	37	--	277,570	7,717,981	22,856	678,785	22,856	461,022	
17441	1	--	0	-	Irreg	800	300	Prod + Ced H	1420	100	U	1974	Grav	--	37	--	97,898	384,751	32,257	104,004	22,250	53,750	
16181	5	0	0	0	Irreg	1650	163	Prod + Chey	1520	20	T	1971	S Gas	1/1	35.5	4	298,108	1,492,720	35,495	431,698	34,714	--	
17588	1	0	0	0	Peri	Vac	127	Prod + Tor	3500	5	U	1974	S Gas	21/65	34	--	39,402	109,359	8,636	160,429	923	2,838	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
DECATUR COUNTY (Concl.)																
7653	Yes	Pollnow	Rocket Schusterman Oil Account*	(W) Pollnow Unit	Pollnow Unit	3,4,5,8,9-3S-29W	740	410	Lans B	3740	4	6	1	0	0	Yes
15013	No	Ung	Halliburton Oil Producing Co.	(P) Jording "A"	Jording "B", Mines Jording	14-2S-30W 23-2S-30W	600	200	LKC	3847	25	4	1	-	1	Yes
13755	Yes	Vavroch	Halliburton Oil Producing Co.	(W) Vavroch	Vavroch	33-3S-28W 4-4S-28W	300	100	LKC	3808	25	4	2	0	0	Yes
12401	--	Warner	Cities Service Co.	(W) Warner Unit	Warner Unit	1,2,11,12-1S-27W	220	0	LKC	3226	12	9	2	0	0	Yes
		DECATUR COUNTY TOTALS (Reported)					5547	880				65	13	0	1	
DICKINSON COUNTY																
15080	No	Lost Springs	Frank Jones Oil Operations	(P) Lost Springs	Wm. Martin B	34-16S-4E	320	20	Miss	2280	20	9	0	0	0	Yes
DOUGLAS COUNTY																
6934	No	Baldwin	Russell Hays	(D) Smith-Danley	--	9-15S-20E	6	--	Squir	820	10	2	2	1	-	Yes
12705	Yes	Baldwin	James E.Russell Pet.,Inc.	(W) Baldwin Unit	Baldwin Unit	36-14S-20E 2,6-15S-20E	120	0	Squir	800	18	15	0	1	0	No*
		DOUGLAS COUNTY TOTALS (Reported)					126	0				17	2	2	0	
DOUGLAS - FRANKLIN COUNTIES																
8295	No	Baldwin	Layton Oil Co.	(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	36	3	3	0	Yes
EDWARDS COUNTY																
6718	No	Enlow	Messman-Rinehart Corp.*	(D) Hahn A	Hahn A	4-24S-16E	160	0	LKC	3740	6	1	1	0	0	Yes
ELK COUNTY																
18748	--	Bush-Denton	R.R.Durbin	(P) --	F.W.Smith	21,22-29S-9E	160	--	Miss	2270	6	2	0	0	0	Yes
5118 15543 16219	No	Bush-Denton	Perkins Oil Co.	(D) --	Kyser B, Hyde Kyser A, Kyser B, Hyde Hyde	9-30S-9E 10-30S-9E 17-30S-9E	200	--	Miss Lime	2375	29	9	--	1	-	Yes
16218	No	Bush-Denton	Perkins Oil Co.	(D) Clad Criger	Clad Criger	34-29S-9E	80	0	Miss Lime	2289	52	1	--	-	-	Yes
18027	--	Grand Summit	Petroleum Enterprises	(P) --	Denton & Ferguson	3,4-31S-8E	--	--	Miss	1927	20	6	--	-	-	Yes
15710	No	Hale-Inge	Traverse Corporation	(W) Inge Waterflood	Inge, Temple	34-31S-12E	127	0	Stray	660	10	24	6	4	0	Yes
				(W) Howell-Kimzey Pilot Waterflood	Howell, Kimzey	27-31S-12E	67	0	Stray	695	14	10	8	0	0	Yes
10390	--	Moline	W.R.Gross	(D) Moline	M.Eyman	9-31S-10E	160	--	Miss	2003	17	0	2	0	0	No*
11214	No	Shrader	Aladdin Petroleum Corp.	(P) Shrader	Shrader	12-31S-8E	160	0	KC	1650	40	11	0	0	0	Yes
17042	No	Webb	Tomlinson Oil Co.	(D) Durbin	Durbin	13-31S-10E	80	0	Miss	1937	10	8	1	0	0	Yes
		ELK COUNTY TOTALS (Reported)					1034	0				71	17	5	0	
ELLIS COUNTY																
10613	--	Air Base	American Petrofina Co. of Texas	(W) Pratt	Pratt Airbase	27-13S-16W	80	15	Gorham Sd	3460	15	6	0	0	0	Yes
16340	No	Air Base East	Hinkle Oil Co.	(W) Brungardt "A"	Brungardt "A", Brungardt "B" Leiker East	25-13S-16W	200	--	LKC	3400	15	4	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
7653	2	0	0	0	Irreg	1180	851	Prod + Dak	1425	25	T	1960	S Gas	10/0	38	--	310,661	4,693,064	10,411	837,509	10,411	407,424	*Was Union Texas.
15013	1	0	0	0	Irreg	350	40	Prod	--	--	T	1970	S Gas	19/1	34	--	14,600	120,813	5,378	197,447*	1,600	7,900	*Corrected figure.
13755	3	1	0	0	Line	1300	344	Prod + Ced H	2120	80	T + S	1968	S Gas	4/1	36	16.7*	376,799	4,100,136	34,674	1,370,864	34,674	265,625	*@40.
12401	7	0	0	0	Irreg	1104	169	Prod + Chey	1265	--	T	1966	S Gas	97/60	34	--	451,159	4,897,175	22,967	888,157	22,967	371,597	
	31	13	0	0													3,143,179	32,373,911	245,156	6,025,583	216,845	2,213,768	
15080	1	0	0	0	Irreg	0	100	Prod	--	--	T	1976	Grav	1/9	35	--	36,500	--	5,755	--	0	--	
6934	1	--	-	-	Irreg	Grav	10-12	Prod	--	--	U	1959	S Gas	--	27	--	4,000	91,000	1,058	--	900	13,000	
12705	6	6	0	0	--	168	15	Roubidoux	1900	--	T	1966	S Gas	--	26	80	32,700	141,371	3,017	49,392	3,017	23,942	*Redevelopment for waterflood.
	7	6	0	0													36,700	232,371	4,075	49,392	3,917	36,942	
8295	28	5	3	0	Line	670	41	No	--	--	F	1964	S Gas	1/8	26	--	416,136	6,569,929	14,851	417,069	14,851	417,069	
6718	1	1	0	0	Irreg	Grav	--	Prod	--	--	U	1958	Wat	--	31	--	4,875	1,297,063	1,915	195,893	1,915	73,188	*Was Natural Gas & Oil.
18748	1	0	0	0	Irreg	0	630	Prod	--	--	T	1977	Wat	1/99	32	--	154,350	--	2,300	--	0	--	
5118	6	--	-	-	Irreg	0	400	Prod	--	--	T+S*	1955	Grav	5/95	37	--	900,000	--	20,200	--	8,500	--	*DuMore Chem. S-11.
15543																							
16219																							
16218	2	--	-	-	Irreg	25	150	Prod	--	--	T+S*	1971	Grav	5/95	36	--	54,750	345,925	1,424	--	700	--	*DuMore Chem. S-11.
18027	2	--	-	-	Irreg	50	125	Prod	--	--	T	1975	Gas Exp	--	32	--	91,000	--	4,500	--	--	--	
15710	18	2	0	0	5-Spot	380	46.8	Prod + Salt Sd	445	20	T	1967	S Gas	1/25	32	14	307,916	2,761,489	8,852	112,520	8,852	112,520	
	9	6	0	0	5-Spot	360	60	Sandstone	30	90	F	1975	S Gas	--	32	14	197,100	346,610	2,846	3,417	2,846	3,417	
10390	0	1	0	0	Irreg	0	0	Prod	--	--	U	--	Grav	--	--	--	0	367,000	0	2,018	--	--	*Wells inactive.
11214	3	0	0	0	Irreg	200	225	Prod + KC	1650	40	T	1957	S Gas	--	34	--	409,389	1,955,514	9,031	491,870	--	491,870	
17042	1	0	0	0	Peri	Vac	235	Prod	--	--	U	1973	S Gas	1/2	31.5	--	86,097	509,852	8,055	252,214	1,530	8,235	
	42	9	0	0													2,200,602	6,286,390	57,208	862,039	22,428	616,042	
10613	1	0	0	0	Irreg	450	362	Prod	--	--	U	1967	Wat	1/6	33.7	--	131,995	1,889,186	7,849	255,942	7,849	77,113	
16340	1	0	0	0	Peri	20	80	Prod + Arb	3650	50	T	1970	S Gas	3/2	40	--	31,355	367,457	26,701	746,082	22,686	138,985	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
ELLIS COUNTY (Cont.)																
17737	Yes	Antonino South	Energy Sources, Inc.	(W) Antonino South	Tract 1 - Copeland Tract 2 - Herl, Tract 3 - Younker	26-14S-19W 35-14S-19W	550	0	LKC	--	--	10	0	0	0	Yes
17768	No	Antonino Southwest	Murfin Drilling Co.*	(P) Feitz W.F.	Murfin Drilling Company Feitz	34-14S-19W	160	0	LKC	3592	3	3	0	0	0	Yes
12629	Yes	Beeching	Icer Addis	(W) Beeching Waterflood Unit	Beeching, Daisy, Gorham, Sarah	34,35-15S-16W	800	--	LKC	3330	15	3	0	0	0	Yes
16660	--	Bemis-Shutts	Continental Oil	(W) Warren Mtge. Inv. Co.	Warren Mtge. Inv. Co.	3-11S-18W	20	0	Lans	3322	10	8	0	-	-	Yes
11239	--	Bemis-Shutts	Fell & Wolfe Oil Co.*	(D) Pearl Cress	Pearl Cress	13-11S-17W	80	--	LKC	3068	12	2	0	0	0	Yes
12116	No	Bemis-Shutts	Lario Oil & Gas Co.	(P) Henderson "E"	Henderson "E"	22-11S-18W	80	0	Top + LKC	3100 3350	--	3	0	0	0	Yes
12788	No	Bemis-Shutts	Lario Oil & Gas Co.	(P) Henderson "E"	Lario-Henderson "E", Sohio-Henderson "A"	22-11S-18W	160	0	Arb	3520	--	2	0	0	0	Yes
7923	No	Bemis-Shutts	Mallonee-Mahoney, Inc.*	(W) Windholz	Hall "A" Windholz "A", Windholz "B"	2-12S-17W 3-12S-17W	340	--	Arb	3600	50	2	0	0	0	Yes
12976	No	Bemis-Shutts	Okmar Oil Co.	(W) Lynn-Henderson	Lynn A, Lynn B, Lynn D, Henderson	23-11S-18W	400	0	LKC	3350	5	6	0	0	0	Yes
14315	Yes	Bemis-Shutts	Petroleum, Inc.	(W) Bemis Shutts LKC Unit	Reeder #4, #5, #6, #8, Jensen "C", #1, #3 Truan "A" #1	22-12S-18W 27-12S-18W	200	0	LKC	3404	7	5	0	0	0	Yes
12769	--	Bemis-Shutts	Shade and Berry	(D) --	Henderson 1-E	15-11S-18W	40	--	LKC	3132	10	3	--	-	-	Yes
11621	No	Bemis-Shutts	Sierra Petroleum Co., Inc.	(D) Schmeidler "E"	Schmeidler "E"	8-12S-17W	160	0	LKC + Arb	3340	224	4	0	0	0	Yes
15294	No	Bemis-Shutts	Sohio Petroleum Co.	(W) Bemis "I"	Bemis "I"	4-12S-17W	80	0	Arb	3560	--	2	1	0	0	Yes
16345 16346 16347 16348	--	Bemis-Shutts	Sun Production Co.	(W) Bemis Co-op Waterflood	Sun-Jorgensen Sun-Hadley A, Phillips-Sites Sun-Hadley BC and Peavey A, Phillips-Hendrecks and Peavey	7-11S-17W 12-11S-18W 13-11S-18W	960	0	Top + Tor+ LKC	2794	--	28	0	0	0	Yes
10120 15856	--	Bemis-Shutts	Tenneco	(W) Wasinger	F.S.Wasinger	21-11S-18W	160	120	LKC + Top	3320	34	8*	0	0	0	Yes
11933	Yes	Catherine	Kewanee Oil Co.	(W) Catherine Unit	--	10,11-13S-17W	0	190	KC	3250	210	9	0	0	0	No*
10619	--	Catherine N.W.	Texaco Inc.	(W) M.Wolf "A"	M.Wolf	4-13S-17W	--	--	Tor + Lans	3350	37	1	3	0	0	Yes
15300	Yes	Catherine South	Sterling Drilling Co.	(P) Catherine South Unit	--	14-13S-17W	200	--	LKC	3276	8	4	1	0	0	Yes
10574	--	Catherine South	Texaco	(P) L.J.Dreiling	L.J.Dreiling "B" L.J.Dreiling "C" L.J.Dreiling "E"	12-13S-17W 21-13S-17W 22-13S-17W	240	--	Arb	3550	30	7	2	0	-	Yes
17121	Yes	Chrisler South	Okmar Oil Co.	(W) Madsen Unit	Snapp, Madsen McGuire B	27-11S-16W 28-11S-16W	100	0	LKC	3017	148	2	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	0	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	7	0	1	0	Yes
17098	No	Dinges	Palomino Petroleum*	(D) Dinges	Dinges	10-15S-18W	160	0	LKC	3348	46	1	0	0	0	Yes
15311	No	Dreiling	Team Oil Co.*	(D) Dreiling	Dreiling A	21-14S-16W	30	--	LKC	3103	150	2	--	1	-	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	3	1	0	0	Yes
6605 11769	No	Emmeram Northeast	Kewanee Oil Co.	(D) Froelich E,F & Sitz	Sitz Froelich E Froelich F	26-12S-16W 27-12S-16W 34-12S-16W	0	160	KC	3270	4	2	1	0	0	Yes
3243 5055 5094 12481 14224	No	Fairport South	Energy Reserves Group*	(W) South Fairport WFS	K.Austin J.Brungardt "A" Furthmyer L.Austin	30-12S-15W 31-12S-15W 25-12S-16W 36-12S-16W	450	0	LKC + Top+ Dodge	3050 2750 3000	90	12	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17737	1	0	0	0	Irreg	1250	645	Prod	--	--	T	1973	Wat	1.37/ 0.73	38	--	221,944	659,954	24,818	487,336	3,218	--	
17768	1	0	0	0	Irreg	Vac	173	Prod + Dak	550	37	T	1975	S Gas	1/4	38	--	63,008	129,494	--	--	--	--	*Was 3-G Oil Co.
12629	1	0	0	0	Irreg	0	230	Prod	--	--	U	1966	Gas Exp	1/8	36	--	83,950	991,660	4,708	35,000*	2,300	25,375*	*Since 1971.
16660	1	0	-	-	Irreg	0	35	Prod	--	--	U	1972	S Gas	--	30.3	--	12,350	3,308,667	19,878	233,528	19,878	233,528	
11239	1	0	0	0	--	Vac	70	Prod + KC	--	--	U	1964	--	--	32	--	--	--	2,823	--	--	--	*Was Gulf Oil Corp.
12116	0	0	0	0	Irreg	Grav	--	Prod	--	--	-	1965	S Gas	29/ 176	28	--	--	208,410	5,469	170,125	2,330	90,936	
12788	1	0	0	0	Irreg	0	3609	Prod	--	--	U	1966	Wat	18/ 1515	28	--	1,317,356	16,441,513	4,992	103,835	0	0	
7923	1	0	0	0	Irreg	Vac	210	Prod	--	--	T	1960	Wat + S Gas	13/7	30.1	--	76,650	843,158	7,103	216,511	--	90,935	*Was George Vye.
12976	2	0	0	0	Peri	Vac	2551	Prod + Arb	3600	5	U	1966	S Gas	--	33	--	791,448	2,542,886	6,924	946,788	3,462	38,516	
14315	2	0	0	0	Line	208	256	Prod	--	--	T	1968	S Gas	18/8	30.5	15	179,143	1,373,042	8,712	326,304	8,712	98,758	
12769	1	0	0	0	--	Vac	500	Prod	--	--	U	1966	--	--	35	--	182,500	1,593,500	1,800	--	1,400	55,800	
11621	1	0	0	0	Irreg	Grav	127	Prod	--	--	T	1965	S Gas	--	29.9	7	46,474	840,804	8,816	--	4,408	49,890	
15294	1	1	0	0	Irreg	0	11	Prod	--	--	T	1969	Wat	1/1	31.3	--	3,854	443,863	29,884	161,015	0	22,595	
16345 16346 16347 16348	5	0	0	0	Peri	--	414	Prod + Arb	3300	50	T	1972	S Gas	1/3.14	--	--	755,401	4,521,007	92,853	601,153	78,925	572,899	
10120 15856	4	0	0	0	Peri	210	230	Prod	--	--	T	1963	S Gas	30/ 161	27.5	--	339,651	5,429,188	24,300	1,941,127	24,300	474,891	*Seven wells producing in LKC & Top. One well producing in Arb.
11933	0	2	0	0	Peri	0	0	Prod	--	--	U	1966	S Gas	77/ 1359	29	--	0	530,049	15,455	1,522,322	0	6,849	*Waterflood shut down.
10619	1	1	0	0	Irreg	Vac	260	Prod	--	--	U	1964	--	2061/ 3342	31	--	94,900	1,881,483	1,670	111,677	1,670	56,230	
15300	1	0	0	0	Irreg	250	150	Prod + Dak	734	734-744	U	1970	Grav	--	33	--	54,750	483,815	3,864	68,554	3,864	56,740	
10574	1	0	0	0	Irreg	Vac	1277	Prod	--	--	U	1964	Wat	2661/ 5270	32	--	466,105	8,183,966	17,968	668,202	--	--	
17121	2	1	0	0	Irreg	0	560	Prod	--	--	U	--	S Gas	1/1	35	--	173,740	1,866,847	2,281	185,950	2,281	19,999	
5605	2	0	0	0	Irreg	245	216	Prod	--	--	T	1957	S Gas	--	28	27.5	157,359	2,349,824	11,180	229,653	11,180	100,638	
13603	1	0	0	0	Irreg	0	6	Prod	--	--	U	--	Gas Exp	--	39	--	2,190	13,661*	986	7,883*	300	1,646	*Since 1971.
16276	1	0	0	0	Irreg	0-Vac	1624	Prod	--	--	U	1971	Wat	1/50	28.7	--	592,730	3,579,763	5,457	296,857	0	0	*Was Imperial Oil Co.
16262	1	0	0	0	Irreg	0	850	Prod	--	--	U	1971	Wat	7/93	30	--	305,000	1,912,000	24,327	305,394	3,000	9,000	*Was Alpine Drilling Co., Inc.
17098	1	0	0	0	Irreg	0	8	Prod	--	--	U	1973	S Gas	3/14	31	--	2,920	19,415	549	168,384	0	100	*Was Colorado Oil & Gas Co.
15311	1	--	-	-	Line	0	210	Prod	--	--	U	1969	Grav	--	31	--	77,000	--	4,350	199,500	1,440	--	*Was Robert A.Dreiling.
13073	4	4	0	0	Peri	30	244	Prod + Dak	800	200	M + T	1967	Wat + S Gas	15.3/ 84.7	33	--	356,511	4,880,616	8,865	151,492	8,865	151,492	
7142	1	0	0	0	Irreg	15V	30	Prod	--	--	T	1959	Wat	72/28	36	--	10,950	--	2,078	--	2,078	--	*Was Terra Resources Inc.
6605 11769	1	1	0	0	Irreg	0	20	Prod	--	--	U	1961	S Gas	--	34	--	7,300	359,634	2,555	248,047	0	11,705	
3243 5055 5094 12481 14224	3	1	0	0	Irreg	0	503	Prod	--	--	U	1956	S Gas	1/2.6	36.4	--	551,084	11,773,888	30,156	2,962,853	30,156	999,724	*Was Pan American.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
ELLIS COUNTY (Concl.)																
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
13428	--	Lieb	Chief Drilling Co., Inc.	(W) Craig-Lundy WF	Craig-Lundy	16-11S-16W	160	0	LKC	3000	200	2	0	0	0	Yes
13535	--	Lieb East	Chief Drilling Co., Inc.	(W) Lundy	Lundy	16-11S-16W	120	0	LKC	0	0	3	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
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 Co.	(P) Mixer Repressuring Project	Mixer C	7-11S-20W	160	110	LKC	3372	19	2	0	0	0	Yes
18064	--	Neddam	Shade and 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	Lans	3762	70	4	0	-	-	Yes
17236	No	Pleasant	Murfin Drilling Co.	(W) Kingsley	Kingsley	34-13S-20W	160	0	LKC	3523	35	3	0	0	0	Yes
17979	No	Pleasant	Dane G.Hansen Trust	(D) Storm	Storm	34-13S-20W	80	0	LKC + Arb	3499	250	2	0	0	0	Yes
15916	No	Pleasant	Reed Oil Co.	(D) Storm	Storm	35-13S-20W	--	--	Squir	3840	12	2	0	0	0	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	--	2	1	0	0	Yes
16804	--	Schmeidler	Frontier Oil Co.	(P) Giebler	Giebler	28-12S-17W	--	--	LKC	3400	6	3	0	0	0	Yes
13234	No	Solburn	NCRA	(W) Solomon-Burnett	Solomon-Burnett	28-14S-20W	70	10	Lans	3409	6	4	0	0	1*	Yes
10846	No	Solomon	Okmar Oil Co.	(W) Albert	Albert, Wickham, Fred	10-11S-19W	160	--	LKC	3244	5	6	1	0	0	Yes
13553	No	Sugarloaf South	Okmar Oil Co.	(W) Dreiling	Dreiling A, Dreiling C	28-13S-17W	60	0	LKC	3280	5	2	1	0	0	Yes
16583	--	Sugarloaf South-east	American Petrofina Co. of Texas*	(P) Braun "B"	Braun "B"	26-13S-17W	80	0	Arb	3484	336	4	0	0	0	Yes
13434	No	Toulon	Willie E.Schultz*	(W) Braun	Braun	35-13S-17W	25	0	LKC	3235	12	2	0	0	0	Yes
15682																
9849	No	Toulon South	Okmar Oil Co.	(W) Brungardt	Goetz D Brungardt Christina	10-14S-17W 14-14S-17W 15-14S-17W	100	--	LKC	3430	7	3	0	0	0	No*
13544	No	Toulon Southwest	Okmar Oil Co.	(W) Dinkel "A"	Dinkel, Dinkel "A"	16-14S-17W	50	0	LKC	3250	5	4	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	E.K.Edmiston	(W) Schmidt	Schmidt	36-12S-18W	80	--	LKC	3600	*	4	0	0	0	Yes
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*
11068	No	Victoria North	Richard L.Mai	(P) Schulte	Quint Schulte	7-14S-16W 8-14S-16W	160	120	LKC	3214	6	5	--	-	-	Yes
CR-6772	No	Wheatland	NCRA	(W) Leiker	Leiker	30-15S-17W	40	0	Lans	3293	17	5	0	0	1*	Yes
13470	--	Wheatland	Petroleum Management, Inc.	(W) Leiker	Leiker	18-15S-17W	20	0	LKC	3282	225	2	1	0	0	No
15655	--	Wheatland East	Petroleum Management, Inc.	(-) Wheatland East Unit	Leiker "B", Leiker "C", Leiker "D", Gross Leiker "D", Stecklein	17-15S-17W 18-15S-17W	120	40	LKC	3338	146	17	0	0	0	Yes
15425	No	Younger	Okmar	(W) Hoffman	Hoffman, Dinkel B	32-13S-17W	50	0	LKC	3318	5	4	0	0	0	Yes
14253	No	Gatschet	Cecil M.Keller	(D) Gatschet Waterflood	Gatschet, Sack	13-13S-19W	320	160	LKC	3368	5*	3	0	0	0	Yes
		ELLIS COUNTY TOTALS (Reported)					9185	1225				275	21	2	2	
ELLIS-ROOKS COUNTIES																
3145	--	Krueger	Cities Service Co.	(W) Krueger Unit	Krueger Unit	35,36-10S-16W 1,2,3-11S-16W	352	0	Dodge LKC	3225	4	21	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
6890	1	0	0	0	Irreg	0	21	Prod	--	--	U	1962	S Gas	--	33	--	7,665	96,310	1,960	203,046	0	--	*Was Hinkle Oil Co.
15930	1	0	0	0	Irreg	Vac	2138	Prod	--	--	U	1972	--	149/ 409	38.4	--	780,370	4,595,909	16,868	179,192	0	99,556	
13428	1	0	0	0	Irreg	300	450	Dak + Chey	350	100	M	--	S Gas	--	--	--	160,200	1,658,419	2,219	17,665	2,219	24,885	
13535	1	0	0	0	Irreg	300	350	Prod + Dak + Chey	--	--	U	1967	S Gas	1/4	35.8	--	123,400	1,358,026	4,496	225,984	2,250	44,223	
13599	0	2	0	0	Irreg	0	0	Prod	--	--	U	1967	S Gas	100/ 1545	36	--	0	556,217	0	--	0	16,548	*Possibly start up at a later date.
13651	2	0	0	0	Irreg	1000	368	Prod	--	--	U	1967	S Gas	--	35	--	268,710	2,346,538	8,731	267,109	8,731	201,623	
14316	1	0	0	0	Line	866	434	Prod + Quat	75	100	M	1968	S Gas	23/19	34.6	8	178,825	1,230,165	4,779	250,289	4,779	101,294	
13093	1	0	0	0	Irreg	350	105	Prod + Arb	3650	8	T	1966	S Gas	17/8	34	--	38,419	--	2,979	--	2,979	--	
18064	1	0	0	0	--	Vac	50	Prod	--	--	U	1976	S Gas	--	35	--	30,000	60,000	700	68,700	0	--	
18056	3	0	-	-	Irreg	0	293	Prod	--	--	T	1976	S Gas	--	--	--	321,035	759,273	10,239	17,409	39	1,291	
17236	1	0	0	0	Irreg	Vac	637	Prod	--	--	T	1974	S Gas	1/3	38	--	232,331	743,660	6,964	117,676	3,174	10,532	
17979	1	0	0	0	Irreg	Vac	258	Prod	--	--	U	1975	S Gas	7/93	40	--	94,170	236,946	4,669	12,114	--	--	
15916	1	0	0	-	Irreg	200	225	Prod	--	--	U	1970	Wat	3/2	38	--	82,125	500,260	3,537	37,480	0	0	
15850	1	1	-	-	Irreg	Vac	20	Prod + KC	3400	6	U	1968	Grav	1/1	36	--	5,000	--	2,600	--	--	--	*Was Lee Phillips.
13426	1	1	0	0	Irreg	600	800	Prod	--	--	U	1967	S Gas	4/9	33.9	--	252,000	2,485,254	2,276	53,750	1,775	42,229	
16804	1	0	0	0	Irreg	0	100	Prod	--	--	U	1972	S Gas	2/3	29	--	36,500	189,435	4,542	32,589	1,514	8,937	
13234	4	0	0	1	Irreg	160	155	Prod + Dak	430	60	M	1970	S Gas	1.06/ 1	41.2†	--	224,540	2,034,881	13,037	273,366	7,523	131,157	*Converted. †@60.
10846	1	0	0	0	Peri	0	337	Prod + Arb	3500	5	U	1964	S Gas	--	34	--	123,000	994,880	8,221	--	5,500	78,788	
13553	1	0	0	0	Peri	Vac	90	Prod + Arb	3530	5	U	1967	S Gas	34/20	30	--	16,470	336,769	4,565	364,253	3,835	7,115	
16583	1	0	0	0	Irreg	0-Vac	402	Prod	--	--	U	1972	Wat	1/2	34	--	146,997	1,311,757	7,980	666,104	0	0	*Was The El Dorado Refining Co.
13434 15682	1	0	0	0	Irreg	225	400	Prod + Fr	220	8	M	1967	S Gas	3/5	33	--	146,000	1,167,158	3,700	61,918	3,700	61,918	*Was Sun Oil Co.
9849	0	2	0	0	Peri	1800	250	Prod + Arb	3500	3	U	1963	S Gas	--	35	--	19,533	1,979,232	1,740	522,736	1,131	97,866	*The one injection well in use in 1977 has been inactive since June 1.
13544	1	0	0	0	Irreg	0	118	Prod	--	--	U	1960	S Gas	--	33	--	36,610	1,199,624	7,938	429,887	6,906	115,500	
9229	1	0	0	0	Irreg	0	3.5	Prod	--	--	U	1962	S Gas	2/3	36	--	1,278	26,028	1,034	82,567	317	917	*Was Colorado Oil & Gas Co.
9694	1	0	0	0	Irreg	0	--	Prod	--	--	U	1963	†	--	28	--	--	--	5,935	433,123	0	--	*Many different zones. †Pumping.
11815	0	2	0	0	Irreg	0	0	Prod	--	--	U	1965	S Gas	49/ 138	29	--	0	630,186	8,106	488,701	0	0	*No water injected.
11068	2	1	0	-	Peri	50	200	Prod	--	--	T	1964	S Gas	4/1	34	--	70,000	1,070,000	6,574	98,704	4,000	--	
CR-6772	1	0	0	0	Irreg	Vac	77	Prod	--	--	T	1977	S Gas	28/ 261	36	--	28,048	28,048	6,944	6,944	50	50	*Converted.
13470	0	--	-	-	Irreg	0	0	--	--	--	U	1967	S Gas	1/0	36	--	0	373,962	7,151	36,652	0	5,815	
15655	5	1	0	0	Peri	200-Vac	245	Prod	--	--	T	1970	S Gas	2/1	37	--	384,047	2,196,163	37,219	749,465	37,219	276,232	
15425	1	0	0	0	Peri	Vac	191	Prod	--	--	U	1970	S Gas	30/67	34	--	59,258	310,825	13,436	328,424	9,405	337,829	
14253	1	0	0	0	Irreg	Vac	251	Prod + Chey	740-1090	250±	U	1968	S Gas + Wat	5/1	35	--	91,588	852,819	8,637	107,140	6,478	80,355	*6 zones average 5'.
	85	21	0	1													11,047,737	110,747,494	629,147	19,484,501	357,826	5,129,004	
3145	10	2	0	0	Irreg	390	478	Prod + Dak	475	--	T	1961	S Gas	155/ 107	37	--	1,736,038	20,890,279	58,644	3,397,629	58,644	1,269,578	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
ELLSWORTH COUNTY																
16438	--	Geneseo-Edwards	Cities Service Co.	(D) Rathbun Arbuckle	Rathbun	16-17S-8W	96	0	Arb	3206	25	4	0	0	0	Yes
13631	Yes	Lorraine	Petroleum, Inc.	(W) Lorraine Unit	Rolfs, Offner Nienke, Janzen	11-17S-9W 12-17S-9W	480	0	LKC	2870	10	5	0	0	0	Yes
10057	No	Stoltenberg	Icer Addis	(W) Zvolanek "B"	Zvolanek "B"	33-15S-10W	30	--	Simp Sd	3246	10	1	0	0	0	Yes
18714	No	Stoltenberg	John Jay Darrah	(W) Vacek	Darrah, Vacek "A" John Vacek, Addis, Zoulaneck	32-16S-9W 33-16S-9W	400	--	Simp Sd	3250	9	4	1	1	0	Yes
16302	No	Wilson Creek	Arthur J.Gorski	(P) George Vopat A	George Vopat A	21-14S-10W	160	0	LKC	2820	14	12	0	0	0	Yes
16265	No	Wilson Creek	L.G.Stephenson & Co., Inc.	(P) Vopat D	Vopat D	21-14S-10W	160	0	Lans	2820	20	9	2	0	0	Yes
16442	No	Wilson Creek	L.G.Stephenson & Co., Inc.	(P) Al.Soukup/K.Vopat	Al. Soukup, Baker, Baker A, K.Vopat	16-14S-10W	320	0	Lans	2800	20	17	0	0	0	Yes
16708 16499	No	Wilson Creek	L.G.Stephenson & Co., Inc.	(P) Pekarek	Pekarek	20-14S-10W	120	0	Lans	2820	20	5	0	0	0	Yes
		ELLSWORTH COUNTY TOTALS (Reported)					1766	160				57	3	1	0	
FINNEY COUNTY																
13914	--	Damme	Palomino Petroleum*	(D) Clark	Clark	22-22S-33W	160	0	Miss	4693	10	2	0	0	0	Yes
16552	--	Damme	Texaco Inc.	(P) Garden City "B"	Garden City "B"	5-22S-33W	480	--	Marm	4412	--	9	2	0	0	Yes
9779	Yes	Nunn	Maurice L.Brown Co.	(P) Nunn	McHugh, Ely S.W.Maune, Davis Davis, Nunn Gobleman, Aeilts	23-21S-34W 26-21S-34W 27-21S-34W 34-21S-34W	1440	160	Marm	4276	9	19	0	0	0	Yes
		FINNEY COUNTY TOTALS (Reported)					2080	160				30	2	0	0	
FINNEY-HASKELL COUNTIES																
13423	Yes	Pleasant Prairie	Helmerich & Payne, Inc.	(P) Pleasant Prairie Unit	Tract 3 Tract 2 Tract 6 Tracts 7,8 Tracts 1,10 Tracts 1,9 Tract 1 Tracts 1,11 Tracts 1,12 Tracts 5,13 Tracts 13,14 Tract 4 Tract 15	17-26S-34W 18-26S-34W 19-26S-34W 20-26S-34W 29-26S-34W 30-26S-34W 31-26S-34W 32-26S-34W 33-26S-34W 4-27S-34W 5-27S-34W 6-27S-34W 8,9,16-27S-34W	6520	--	Miss	5050	15	63	6	0	0	Yes
FRANKLIN COUNTY																
11721	No	Baldwin	Layton Oil Co.	(W) Wellsville Project	Broers Wiseman	25-15S-20E 30-15S-21E	60	0	Squir	750	18	10	0	0	0	Yes
17598	--	Paola-Rantoul	William Caenen	(P) Kurz	Kurz	32-16S-21E	15	0	Squir	625	10	3	--	-	-	Yes
7526	*	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	0	Yes
12165 18352	--	Paola-Rantoul	Jackson Oil Co.	(W) Wellsville	Collins Coons, Shawen, Todd, Beckmeyer	31-15S-21E 32-15S-21E	--	--	Squir	720	20	47	0	8	0	Yes
17266	No	Paola-Rantoul	L L & B Oil Co.*	(P) Finch	--	29-16S-21E	190	0	Squir Sd	630	14	9	6	0	0	Yes
5495	--	Paola-Rantoul	Glen Layton Jr.*	(-) --	Naylor	33-16S-21E	5	--	Squir	--	20	1	--	-	-	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
16438	1	0	0	0	Irreg	820	76	Prod	--	--	F	1972	S Gas	25/ 420	37.3	--	22,547	148,879	5,532	546,214	798	6,095	
13631	1	0	0	0	Line	834	873	Prod + Dak	200	50	M	1967	Wat	693/ 292	35.8	7	318,768	3,090,688	10,517	395,598	10,517	158,161	
10057	1	0	0	0	Irreg	0	115	Prod	--	--	U	1962	Wat	--	37	--	41,975	428,485	2,871	12,788*	2,000	30,287	*Since 1973.
18714	1	0	0	0	Line	0	--	Prod + Arb	--	--	T	1977	Gas Exp	95/5	39	--	5,513	5,513	6,589	6,589*	2,460	2,460	*Vacek "A" lease only. Only lease helped by flood to date.
16302	2	0	0	0	Peri	300	200	Prod	--	--	U	1971	S Gas	9/1	38	--	146,000	396,000	18,800	150,800	4,200	17,400	
16265	2	0	0	0	Peri	350	197	Prod	--	--	U	1972	S Gas	83/ 17	37.5	--	71,997	589,516	38,859	619,746	0	0	
16442 16708	3	0	0	0	Peri	700	312	Prod	--	--	U	1972	S Gas	83/ 17	37.4	--	114,004	472,531	41,628	647,232	0	0	
16499	1	0	0	0	Peri	550	282.5	Prod	--	--	U	1972	S Gas	83/ 17	37.5	--	103,130	591,306	19,649	318,071	0	0	
	12	0	0	0													823,934	5,722,918	144,445	2,697,038	19,975	214,403	
13914	1	0	0	0	Irreg	0	102	Prod	--	--	U	1968	S Gas	1/1	30	--	37,230	213,305	9,538	310,647	5,800	57,700	*Was Rocket Drilling Co.
16552	1	0	0	0	Irreg	240	1531	Prod	--	--	U	1972	S Gas	688/ 57	28.4	--	558,815	1,771,022	90,728	1,084,744	--	--	
9779	1	4	0	0	Line	0	330	Prod	--	--	T	1958	S Gas	--	30	11.6*	119,213	3,164,308	39,551	3,421,996	19,775	258,799	*@100.
	3	4	0	0													715,258	5,148,635	139,817	4,817,387	25,575	316,499	
13423	7	0	0	0	Irreg	180/ 580	380	Prod	--	--	T	1966	Wat + S Gas	2573/ 3278	33.5	--	971,323	9,315,285	442,303	18,953,679	0	0	
11721	5	7	0	0	Line	700	7	Prod + Sd	60	40	F	1970	S Gas	1/5	26	--	13,263	473,231	445	9,276	445	9,276	
17598	1	--	-	-	5-Spot	500	20	Prod	--	--	M	1969	--	9/1	30	--	7,000	57,000	520	4,880	--	--	
7526	21	61	0	0	Line	690	10	Prod + Arb	1500	300	T	1959	S Gas	130/ 58	28	40	98,370	9,791,758	9,539	866,453	--	--	*Partial.
12165 18352	21	0	6	0	Irreg	650	345	Prod + Arb	1600	10	T	1965	Grav	1/3	25.7	--	125,284	1,663,122	14,124	252,046	4,237	81,366	
17266	1	8	0	0	4-Spot	490	7200	Prod + Squir	630	14	U	1974	Grav	95/5	--	--	7,200	--	874	--	874	--	*Was Glen Layton.
5495	4	--	-	-	Irreg	300	30	Prod	--	--	T	--	--	9/1	29	--	4,000	--	400	--	--	--	*Sold to Marion Towner 4/1/77.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
FRANKLIN COUNTY (Concl.)																
12728	--	Paola-Rantoul	Glen Layton Jr.*	(-) Hays	Hays	20-16S-21E	20	--	Squir	630	20	4	--	-	-	Yes
11109	No	Paola-Rantoul	Layton Oil Co.	(W) LeLoup Area	Revey Burgoon, Barnhizel Shawen-Hill	30-15S-21E 31-15S-21E 32-15S-21E	580	0	Squir	720	20	18	17	0	0	Yes
CR-8775	Yes	Paola-Rantoul	Oaks Petroleum Inc.*	(P) Oaks Project		10,12,15-17S-21E	930	--	Squir	600	15	24	18	20	0	Yes†
5012	No	Paola-Rantoul	Rader Oil Co.	(P) McConnell	McConnell	18-16S-21E	160	0	Squir	685	12	11	0	2	0	Yes
17259	No	Paola-Rantoul	Rader Oil Co.	(P) Coffman	Coffman	29-16S-21E	80	0	Squir	625	15	3	0	0	0	Yes
17387	No	Paola-Rantoul	Rader Oil Co.	(P) Stephens	Stephens, McGlashon	7-16S-21E	278	0	Squir	710	10	7	0	2	0	Yes
18459	No	Paola-Rantoul	Rader Oil Co.	(P) Slaven	Slaven Ayers	19-16S-21E 30-16S-21E	198	0	Squir	690	10	5	0	1	0	Yes
15342	No	Paola-Rantoul	Reed Oil Co.	(W) Rantoul	Gilliland, McCullough Detwiler	19-17S-21E 20-17S-21E	59	0	Squir	610	8	18	0	0	0	Yes
5419	No	Paola-Rantoul	L.O.Tenk	(W) Carter Waterflood	Carter, Needham, Ritchal Carter	17-18S-21E 18-18S-21E	640	0	Squir	550	17	27	0	4	0	Yes
FRANKLIN COUNTY TOTALS (Reported)							3515	0				217	62	37	0	
GOVE COUNTY																
13915	--	Albin	Chief Drilling Co., Inc.*	(P) Albin	G.Albin	10-14S-27W	320	0	Miss	4330	16	1	0	0	0	--
17846	No	Campus Siding	A.L.Abercrombie, Inc.	(D) Bloom	Bloom	2-11S-31W	230	10	LKC	4021	3	1	0	0	0	Yes
13217	--	Castle Rock	Chief Drilling Co., Inc.	(P) Sauer	Sauer	27-14S-27W	160	160	Miss	4300	16	1	0	0	0	Yes
16501	--	Castle Rock	Pickrell Drilling Co.	(D) Albin GH	Albin GH Unit, Leighton BF Unit	29-14S-27W	200	0	KC	3917	12	5	0	0	0	Yes
17166	--	Chapman	Pickrell Drilling Co.	(-) Chapman A	Oshay Chapman A	26-15S-26W 35-15S-26W	120	0	Marm	4338	17	2	0	0	0	Yes
CR-7779	No	Lundgren South	Energy Reserves Group*	(W) Lundgren WFS	E.J.Lundgren "A", E.J.Lundgren "B", R.L.Lundgren	31-14S-29W	400	0	Miss	4250	50	3	0	1	1	No†
17366	No	Missouri Flats	Donald C.Slawson	(W) Beesley C	Beesley C	27-14S-28W	320	0	LKC	3700	6	2	0	0	0	Yes
15205	--	Rosa	Pickrell Drilling Co.	(P) Rosa Becker B	Becker B	34-15S-27W	40	0	KC	4000	6	1	0	0	0	Yes
GOVE COUNTY TOTALS (Reported)							1790	170				16	0	1	1	
GRAHAM COUNTY																
9707	Yes	Blazier	Cities Service Co.	(W) Blazier LKC Unit	Blazier Unit	12,27,28-7S-25W	180	0	LKC	3800	20	4	4	0	0	Yes
17942	No	Brassfield	Murfin Drilling Co.	(P) Wolfe Waterflood	Murfin Drilling-Gustafson Murfin Drilling - Wolfe	25-9S-22W 36-9S-22W	480	0	LKC	3570	204	3	0	0	0	Yes
15497	Yes	Brush Creek	Cities Service Co.	(W) Brush Creek LKC Unit	Brush Creek Lansing-Kansas City Unit	4,9-9S-23W	106	0	LKC	3740	10	10	0	0	0	Yes
15929	No	Brush Creek Northwest	Dane G.Hansen Trust	(D) Wilson 'K'	Wilson 'K', McVey	32-8S-23W	240	0	LKC	3700	200	3	0	0	0	No*
17655	No	Brush Creek Northwest	Murfin Drilling Co.	(P) Brush Creek Inj. Coop	Wilson K - D.G.Hanson, McVey K - D.G.Hanson Fountain A - Murfin, Fountain B - Murfin	32-8S-23W 5-9S-23W	--	--	LKC	3686	40	6	0	0	0	Yes
18506	--	Cooper	John O.Farmer, Inc.	(P) Acheson	Acheson	14-10S-21W	160	--	LKC	3514	5	4	--	-	-	No*
12527	No	Cooper	Petroleum, Inc.	(W) Cooper Pilot Flood	Schmahlfeldt	24-10S-21W	160	0	Arb	3740	15	6	0	0	0	Yes
7966	No	Cooper	White Hawk Oil Co.*	(P) C.Smith Unit	Denning Rudman, Smith	32-9S-21W 5-10S-21W	160	0	LKC	3510	6	6	0	0	0	Yes
9110	Yes	Diebolt	Sun Production Co.	(W) Diebolt LKC	Diebolt LKC Unit	16,17,20,21,28, 29-10S-23W	1920	640	LKC	3050	20	20	23	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
12728	4	--	-	-	--	600	20	Pond	--	--	M	1948	Other	9/1	29	--	2,400	--	700	--	--	--	*Sold to Lowell Craig 8/1/77.
11109	2	5	0	0	5-Spot	650	16	Prod	--	--	U	1965	S Gas	1/3	25	--	10,793	13,648	3,330	17,305	3,330	17,305	
CR-8775	1	0	1	0	5-Spot	200	35	Prod	--	--	U	1977	Grav	9/1	32	--	100	--	--	--	0	0	*Was L L & B Oil. †Started injection 12/77.
5012	2	0	0	0	Irreg	150	23	Prod	--	--	U	1970	S Gas	10/1	26	--	16,790	88,090	3,700	--	475	--	
17259	2	0	0	0	Irreg	250	5	Prod	--	--	U	1975	S Gas	1/10	28	--	3,625	14,475	230	1,965	0	--	
17387	4	0	0	0	Irreg	150	25	Prod	--	--	U	1974	S Gas	1/9	27	--	36,000	84,250	3,025	7,495	525	--	
18459	1	0	0	0	Irreg	400	30	Prod	--	--	U	1976	S Gas	4/1	33	--	10,950	12,000	4,200	7,200	0	--	
15342	11	0	0	0	Irreg	500	18	Prod + Grav	20	5	M	1970	S Gas	1/0	29	--	70,320	785,701	4,228	64,314	4,228	64,314	
5419	8	0	0	0	5-Spot	200	3	Prod + Miss	945	87	T+S	1957	S Gas	1/0	27	--	8,760	506,960	8,497	154,497	123,597	--	
	88	81	7	0													414,855	13,490,235	53,812	1,385,431	137,711	172,261	
13915	1	0	0	0	Irreg	--	85	--	--	--	U	--	S Gas	--	36	--	26,500	129,769	8,339	42,815	2,500	10,000	*Was Tide Water Oil Co.
17846	1	0	0	0	Irreg	150	20	Prod	--	--	U	1975	S Gas	10/9	38	--	6,788	10,918	1,310	14,724	0	0	
13217	1	0	0	0	Irreg	0	76	Prod	--	--	U	--	S Gas	--	36	--	22,300	107,638	2,372	13,099	1,100	3,300	
16501	1	0	0	0	Irreg	0	22	Prod	--	--	U	1972	--	84/28	38	2.5	8,030	64,971	8,713	194,326	0	0	
17166	1	0	0	0	Irreg	0	15	Prod	--	--	U	1975	S Gas	11/18	39	2.5	5,475	10,476	2,725	42,251	0	0	
CR-7779	1	0	1	0	Irreg	540	550	Prod	--	--	U	1977	S Gas	1/3	35	--	68,439	68,439	8,434	63,634	0	0	*Was Marjorie Wright. †First injection 9/1/77.
17366	2	0	0	0	Irreg	0	155	Prod	--	--	U	1974	S Gas	5/1	38	3.5	56,522	143,130	23,847	158,188	30,609	--	
15205	1	0	0	0	Irreg	0	9	Prod	--	--	U	1970	S Gas	12/14	38	2.5	3,285	33,819	2,097	65,052	0	3,139	
	9	0	1	0													197,339	569,160	57,837	594,089	34,209	16,439	
9707	4	0	0	0	Peri	392	279	Prod + Dak	1500	--	T	1962	S Gas	1/1	39	--	315,531	4,233,462	21,475	1,000,286	21,475	487,214	
17942	1	0	0	0	Irreg	400	397	Prod + Arb	3908	--	T	1975	S Gas	1/4	38	--	138,375	271,523	5,368	69,037	2,684	8,443	
15497	5	0	0	0	Irreg	397	237	Prod + Ced H	1480	256	T	1970	S Gas	29/175	35	--	487,340	4,677,710	16,362	1,083,592	16,362	285,950	
15929	0	0	0	0	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*No water being injected in this system. All water being put in Murfins Fountain # 1.
17655	1	0	0	0	Irreg	Vac	219	Prod	--	--	T	1974	S Gas + Grav	1/5	34	--	79,949	316,662	7,261	146,101	7,261	--	
18506	1	--	-	-	Irreg	200	700	Prod	--	--	U	1976	Grav	--	32	--	252,000	319,500	26,622	309,922	6,000	6,000	*Pump only produced water.
12527	1	0	0	0	Irreg	Vac	251	Prod	--	--	U	1966	S Gas*	2254/†	34.8	8	91,726	1,061,766	9,817	721,331	9,817	195,719	* + edgewater. †2834.
7966	1	0	0	0	Irreg	200	571	Prod	--	--	U	1960	Wat	--	35	--	208,415	4,384,456	7,903	165,046	7,903	--	*Was Natural Gas & Oil.
9110	5	14	0	0	Peri	--	396	Prod	--	--	U	1962	S Gas	1/1.9	42	--	723,367	24,622,201	108,614	1,805,742	108,614	1,805,742	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
GRAHAM COUNTY (Cont.)																
14576	--	Elrick	Shenandoah Oil Corp.*	(W) Elrick Unit	Elrick Unit	3,9,10,14,15-10S-25W	1640	0	KC	3800	150	31	9	0	0	Yes
15410	--	Elrick East	Texaco Inc.	(W) East Elrick	J.P.Billinger, H.J.Rome "D", Frank	11-10S-25W	400	2.5	LKC	3750	0	5	0	0	-	Yes
14844	Yes	Emor	Bankoff Oil Co.	(W) Bollig Inj.	Bollig #1, Sauer #1 Brungardt #1	28-9S-25W 35-9S-25W	120	80	Lans	3870	4	3	0	0	0	Yes
16551	--	Emor	Texaco Inc.	(W) D.Spies	Spies	35-9S-25W	80	--	LKC	3800	3	2	0	0	0	Yes
11076 11084	Yes	Fabricius	Cities Service Co.*	(W) Fabricius LKC Unit	Fabricius Lansing-Kansas City Unit	19,23,24,25,26-7S-23W	680	80	LKC	3836	10	4	5	0	0	Yes
CR-77714	No	Fabricius South	Maurice L.Brown Co.	(P) Montgomery	--	2-8S-23W	80	0	LKC	3545	159	3	0	0	0	Yes
18387	Yes	Gra-Sher	Kimbark Operating Co.	(W) Gra-Sher Unit	Gra-Sher Unit	6-10S-25W	640	--	Tor + LKC	3700	200	9	0	1	1	Yes
16842 17634	--†	High Hill	Alta Loma Oil Co.*	(P) High Hill	Dave Rush 'B' Hobbs Unit Dave Rush 'A', Gay Rush Estate 'C', Dave Rush 'AB'	17-10S-24W 18,19-10S-24W 20-10S-24W	880	0	LKC	3725	250	10	0	1	0	Yes
9991	Yes	Holley	Cities Service Co.*	(W) Holley Unit	Holley	33-8S-24W	460	20	LKC	3957	4	5	0	0	0	Yes
6453	No	Holley	Fell & Wolfe Oil Co.*	(D) Blackburn	Blackburn	33-8S-24W	160	--	KC	3968	6	2	0	0	0	Yes
8742	--	Holley	Fell & Wolfe Oil Co.	(W) Holley Pool	Ida Keith	10-9S-24W	160	--	LKC	3924	40	4	0	0	0	Yes
10363	--	Holley	Fell & Wolfe Oil Co.*	(D) Clark	Clark	10-9S-24W	160	--	KC	3960	3-6	1	0	0	0	Yes
11613	--	Holley	Fell & Wolfe Oil Co.*	(-) Holley Pool	G.Keith, Keith "A", A.E.Hilerbrand	4-9S-24W	630	--	LKC	3775	209	9	0	0	0	Yes
12174	No	Holley	Herndon Drilling Co.	(-) Keith Waterflood	Keith	9-9S-24W	90	--	KC	3884	4	3	1	0	0	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" L.Keith "b-c", W.L.Bell, F.E.Watte D.Clark "A", R. McKinley Schemberger "C" A.J.Clark, W.L.Bell, Schemberger	30-8S-24W 31-8S-24W 32-8S-24W 5-9S-24W 6-9S-24W 25-8S-25W 36-8S-25W	2800	--	Lans Lime	3950	8	12	8	0	39	Yes
10367	--	Holley Southeast	Cities Service Co.*	(W) Holley S.E.W.F.	Nickelson	15-9S-24W	160	0	LKC	3847	12	1	1	0	0	Yes
15766	--	Hoof	Cities Service Co.	(W) Hoof LKC Unit	Hoof LKC Unit	9,16-10S-23W	573	--	LKC	3850	16	18	1	0	0	Yes
16528	Yes	Hoof Northwest	Cities Service Co.	(W) Hoff N.W.LKC Unit	Hoof N.W.LKC Unit	31-9S-23W	253	0	LKC	3900	6	9	0	0	0	Yes
13102	No	Hoof Northwest	Dane G.Hansen Trust	(D) Gano Input	Gano	6-10S-23W	160	0	LKC	3700	200	6	0	0	0	Yes
18445	No	Huntington	Beren Corp.*	(P) Huntington Coop	Huntington, Brandt F Moore, Brandt	7-7S-25W 18-7S-25W	640	0	LKC	3802	24	5	0	0	0	Yes
13981	No	Iron Clad	Glenn W.Peel Estate*	(D) Desair	Desair	26-9S-22W	160	0	LKC	3640	160	2	0	0	0	Yes
18347	Yes	Knoll North	Koch Exploration Co.	(W) Knoll N., LKC	Ploeger, Stevenson Walz, Dreiling	29-8S-25W 32-8S-25W	--	--	LKC	3770	--	7	0	0	0	No
15310	--	Kohart	Petroleum Management, Inc.	(-) Moore-Kurtz	Moore Kurtz	27-9S-24W 34-9S-24W	40	10	LKC	3906	997	1	--	-	-	No
16383	No	Knoll North	Dane G.Hansen Trust	(D) Hansen Estate Fee	Hansen Estate Fee	30-8S-25W	240	0	LKC	3825	200	4	0	0	0	Yes
10386 9379	--	Law Northwest	Burch Exploration Inc.	(D) --	Hildebrand A, Morris	28-9S-23W	320	120	LKC	3900	180	5	3	0	0	Yes
9536	--	Law Southeast	B-J Oil Co.	(W) --	Southeast Law Unit	12-10S-23W	--	--	--	--	--	--	--	-	-	--*
14298	Yes	Morel	Maurice L.Brown Co.	(W) LKC	Lansing - KC	14,23-9S-21W	400	0	LKC	3420	30	7	1	0	0	Yes
CR-77710	No	Morel	Graves Drilling Co., Inc.*	(A) Cooley	--	7-9S-21W	80	--	LKC	3550	10	2	0	0	0	Yes
14977	No	Morel	NCRA	(D) Shaw	Shaw	7-9S-21W	10	0	LKC	3641	15	1	0	0	0	Yes
11191	--	Nana Northwest	Cities Service 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	LKC	3600	10	2	2	0	0	Yes
14964	Yes	Redline	Petroleum, Inc.	(W) Redline NW L-KC Unit	Blakley Ninemire (Kaiser-Fran), Ninemire Lacerte, Lacerte "D", Lacerte "A"	30-9S-22W 24-9S-23W 25-9S-23W	960	0	LKC	3800	15	6	2	0	0	Yes
8553	--	Schmied	Petroleum Management, Inc.	(W) Madden-Davis Unit	Madden-Davis A, Madden-Davis B, Madden-Davis C	17-8S-25W	400	--	Lans Lm	3650	15	3	2	0	0	Yes
9396	No	Schmied	Willie E.Schultz*	(D) Madden-Davis "A"	Madden-Davis "A"	16-8S-25W	40	280	LKC	3800	60	3	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
14576	5	9	0	0	Irreg	0	545	Prod	--	--	T	1969	S Gas	9/1	40	3	979,655	14,341,260	101,796	1,998,590	82,157	1,180,717	*Was Empire Drilling Co.
15410	6	0	0	0	Irreg	510	125	Prod + Ced H	1690	190	U	1971	S Gas	42/116	41	2.6	272,876	2,937,252	17,577	257,416	17,577	202,582	
14844	1	0	0	0	Irreg	65	150	Prod	--	--	U	1969	Grav	4/1	36	--	54,750	685,740	4,660	98,360	4,000	--	
16551	1	0	0	0	--	Vac	88	Prod	--	--	U	1972	S Gas	45/94	41	--	32,120	236,088	8,427	91,051	--	--	
11076	6	4	0	0	Peri	622	181	Prod + Ced H	1435	--	T	1964	S Gas	100/25	40	--	442,410	7,801,381	12,266	1,406,800	12,266	560,465	*Was Imperial Oil Co.
11084 CR-77714	1	0	0	0	Peri	0	666	Prod	--	--	T	1977	S Gas	32/59	--	37	32,928	32,928	4,980	4,980	0	0	
18387	1	0	1	0	Peri	10	150	Prod + Ced H	400	20	M	1977	S Gas	25/150	38	--	45,000	45,000	9,066	955,840	0	--	
16842 17634	4	--	-	-	Peri	280	213	Prod + Ced H	1678	109	U	1973	S Gas	1/2	37	--	311,503	783,161	44,456	875,625	29,000	87,000	*Was King Oil Co. †Partially
9991	4	0	0	0	Irreg	885	179	Prod + Ced H	1800	--	T	1963	S Gas	1/1	37	--	288,465	2,816,437	6,811	553,926	6,811	235,141	*Was Imperial Oil Co.
6453	1	0	0	0	--	300	220	Prod	--	--	-	1958	--	--	33	--	68,764	--	3,776	--	--	--	*Was Sun Oil Co.
8742	1	0	0	0	--	500-600	290	Prod + Wat Sd	100	--	F	1963	--	--	38.5	--	180,589	1,382,580	1,854	11,617	--	--	
10363	1	0	0	0	--	450	325	Prod	--	--	-	1965	--	--	31.3	--	2,283	--	16,842	--	--	--	*Was Sun Oil Co.
11613	4	0	0	0	--	300	1250	Prod + Wat Sd	95	--	-	1965	--	--	38-40	--	171,480	3,549,927	12,785	--	--	--	*Was Champlin Pet. Co. and NCRA.
12174	1	0	0	0	5-Spot	0	106	Shallow Sd	40	--	F	1966	S Gas	--	40	--	38,845	638,897	2,024	64,393	2,024	--	
9577	5	8	0	0	Irreg	325	184	Prod + Ced H	1800	--	U	1963	S Gas	6727/8277	40	--	335,094	22,090,825	10,740	1,978,228	10,740	1,978,228	
10367	2	0	0	0	Irreg	440	187	Prod + Ced H	1400	--	T	1964	S Gas	14/63	37	--	99,950	1,453,111	4,144	326,268	4,144	92,134	*Was Imperial Oil Co.
15766	8	0	0	0	Peri	41	273	Prod + Ced H	1556	180	T	1970	S Gas	102/453	35	--	718,122	6,374,594	57,675	3,542,470	57,675	606,228	
16528	6	0	0	0	Peri	286	293	Prod + Dak	1662	78	T	1972	S Gas	26/38	38	--	651,629	2,841,688	49,150	1,066,133	49,150	279,179	
13102	3	0	0	0	Irreg	Vac	309	Prod + Dak	1322	88	T	1966	S Gas	8/2	39	--	338,198	1,929,076	33,048	417,617	--	--	
18445	1	0	0	0	Peri	0	342	Prod	--	--	U	1977	S Gas	--	36	--	106,106	106,106	7,331	7,331	0	0	*Was Brooks Hall and John O.Farmer.
13981	1	0	0	0	Irreg	Grav	36	Prod	--	--	U	1968	Wat	30/16	38	--	26,000	134,284	4,815	74,500	4,815	74,500	*Was Glenn W.Peel Oil.
18347	0	0	0	0	--	--	--	--	--	--	-	--	--	1/1	41	--	0	0	26,859	720,910	0	--	
15310	0	1	0	0	Irreg	--	--	--	--	--	-	1970	S Gas	1/0	--	--	0	0	436	4,278	0	0	
16383	1	0	0	0	Irreg	Vac	224	Prod	--	--	U	1972	S Gas	1/1	38	--	81,760	482,522	14,652	213,110	--	--	
10386	1	0	0	0	Irreg	300	131	Ced H	1600	210	U	1962	S Gas	--	36	6	47,841	2,300,976	12,239	310,437	12,239	2,265,374	
9379 9536	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Temporarily inactive.
14298	1	1	0	0	Irreg	0	1436	Prod + Arb	3750	40	T	1968	S Gas	--	33	--	509,050	3,858,266	15,269	301,268	15,269	230,952	
CR-77710	1	0	0	0	Irreg	0	40	Prod	--	--	U	1977	S Gas	1/4	34	--	7,200	7,200	2,000	291,500	--	--	*Was Monsanto
14977	1	0	0	0	Irreg	Vac	71	Prod	--	--	T	1969	S Gas	1/0	32.4	--	25,802	165,134	1,594	21,410	1,594	18,463	
11191	3	0	0	0	Peri	753	45	Prod + Ced H	1432	--	T	1966	S Gas	9.5/47.5	38	--	162,347	1,808,352	8,777	459,442	8,777	169,535	
14964	3	1	0	0	Line	Vac	641	Prod + Dak + Chey	1200 800	100	M	1969	S Gas	59/64	41.1	4	269,082	2,555,461	6,953	451,806	6,953	139,910	
8553	3	1	-	-	Peri	230	466	Prod + Ced H	1850	--	T	1961	--	5997/8865	41	--	475,413	8,080,584	6,532	422,048	6,532	95,814	
9396	1	0	0	0	Irreg	150	350	Prod	--	--	U	1961	S Gas	1/13	40	--	130,000	2,050,745	4,000	361,100	4,000	361,100	*Was Empire Drlg. 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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
GRAHAM COUNTY (Concl.)																
17324	No	Schnably	Thornton E.Anderson	(P) Jones	Jones	9-8S-22W	40	40	LKC	3507	3	1	0	0	0	Yes
9397	No	Shiloh	Wille E.Schultz*	(D) Minium	Minium	1,2-9S-25W	200	150	LKC	3800	60	2	0	0	0	Yes
17940	--	Trico West	Cities Service Co.	(W) Trico West Unit	Schneider	31-10S-20W	640	0	LKC	--	15	8	0	0	0	Yes
					Fondoble	36-10S-21W										
7334	No	Van	Koch Exploration Co.	(W) Sandzen	Sandzen	14-9S-22W	70	--	LKC	3490	20	3	0	0	0	No
10328	No	Van	NCRA	(W) Van Loenen	Van Loenen	14-9S-22W	50	10	Lans	3497	15	4	0	0	0	Yes
10172	Yes	Vesper	Petroleum, Inc.	(W) Vesper Unit	Sutor "E"	31-9S-22W	920	80	LKC	3460	22	12	6	0	0	Yes
					Rice, Lacerte "C", Manaugh, Vesper	36-9S-23W										
		GRAHAM COUNTY TOTALS (Reported)					18797	1513				277	68	2	40	
GRAHAM-SHERIDAN COUNTIES																
15006	No	Lindenman	Okmar Oil Co.	(-) Lindenman Coop	Lindenman, Ward	31-6S-25W	130	0	LKC	3830	5	4	0	0	0	Yes
					Vejl, Horton	36-6S-26W										
GRAHAM-TREGO COUNTIES																
6808	--	Diebolt	Cities Service Co.*	(W) N.W.Wakeeney Coop	Diebolt	33-10S-23W	290	160	LKC	3588	4	7	0	0	0	Yes
					Osborn, Walker, Surmeier	4-11S-23W										
					Osborn	5-11S-23W										
					Erickson	9-11S-23W										
GREENWOOD COUNTY																
17019	No	Beaumont	Adair Oil Co.	(P) Fowler	Fowler, Lewis	24-27S-8E	600	40	Miss	2426	16	3	0	0	0	Yes
17096	No	Beaumont	Stewart Bros.	(D) W.Edgar	W.Edgar	2-28S-8E	250	0	Miss	2490	14	4	0	0	0	Yes
					L.Edgar	11-28S-8E										
10680	--	Beaumont	K.T.Wiedemann Trust	(D) Edgar	Edgar	2-28S-8E	80	--	Miss	2480	--	7	0	3	0	Yes
12117	--	Beaumont	K.T.Wiedemann Trust	(W) Temple-Lewis	Lewis A, Lewis C, Temple	25-27S-8E	600	--	Miss	2431	--	19	0	0	0	Yes
17590																
8755	--	Browning	American Petrofina Co. of Texas*	(W) Browning "A"	Browning "A"	19-22S-10E	120	0	Bartl	2550	28	6	2	0	0	Yes
5726	No	Climax	McCarthy Oil Co.*	(P) Climax	Ferguson, Lane	4-27S-11E	160	--	Miss	1850	6	5	--	0	1	Yes†
					Lane	9-27S-11E										
2072	No	DeMalorie-Souder	R.R.Abderhalden*	(W) DeMalorie-Souder Unit	Central Unit	1-22S-10E	660	0	Bartl	2100	55	18	1	0	0	Yes
3123					East Unit	2-22S-10E										
3423					West Unit	11-22S-10E										
					Central Unit, East Unit	12-22S-10E										
7558	Yes	Virgil	R.R.Abderhalden*	(W) West Virgil Unit	Geist	13-24S-12E	539	0	Miss	1730	70	33	6	0	0	Yes
					Sullivan & Wayham	14-24S-12E										
9297	No	DeMalorie-Souder	R.R.Abderhalden*	(W) DeMalorie-Souder (Harris Unit)	Warrenburg	12-22S-10E	200	0	Bartl	2150	25	6	1	0	0	Yes
					Kipfer "A", "B", "C", "D"	13-22S-10E										
13779	No	DeMalorie-Souder	H.G.Forbes	(-) Clopton	Clopton	13-22S-10E	80	--	Bartl	2000	10	2	0	0	0	Yes
2071	No	DeMalorie-Souder	John P.Rodenbeck*	(D) Pix Unit	Pixlee	3-22S-10E	20	0	Bartl	2100	40	5	0	0	1	Yes
3124	--	DeMalorie-Souder	R.& G. Oil Co.	(-) DeMalorie-Souder	Clopton	18-22S-11E	160	--	Bartl	2100	40	3	0	0	-	--
5619	No	Dunaway	Ale Oil Co.	(W) --	Sauder Heirs	3-23S-13E	480	0	Miss	1850	15	12	0	0	0	Yes
2252	--	Dunaway	B B L Oil Producers	(W) --	Miller, Norris	27-22S-13E	60	--	Burg	1800	10	3	--	0	-	Yes
9459	No	Dunaway	Herbert H.Hart	(P) --	Koenig	27-22S-13E	220	--	Miss	1850	20	14	0	2	0	Yes
					Hessler	34-22S-13E			Lm							
10543	Yes	Dunaway	Larry Moore Ranch, Inc.	(W) R.W.Young	R.W.Young	22-22S-13E	20	30	Burg	1800	12	2	--	0	-	Yes
5200	No	Fankhauser	George A.Barnard	(P) Boles	Boles	10-22S-12E	80	10	Bartl	1750	25	2	0	0	0	Yes
2492	No	Fankhauser	Barnard-Wells Co.	(P) Swanson	Swanson	10-22S-12E	160	120	Bartl	1800	15	2	0	0	0	Yes
15037																
5968	No	Fankhauser	H.L.Ellis*	(-) Kipfer B	Kipfer B	5-22S-12E	160	80	Bartl	1894	17	3	4	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17324	1	0	0	0	Irreg	0	5	Prod	--	--	U	1974	S Gas	1/1	40	--	1,800	5,300	1,140	45,039	200	200	
9397	1	0	0	0	Irreg	0	800	Prod	--	--	U	1962	S Gas	3/1	38	--	290,000	2,298,774	3,800	141,021	3,800	141,021	*Was Empire Drilling Co.
17940	3	0	0	0	Peri	903	128	Prod	--	--	T	1976	S Gas	1/1	--	--	154,077	160,587	25,803	338,913	6,518	8,342	
7334	0	0	0	0	Irreg	--	--	--	--	--	-	1959	Gas Exp	1/0.5	30	--	0	1,188,753	6,208	558,802	6,208	108,423	
10328	1	0	0	0	Irreg	Vac	365	Prod	--	--	T	1963	S Gas	1/0	36.6	--	133,197	2,737,729	5,157	214,188	1,973	116,961	
10172	5	5	0	1	Line	116	370	Prod + Chey + Dak	800-1200	100	M	1963	S Gas	2850/1568	41.7	4	716,522	13,782,630	16,125	2,331,618	16,125	637,406	
	108	44	1	1													10,497,561	151,550,628	775,189	26,219,092	550,663	12,378,743	
15006	1	0	0	0	Peri	Vac	356	Prod	--	--	U	1969	S Gas	120/35	36	--	130,068	1,553,694	24,130	812,738	24,130	237,774	
6808	3	1	0	0	Irreg	281	392	Prod + Ced H	1500	--	T	1958	S Gas	--	40	--	429,359	6,247,274	7,653	2,094,958	7,653	758,081	*Was Imperial Oil Co., 4/1/65.
17019	1	0	0	0	Irreg	Grav	1	Prod	--	--	U	1973	Wat	--	35	--	1,250	8,190	4,663	23,335	0	0	
17096	1	0	0	0	Line	0	62	Prod	--	--	U	--	Gas Exp	--	37	--	22,630	120,216	7,245	79,024	--	--	
10680	1	0	0	0	Irreg	0	27	Prod	--	--	T	1963	Grav	--	35	--	9,855	98,145	6,456	275,315	--	--	
12117	1	0	0	0	Irreg	50	229	Prod	--	--	T	1974	Wat	--	33	--	83,445	305,185	10,593	1,337,734	--	--	
17590																							
8755	2	0	0	0	Irreg	450	317	Prod + Doug	1421	50	U	1965	S Gas	1/5	--	--	231,510	2,497,456	5,429	586,772	5,429	114,826	*Was the El Dorado Refining Co.
5726	2	--	0	1	7-Spot	650	200	Prod	--	--	T + S#	--	Wat	6/96	--	--	250,000	--	1,875	--	1,875	--	*Was Dick Soule. †#4 stopped taking water injected so converted #1A to a water injection well. #Emulsion breaker + corrosion inhibitor + acid treatment.
2072	6	6	0	0	Irreg	1100	100	Prod + Arb	2730	700	T	1949	S Gas	--	40	2.8	219,000	38,071,951	5,877	3,317,351	5,877	3,317,351	*Was Richard Soule.
3123																							
3423																							
7558	10	9	0	0	Irreg	220	40	Prod + Arb	2200	150	T	1958	S Gas	2/1	38	3.4	146,000	6,425,875	10,856	781,291	10,856	781,291	*Was Sun Oil Co.
9297	3	4	0	0	5-Spot	500	80	Prod + Arb	2730	700	T	1962	S Gas	--	40	4.1	87,600	9,688,027	1,912	468,700	1,912	468,700	*Was Richard Soule.
13779	1	0	0	0	Irreg	100	100	Prod	--	--	U	--	Grav	1/20	39	--	7,500	--	740	--	500	--	
2071	1	0	0	0	5-Spot	600	200	Prod + Doug	700	1000	M	--	S Gas	--	40	--	73,000	--	3,320	--	--	--	*Was B.B.Jamison 1971.
3124	1	0	0	7*	5-Spot	400	200	Prod	--	--	U	--	Grav	--	41	--	73,200	--	2,177	--	--	--	*Temporarily abandoned.
5619	3	0	0	0	Irreg	300	50	Prod + Doug	750	--	T	1957	Wat + Grav	1/1	34	--	50,000	1,011,400	10,000	126,700	3,000	--	
2252	1	--	-	-	Irreg	200	60	Prod	--	--	T	--	Grav	--	36	--	--	--	--	--	--	--	
9459	4	0	0	0	Irreg	350	125	Prod	--	--	U	1962	Grav	3/2	29* 38†	--	91,250	5,695,825	27,162	397,746	--	--	*Hessler †Koenig
10543	1	3	0	-	Irreg	225	300	Returned Prod	--	--	U	1963	Grav	4/1	37	--	109,500	2,208,250	2,704	216,089	--	--	
5200	1	0	0	0	Irreg	300	150	Prod	--	--	T	1975	S Gas	--	39	--	54,750	72,750	416	876	416	876	
2492	1	0	0	0	Irreg	600	200	Prod + Doug	750	20	T	1969	S Gas	--	39	--	73,000	864,312	2,570	61,955	2,570	61,955	
15037																							
5968	1	1	0	0	Irreg	250	80	Prod	--	--	T	1958	--	3/7	--	39	16,800	--	556†	--	200	--	*Sold to Donald Evans & Glen McIlvain 8/1/77. †1/1/77-8/1/77.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
GREENWOOD COUNTY (Cont.)																
7362	--	Fankhauser	Jackman & Jackman	(-) Fankhauser	Fankhauser	23-22S-12E	160	80	Bartl	1660	20	4	1	-	-	Yes
15638	No	Fankhauser	Barnard-Wells	(P) Norton	Norton	22-22S-12E	40	40	Bartl	1706	30	1	0	0	0	Yes
883	--	Fankhauser	R. & G. Oil Co.	(-) --	Fankhauser	4-22S-12E	80	400	Bartl	1900	25	4	0	0	0	Yes
2065																
17689	No	Gaffney	Forbes & Lester	(D) Lindamood	Lindamood	18-24S-11E	160	0	Peru	1500	7	1	0	0	0	Yes
16051	Yes	Gaffney	Geo. E.Sauder*	(W) Smith Unit	Barnes	12-24S-10E	400	--	Squir	1850	12	9	0	0	0	Yes
					Smith, Smith A,B,C	7-24S-11E										
--	No	Harris	L.B.Campbell	(D) Derbyshire	--	12-22S-11E	85	20	Bartl	2130	30	4	--	0	0	Yes
--	No	Harris	L.B.Campbell	(D) Clopton	--	18-22S-12E	160	100	Bartl	2100	30	2	--	0	0	Yes
2309	--	Harris	R. & G.Oil Co.	(-) Harris	Harris	19-22S-11E	--	0	Bartl	2060	40	2	0	0	0	--
14986	No	Lamont	Cheever Well Service, Inc.*	(W)--	Wernli	32-22S-13E	160	0	Bartl	--	--	2	0	0	0	Yes
16546	--	Lamont	R. & G. Oil Co.	(-) Lamont Unit D	Peter Fankhauser	23-22S-12E	--	--	Bartl	1670	50	3	0	0	0	--
5312	--	Polhamus	TG's Oil Enterprise*	(D) --	Dunlap	9-25S-9E	160	--	Bartl	2000	10	1	0	0	0	Yes
2676	No	Quincy	Bird & Hanley*	(W) Quincy	Dinius, King	31-24S-13E	1200	0	Bartl	1500	40	32	11	11	9	Yes
4497					Hollister, Shaw	5-25S-13E										
12234					Gilroy	6-25S-13E										
					Johnson	8-25S-13E										
					Hoggatt	9-25S-13E										
18220	--	Reece	H.G.Forbes	(D) Life	Life	13-26S-9E	640	--	Miss	2200	6-20	6	1	0	0	Yes
CR-	No	Reece	H.G.Forbes	(-) Mustard	Mustard	12-26S-9E	640	--	Miss	2100	8-20	7	0	1	0	Yes
9777																
3565	No	Sallyards	R.R.Abderhalden	(W) Blankenship Sallyards Unit	F.H.Hull "A" & "B"	35-25S-8E	520	0	Bartl	2425	39	20	2	0	0	Yes
					F.H.Hull "A" & "B", A.L.Stevenson	2-26S-8E										
					A.L.Stevenson	11-26S-8E										
3482	No	Sallyards	Beard, English & Martin*	(W) Bryden-Ladd	Bryden-Ladd-Hoffman Unit	25,36-25S-8E 19,20,30,31-25S-9E	600	300	Bartl	2470	50	16	0	0	0	Yes
5052	No	Sallyards	Jackson Brothers*	(D) Ladd "C"	Ladd "C"	26,35-25S-8E	320	40	Bartl	2450	15	4	0	1	0	Yes
12717	No	Sallyards	Hank Martell Oil Co.	(P) Bates	Bates	30-25S-9E	64	0	Bartl	--	--	2	--	0	0	Yes
18526	No	Sallyards	Hank Martell Oil Co.	(-) King-Ladd	--	25,26,35-25S-8E	360	0	Bartl	2432	14	2	0	0	0	Yes
11096	No	Sallyards	Nadel and Gussman	(W) Jackson Heirs	Jackson Heirs	23,25-25S-8E	80	20	Bartl	2400	15	3	8	0	0	Yes
14001																
18193	Yes	Sallyards	Teichgraeber Oil Operations	(P) Hendrickson	Hendrickson	17,18-25S-9E	240	1	Bartl	2289	20	9	1	2	-	Yes
17648	No	Seeley-Wick	Barnard-Wells Co.	(D) Rickabaugh	Rickabaugh	4-23S-11E	80	40	Bartl	1940	9	2	0	0	0	Yes
10083	--	Seeley-Wick	H.L.Ellis	(W) --	Roy & Pearl Kipfer	12-22S-11E	40	20	Bartl	1770	41	2	0	0	0	Yes
3342	No	Seeley-Wick	H.G.Forbes	(D) Freeburg	Freeburg	22-22S-11E	80	0	Bartl	1900	10	2	0	0	0	Yes
17131	--	Seeley-Wick	Glacier Petroleum Co.	(P) Jones	Jones	6-22S-12E	20	--	Bartl	1884	10	2	--	-	-	--
16739	No	Seeley-Wick	Warren G.Godfrey*	(W) Lyke	Lyke	8-24S-12E	80	0	Bartl	1700	20	3	0	0	1	Yes
13360	--	Seeley-Wick	Cloide J.Hensley*	(P) Cloide J.Hensley	Hensley	6-22S-12E	30	--	Bartl	1775	30	0	1	0	0	Yes
8952	No	Seeley-Wick	Hank Martell Oil Co.	(P) Humes	Humes	29,30-22S-11E	240	0	Bartl	2100	15	1	0	0	0	--
12172	--	Seeley-Wick	E.C.Murphy	(-) Gardner & Winkler	Gardner, Winkler	1-22S-11E	160	--	Bartl	1900	16	2	1	0	0	Yes
10954	--	Seeley-Wick	Geo. E.Sauder	(W) Wilson-Lewis	Lewis Johnson	8,9-24S-12E	120	20	Bartl	1700	18	8	0	0	0	Yes
11213	No	Seeley-Wick	Geo. E.Sauder	(W) Huber-Curtis	Huber-Curtis	7,8-22S-12E	70	20	Bartl	1720	20	5	0	0	0	Yes
5095	--	Seeley-Wick	Schankie Well Service, Inc.*	(W) BEC Unit	C.G.Beal	28-23S-11E	490	200	Bartl	1950	12	6	--	0	-	Yes
14908					Tom Edwards	29-23S-11E										
					C.G.Beal	32-23S-11E										
					Carson, D.A.Edwards	33-23S-11E										
11615	--	Seeley-Wick	K.E.Snyder	(D) Shaefer Flood Project	Shaefer	27-23S-11E	40	0	Bartl	1920	22	9	0	0	0	Yes
14151	Yes	Seeley-Wick	Teichgraeber Oil Operations	(D) Greenwood	Greenwood	6-23S-21E	240	0	Bartl	2100	12	4	0	0	0	Yes
1362	--	Seeley-Wick	Tesoro Petroleum Corp.	(W) Clopton	Clopton	8-23S-11E	320	--	Bartl	1750	15	3	2	0	0	Yes
5552	--	Seeley-Wick	Tesoro Petroleum Corp.	(W) Seeley-Wick	F.Nisbet, Schultz	31-23S-12E	560	400	Bartl	1800	15	22	2	0	0	Yes
11091					W.Nisbet, Ratcliff, Smith	6-24S-12E										
10368	Yes	Seeley-Wick	White & Ellis Drilling,Inc.	(W) Kipfer	Kipfer	1,12-22S-11E	320	0	Bartl	1760	17	9	0	0	0	Yes
17991	--	Seeley-Wick	E.L.Williams*	(D) Galbreath	Galbreath	31-22S-11E	160	160	Bartl	1971	26	1	--	0	0	Yes
16709	--	Stanhope	TG's Oil Enterprise*	(D) --	Tose B & C	22-26S-8E	320	--	Miss	2450	20	2	0	0	1	Yes
12236	No	Teichgraeber	Alta Loma Oil Co.*	(P) Spencer	Spencer	18-25S-9E	80	0	Bartl	2375	23	5	0	0	0	Yes

Oros, Saile, and Sherman—Enhanced Oil-Recovery Operations in Kansas, 1977

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
7362	2	2	0	0	Irreg	77	220	Prod + Bartl	1600	20	T	--	Grav	--	38	--	80,300	--	2,317	--	2,317	--	
15638	1	1	0	0	Irreg	100	75	Prod	--	--	T	1975	S Gas	--	38	--	27,375	45,675	462	892	462	892	
883	1	0	0	0	5-Spot	200	230	Prod	--	--	U	--	Grav	--	40	--	0	--	916	--	--	--	
2065																							
17689	1	0	0	0	Irreg	50	30	Prod	--	--	U	--	Grav	1/20	36	--	4,000	--	161	--	160	--	
16051	4	0	0	0	Irreg	50	50	Prod + Doug	950	100	T	1971	Grav	1/1	39	--	70,000	233,000	1,880	85,293	0	--†	*Was Dimick and Dimick. †This flood is not working out.
--	2	--	0	0	Irreg	100	200	Prod	--	--	T	1952	--	--	40	--	73,000	2,177,625	1,304	154,871	--	--	
--	1	1	0	0	Irreg	100	300	Prod	--	--	T	--	--	--	40	--	100,000	2,190	1,756	--	--	--	
2309	--	0	0	0	Irreg	0	0	--	--	--	-	--	--	--	39	--	0	--	3,172	--	--	--	
14986	1	0	0	0	Irreg	300	25	Prod	--	--	U	--	--	--	--	--	1,525†	--	125†	--	--	--	*Was D.A.Ball. †Production for 11,12/77.
16546	1	0	0	0	Irreg	50	175	Prod	--	--	U	--	Grav	--	40	--	64,050	--	1,322	--	--	--	
5312	1	0	0	0	Irreg	50	30	Prod	--	--	U	--	Grav	1/9	39	--	--	10,950	--	745	--	--	*Was Sam P.Wallingford.
2676	14	9	0	2	Irreg	700	110	Prod	--	--	T	1950	Gas Exp	1/0	40	5	560,747	9,839,656	72,748	646,519	--	--	*Was Bird, Hanley & Sheedy.
4497																							
12234																							
18220	1	0	0	0	Irreg	100	200	Prod	--	--	U	--	Grav	1/50	31	--	55,000	--	3,000	--	2,000	--	
CR-9777	1	0	-	-	Irreg	25	200	Prod	--	--	U	1977	Grav	2/50	38	--	3,000	--	2,700	--	1,000	--	
3565	7	4	0	0	Irreg	600	100	Prod + Doug	1400	60	T	1953	S Gas	2/1	37	--	255,500	28,220,244	8,760	3,162,180	8,760	3,162,180	
3482	4	0	0	0	5-Spot	750	400	Prod + Doug	1290	--	-	1952	S Gas	--	37-40	--	--	--	23,632	166,090	--	--	*Was Marathon Oil Co.
5052	1	0	0	0	Peri	0	2	Prod	--	--	U	1958	S Gas	5/1	38.5	--	675	--	1,314	--	788	--	*Was T.E.Lilystrand.
12717	1	--	0	0	Irreg	800	200	Prod	--	--	U	1966	S Gas	3/1	40	--	73,000	686,200	1,166	--	--	--	
18526	1	0	0	0	Irreg	100	100	Prod	--	--	T	1976	S Gas	1/1	40	--	36,500	41,800	840	--	--	--	
11096	2	3	0	0	Irreg	600	63	Prod + Doug	1400	80	T	1964	S Gas	1/0	39	--	46,252	1,054,708	1,968	--	1,968	50,869	
14001																							
18193	1	--	-	-	Irreg	250	150	Prod	--	--	U	1976	S Gas	1/1	39	--	54,750	82,290	14,973	21,964	--	--	
17648	1	0	0	0	Irreg	0	75	Prod	--	--	T	1974	Wat	--	40	--	27,375	40,875	2,329	9,382	2,329	9,382	
10083	1	0	0	0	Irreg	300	75	Prod	--	--	T	1962	Grav	4/1	38	--	27,000	--	910	--	350	--	
3342	--	--	-	-	Irreg	100	100	Prod	--	--	U	--	Grav	--	37-38	--	30,000	--	1,700	--	1,500	--	
17131	1	--	-	-	Irreg	0	45	Prod	--	--	U	--	S Gas	--	38	--	14,625	--	1,050	--	--	--	
16739	2	0	0	0	5-Spot	350	150	Prod	--	--	T	--	--	--	40	--	292,000	--	3,441	--	--	--	*Was Glenn Supply Co., 1972.
13360	1	--	-	-	Irreg	100	10	Prod	--	--	U	1968	Grav	10/1	40	--	3,500	--	750	--	--	--	*Was Grosshans-Peterson.
8952	1	--	0	0	Irreg	0	20	Prod + Doug	1200	100	-	1961	--	7/3	36	--	7,300	251,810	166	--	--	--	
12172	2	1	0	0	Irreg	Vac	140	Prod + Bart	1900	16	T	--	Grav	--	39	--	51,100	--	1,701	--	1,701	--	
10954	5	0	0	0	Irreg	300	165	Prod + Doug	600	100	T	1951	Grav	1/3	42	--	300,000	3,485,000	6,780	138,950	6,780	--	
11213	2	0	0	0	Irreg	400	120	Prod + Doug	600	100	T	1959	Grav	9/1	38	--	88,000	1,353,000	2,500	200,370	2,500	200,370	
5095	3	--	0	-	Irreg	600	100	Prod + Doug	850	75	T	1959	Wat	1/1	38	--	95,000	--	4,800	--	900	--	*Was Letha Dimick.
14908																							
11615	2	0	0	0	5-Spot	800	75	Prod + Doug*	1090	80	U	1972	S Gas	55/110	41	--	54,750	309,700	6,573	375,511	6,573	37,646	*Inactive
14151	--	--	-	-	5-Spot	0	50	Prod	--	--	U	--	S Gas	1/1	39	--	6,400	105,090	1,304	40,676	--	--	
1362	2	4	0	0	5-Spot	400	272	Prod + Doug	650	50-75	U	1946	Gas Exp	--	43	--	198,935	4,067,948	2,965	1,295,119	--	--	
5552	9	1	0	0	5-Spot	470	196	Prod + Doug	725	50	M	--	S Gas	--	40	--	642,324	8,908,984	20,598	667,867	--	--	
11091																							
10368	2	0	0	0	Irreg	150	85	Prod + Doug	700	100	T	1963	S Gas	3/1	41	--	30,000	854,200	3,770	294,765	--	--	
17991	1	--	0	-	Irreg	Grav	24	Prod	--	--	U	1975	Grav	1.5/24	36.5	--	8,760	--	800	---	--	--	*Was Chet Thompson.
16709	1	0	0	0	Irreg	60	250	Prod	--	--	U	--	Grav	1/9	36	36	--	91,250	1,299	1,299	--	--	*Was K.T.Wiedemann.
12236	3	0	0	0	Irreg	850	100	Prod + Doug	1290	90	U	1965	S Gas	1/1	40	--	87,675	904,412	6,781	142,454	6,400	45,845	*Was King 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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
GREENWOOD COUNTY (Cont.)																
11737	No	Teichgraeber	Nadel and Gussman	(W) Welsh-Birkett	Birkett Welsh	12-25S-8E 13,14-25S-8E	300	0	Bartl	2350	15	46	5	0	0	Yes
13198	No	Teichgraeber	Nadel and Gussman	(W) Spencer	Spencer	18-25S-9E	40	0	Bartl	2400	15	3	1	0	0	Yes
3293 3357 10274	--	Teeter	Berentz Drilling Co.*	(W) J.W.Teter Unit	J W.Teter Unit Teter-Spencer	21-23S-9E 22-23S-9E	120	280	Bartl	2425	30-90	4	2	4	2	Yes
11169	--	Teeter	K.E.Snyder	(D) Green 'B' Flood Project	Green 'B'	1,2,11,12-23S-9E	40	0	Bartl	2410	45	9	0	1	0	Yes
10430	--	Teeter-Scott	Glacier Petroleum Co.,Inc.	(P) Noller A	Noller A	9,10-23S-9E	25	--	Bartl	2450	35	6	--	-	-	Yes
14306	No	Teeter-Scott	Glacier Petroleum Co.,Inc.	(P) Noller	Noller	3-23S-9E	10	--	Bartl	2450	35	2	0	0	0	Yes
14901	No	Teeter-Scott	Glacier Petroleum Co.,Inc.	(P) Hartley "B"	Hartley "B"	2-23S-9E	60	--	Bartl	2450	50	6	1	0	0	Yes
2226	Yes	Thrall-Aagard	The Maurice L.Brown Co.	(W) Thrall-McKee Consolidated	Thrall McKee Thrall McKee, Louisa Thrall, Ernestine Thrall Thrall McKee	28-23S-10E 29-23S-10E 32,33-23S-10E	640	560	Bartl	2300	31	1	0	0	0	Yes
2743	Yes	Thrall-Aagard	The Maurice L.Brown Co.	(W) Cartwright	--	36-23S-9E 1-24S-9E 6-24S-10E	325	--	Bartl	2200	35	8	4	0	2	Yes
10734	No	Thrall-Aagard	The Maurice L.Brown Co.	(W) Moore-Holverson	Moore, Aagard Hill Hill, Holverson	23-24S-9E 25-24S-9E 26-24S-9E	275	0	Bartl	2120	20	6	0	0	0	No*
15438	Yes	Thrall-Aagard	The Maurice L.Brown Co.	(W) George I.Miller	George I.Miller	28-23S-10E	40	0	Bartl	2385	25	4	0	0	0	Yes
16865	--	Thrall-Aagard	Glacier Petroleum Co.,Inc.	(-) Eide-Hill	Eide, Hill	26,27-24S-9E	--	--	--	--	--	--	--	-	-	--
17510	--	Thrall-Aagard	Glacier Petroleum Co.,Inc.	(P) Bratton	Bratton	14-24S-9E	10	--	Bartl	2110	91	2	1	-	-	Yes
8109	Yes	Thrall-Aagard	J. & T. Cooper*	(W) Bratlon-Mansfield	Bratlon-Mansfield	13-24S-9E	200	200	Bartl	2200	20	11	0	0	0	Yes
13474	No	Thrall-Aagard	Kenneth C.McKee*	(D) Boone-Moore	Moore Boone	24-24S-9E 25-24S-9E	160	--	Bartl	2160	13	3	0	0	0	Yes
9922	--	Virgil	Brunson-Spines,Inc.	(W) Johnson	Johnson	23-24S-12E	450	0	Miss	1700	15	14	5	0	0	Yes
18244	--	Virgil	Brunson-Spines,Inc.	(W) Lane	--	26-24S-12E	160	--	Bartl	1658	10	3	1	0	0	Yes
192	--	Virgil	French & Winterscheid,Inc.	(P) Hout-Meyers	Meyers Hout	10-24S-12E 11-24S-12E	50	70	Miss Lm	1700	5	3	0	0	0	Yes
221	--	Virgil	French & Winterscheid,Inc.	(P) Shadel	Shadel	15-22S-13E	120	60	Miss Lm	1800	6	6	0	0	0	Yes
3259	--	Virgil	French & Winterscheid,Inc.	(P) L.Young	L.Young	10-23S-13E	40	40	Miss Lm	1800	6	4	0	0	0	Yes
3915	--	Virgil	French & Winterscheid,Inc.	(P) Lovett & Shambaugh	Lovett, Shambaugh	22-23S-13E	100	--	Miss Lm	1700	6	7	0	0	0	Yes
12482	--	Virgil	French & Winterscheid,Inc.	(P) Dame	Dame	12-24S-12E	80	40	Miss Lm	1700	6	8	0	0	0	Yes
12408	No	Virgil	Long Oil Co.	(P) Barnes	Barnes, Sharp	7-24S-13E	139	--	Miss Lm	1664	16	2	--	1	-	Yes
15502	No	Virgil North	Ale Oil Co.	(D) Ale Oil Co.	Gruber Imthurn	33-22S-13E 4-23S-13E	200	0	Miss + Viola	1850	15	4	2	1	0	Yes
18152	No	Virgil North	Barnett Oil,Inc.	(D) Demler W.F.	Demler	21-23S-13E	160	0	Miss	1726	26	5	0	0	0	Yes
1057 15851	No	Virgil North	Kewanee Oil Co.*	(W) Schneider	Schneider	10-23S-13E	40	0	Miss	1770	15	7	2	0	1	Yes
5838	--	Virgil Northeast	Sun Production Co.	(W) Shadel	Shadel	15-23S-13E	160	--	Bartl	1540	50	3	0	0	0	No*
6126	--	Virgil Northeast	Sun Production Co.	(-) Olinger A	Olinger A	15-23S-13E	10	2	Miss Lm	1720	30	4	0	0	0	Yes
6135	--	Virgil Northeast	Sun Production Co.	(W) Jones A	Jones A Dehlinger A	21-23S-13E 28-23S-13E	80	12	Miss Lm	1670	55	7	1	0	0	Yes
8090	--	Virgil Northeast	Sun Production Co.	(W) Griblin A	Griblin B	21-23S-13E	160	10	Miss Lm	1750	30	6	0	0	0	Yes
16111	No	Virgil Northeast	Sun Production Co.	(W) Dehlinger B	Dehlinger B	29-23S-13E	160	20	Miss Lm	1700	10	6	0	0	0	Yes
16617	No	Wiggins	Barnard-Wells Co.	(P) Wiggins	Nixon Wiggins	25-24S-10E 30-24S-11E	400	320	Cattle	1830	15	5	0	0	0	Yes
17508	No	Wiggins	Barnard-Wells Co.	(P) Lindamood	Lindamood	19-24S-11E	80	40	Cattle	1800	25	1	0	0	0	Yes
11069	No	Wilkinson	E.W.Sauder	(P) Olsen	Olsen	6-25S-9E	20	--	Cattle	2100	20	2	1	0	0	Yes
11036	No	Wilkinson	Geo.E.Sauder	(D) Wilkinson-Carrington	Carrington Wilkinson	6-25S-9E 7-25S-9E	40	20	Cattle	2100	30	4	0	0	0	Yes
CR-4777	--	Willard	McCarthy Oil Co.	(P) Cross	Cross	12-27S-10E	160	--	Miss	1950	7	2	--	0	-	Yes
15095	--	Willow Creek	Oscar Koepke	(-) Feltner & Feltner B	Feltner	31-22S-11E	100	0	Bartl	2000	30	1	0	0	0	--
13840	--	Willow Creek	Geo.E.Sauder	(D) Warren	Warren	6-23S-11E	40	0	Bartl	2050	20	10	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
11737	8	1	0	0	Irreg	1500	184	Prod + Doug	1000	50	T	1967	S Gas	95/5	41	--	538,434	5,676,034	62,581	--	62,581	654,741	
13198	2	1	0	0	Irreg	700	118	Prod + Doug	1000	50	T	1967	S Gas	9/1	39	--	86,146	985,300	7,896	--	7,896	38,350	
3293	1	2	0	0	5-Spot	450	120	Prod + Doug	1400	60	T	1963	S Gas	--	42	5	34,000	216,650	2,504	186,778	2,504	186,778	*Was Sinclair Oil.
3357																							
10274																							
11169	1	0	0	0	Irreg	0	140	Prod	--	--	U	1967	S Gas	48/130	39	--	51,100	741,875	6,304	313,866	6,304	128,635	
10430	1	--	-	-	Irreg	600	235	Prod	--	--	U	--	S Gas	--	39	--	76,200	--	5,670	--	--	--	
14306	--	--	-	-	Irreg	140	35	Prod	--	--	U	--	S Gas	--	40	--	10,500	--	1,700	--	--	--	
14901	2	--	-	-	Irreg	350	340	Prod	--	--	U	--	S Gas	--	39	--	110,500	--	6,022	--	--	--	
2226	1	3	0	0	5-Spot	450	272	Prod + Doug	1200	--	T	1949	S Gas	--	40	3.4	18,350	58,137,697	80	6,256,729	80	3,981,265	
2743	8	12	0	0	5-Spot	826	282	Prod + Doug	1200	40	T	1952	S Gas	--	40	5	822,555	30,431,709	10,593	1,301,105	10,593	1,301,105	
10734	0	5	0	16	Irreg	0	0	Prod + Doug	1000	50	T	1963	S Gas	--	40	3.2	0	8,170,632	1,960	496,564	1,960	496,564	*Injection wells shut down.
15438	1	0	0	0	Irreg	421	503	Prod + Doug	1200	140	T	1967	S Gas	--	40	3.4	180,300	1,072,649	5,544	123,658	5,544	119,531	
16865	--	--	-	-	--	0	0	--	--	--	-	--	--	--	--	--	0	--	--	--	--	--	
17510	1	--	-	-	Irreg	150	75	Prod	--	--	U	--	--	--	38	--	22,500	--	540	--	--	--	
8109	9	0	0	0	Irreg	1000	800	Prod + Doug	1000	100	T	--	S Gas	98/2	40	--	--	--	--	7,801	--	7,801	*Was R.R.Riss.
13474	1	0	0	0	Irreg	--	2	Prod	--	--	M	1967	Grav	5/1-3	37-38	--	500	5,900	1,163	24,725	200	5,275	*Was Bedell-Catt.
9922	3	11	0	0	5-Spot	800	49	Prod + Arb	2100	--	U	1962	S Gas	38/70	38	--	53,472	16,139,299	7,990	357,347	--	--	
18244	1	1	0	0	Irreg	1200	152	Prod	--	--	U	1970	S Gas	1/10	33	--	55,586	550,933	2,810	34,387	--	--	
192	1	0	0	0	Irreg	130	125	Prod	--	--	T	1964	Wat	2/3	39	--	30,000	336,000	5,200	--	2,600	40,508	
221	1	0	0	0	Irreg	150	300	Prod	--	--	T	1955	Wat	1/1	--	--	900,000	9,021,000	5,750	--	2,875	47,788	
3259	1	0	0	0	Irreg	80	120	Prod	--	--	T	1955	Wat	55/45	36	--	30,000	628,000	1,940	--	970	24,562	
3915	1	0	0	0	Irreg	50	230	Prod	--	--	T	1956	Wat	55/45	36	--	900,000	9,900,000	4,893	--	2,446	52,609	
12482	1	0	0	0	Irreg	300	300	--	--	--	T	1966	Wat	1/1	38	--	79,000	790,000	3,768	--	3,768	46,471	
12408	1	--	-	-	Irreg	Grav	50	Prod	--	--	U	1966	Grav	--	38	--	18,250	--	900	--	65	--	
15502	1	0	0	0	Irreg	Grav	40	Prod	--	--	T	1970	Grav	1/4	26	--	14,000	95,000	2,300	31,380	500	1,500	
18152	1	0	0	0	Irreg	Vac	100	Prod	--	--	U	1976	S Gas	15/100	39	--	36,500	45,100	4,678	5,918	500	500	
1057	3	1	0	0	Irreg	1100	117	Prod	--	--	U	1944	S Gas	5/47	39	--	127,719	1,038,377	7,619	1,261,255	7,619	61,378	*Was Barbara Oil Co.
15851																							
5838	0	1	0	0	--	--	0	--	--	--	U	1938	S Gas	--	36.2	4.5	0	17,661,825	3,840	192,936	--	--	*Injection stopped in 1977.
6126	1	0	0	0	Irreg	--	56	Prod	--	--	U	1959	S Gas	--	38.8	3.5	20,486	348,746	2,574	69,790	2,574	69,790	
6135	2	1	0	0	Irreg	--	171	Prod	--	--	U	1958	S Gas	--	39.4	3.5	124,516	3,099,857	11,357	280,896	11,357	280,896	
8090	3	0	0	0	Irreg	--	397	Prod	--	--	U	1961	--	1/4	34.3	3.4	434,610	9,191,647	3,574	148,703	3,574	148,703	
16111	2	0	0	0	Irreg	--	281	Prod	--	--	T	1971	S Gas + Wat	1/21	39.2	4	205,419	1,508,742	7,699	65,535	7,699	65,535	
16617	2	0	0	0	Irreg	500	250	Prod	--	--	T	1966	S Gas	--	38	--	91,250	1,010,465	4,094	43,838	4,094	43,838	
17508	1	0	0	0	Irreg	500	200	Prod	--	--	T	1974	S Gas	--	38	--	73,000	293,800	532	1,854	532	1,854	
11069	--	--	-	-	Irreg	350	100	Prod	--	--	T	1964	Grav	1/4	37	--	35,000	680,500	1,400	120,830	1,000	30,200	
11036	1	--	-	-	Irreg	450	75	Prod + Doug	1000	100	-	1964	Grav	7/3	38	--	2,750	347,250	2,970	28,995	--	--	
CR-4777	1	--	0	-	4-Spot	Grav	200	Prod + Miss	1950	7	T*	1977	Wat	4/96	27.5	--†	--	140,000	923	--	923	--	*+Corosion inhibitor, +Emulsion breaker + Acid. †Heavy (Gravity)
15095	1	0	0	0	Irreg	20	80	Prod + Doug	900	100	U	--	--	1/1	39	--	29,200	282,800	5,440	29,757	2,720	12,700	
13840	1	0	0	0	5-Spot	200	20	--	--	--	-	1968	Grav	95/5	38	--	7,000	78,000	3,500	190,000	1,200	15,330	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
GREENWOOD COUNTY (Concl.)																
14342	No	Zimmerman	J. & T.Cooper*	(W) Zimmerman	Zimmerman	19-23S-10E	50	0	Bartl	2300	12	4	0	0	0	Yes
		GREENWOOD COUNTY TOTALS (Reported)					19412	3815				600	70	27	18	
HARPER COUNTY																
17631	--	Runnymede	Texaco Inc.	(P) Runnymede U.	Springer Unit Litsey Unit	23,24-31S-6W 25,26-31S-6W	320	--	Lans	3613	--	8	0	0	0	Yes
HARVEY COUNTY																
10087	No	Burrton	Home-Stake Production Co.	(W) Burrton Waterflood	Martindale, LeClere, Howell, Fredierick "A", Martin Cunningham, Day A & B, Dick A & B, Gouldner, Krebbiel Martindale, LeClere, Howell, Fredierick "A", Martin Short, Nelson, Norris, Schrag "A", Murphy "A"	17,18-23S-3W 19-23S-3W 20-23S-3W 30-23S-3W	1452	528	Miss Ch	3400	35	39	0	0	0	Yes
13454	--	Burrton	Kaiser-Francis Oil Co.*	(W) Bott Unit	Bott Unit	6,7,8,18-23S-3W	1580	--	Miss	3350	20	50	0	0	0	Not
17963	No	Halstead	Oil Property Management, Inc.	(P) Haury-Cohen	Haury, Haury-Cohen	11-23S-2W	480	0	Miss	2950	30	5	0	0	0	Yes
11005 11876	Yes	Hollow-Nikkel	Kewanee Oil Co.	(W) Hollow Nikkel	Dyck, Duerkson, Hiebert, Neufeldt Nikkel, Schroder, Siemens	5-22S-3W 8-22S-3W	200	160	Miss + Hunt	3200 3500	10 22	11	0	0	0	Yes
		HARVEY COUNTY TOTALS (Reported)					3712	688				105	0	0	0	
HARVEY-MCPHERSON COUNTIES																
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	Hunt	3550	8	4	0	0	0	No*
10729	--	Hollow-Nikkel	Brunson-Spines, Inc.	(W) Hollow-Nikkel Waterflood Project	Schroeder Unit Hollow-Nikkel	32-21S-3W 33-21S-3W 4-22S-3W	960	320	Hunt	3500	20	8	4	0	0	No*
		HARVEY-MCPHERSON COUNTIES TOTALS (Reported)					1550	620				12	4	0	0	
HASKELL COUNTY																
17988	No	Eubank	Helmerich & Payne, Inc.	(-) Eubank	Eubank	28-28S-34W	640	--	Ches	5494	20	3	0	0	0	--
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 "AB"	Huling "AB"	15-21S-21W	120	120	Miss	4325	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	4460	10	5	0	0	1	Yes
7630	Yes	Hallet	Kewanee Oil Co.	(P) Hallet Waterflood	Hallet Waterflood	15,22-22S-25W	640	320	Miss	4597	64	12	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
14342	1	0	0	0	Irreg	1000	150	Prod + Doug	1000	100	T	--	S Gas	98/2	46	--	--	--	4,400	--	--	--	*Was R.R.Riss.
	196	88	0	26													10,289,551	308,459,976	531,992	26,652,482	233,801	16,116,390	
17631	4	2	0	0	Irreg	450	180	Prod	--	--	U	1974	S Gas	186/ 488	--	--	66,150	650,426	14,937	126,650	--	--	
10087	28	0	0	0	5-Spot	50	427	Prod + Equus Beds	75	40	M	1963	S Gas	--	36	--	5,157,649	108,061,790	66,100	2,147,325	66,100	2,147,325	
13454	--	4	-	-	Irreg	--	394	Prod	--	--	U	1967	Wat + Gas Cap	155/ 1200	38	--	143,810	9,354,603	15,012#	2,719,598	--	--	*Was Drillers Production. †4 injection wells temporarily abandoned in Nov-Dec 1976. #Since 7/77.
17963	1	0	0	0	Irreg	0	475	Prod	--	--	T	1975	Gas Exp	5/95	35	--	173,375	457,799	5,508	18,765	--	--*	*We are holding up the decline with repressuring.
11005 11876	3	1	0	0	Irreg	500	707	Prod + Equus Beds	35	--	F+ U	1964	Wat + S Gas	1/3	42	--	773,801	19,144,457	29,457	1,378,806	29,457	723,588	
	32	5	0	0													6,248,635	137,018,649	116,077	6,264,494	95,557	2,870,913	
6889	0	2	0	-	Peri	0	0	Prod	--	--	U	1959	Wat + S Gas	2/5	40	--	0	6,200,639	11,719	593,292	--	--	*Shut down temporarily - high water cuts experienced.
10729	0	2	0	0	Peri	0	0	Equus Beds	25	140	F	1963	S Gas + Grav	14/ 20	40	--	0	16,012,265	18,341	950,832	--	--	*Shut down temporarily - high water cuts experienced.
	0	4	0	0													0	22,212,904	30,060	1,544,124	--	--	
17988	1	0	0	0	Irreg	650	160	Prod	--	--	U	1975	S Gas	786/ 186	28	--	58,374	139,258	4,963	602,578	0	0	
14869	1	0	0	0	Line	0-Vac	36	Prod	--	--	U	1969	Wat	1/1	37.5	--	13,194	79,055	3,069	65,840	0	0	*Was Imperial Oil Co.
11855	1	0	0	0	Irreg	750	614	Prod + Ced H	900	200	T	1965	Wat	--	35	--	224,114	1,877,233	16,716	408,089	10,296	108,579	*Was Beardmore Oil Co.
16699	1	0	0	0	Irreg	0	82	Prod	--	--	U	1972	S Gas	54/ 21	36	2.5	29,970	350,860	11,314	482,749	0	0	
7630	4	0	0	0	Peri	1525	402	Gr Well	405	20	F	1960	Wat	552/ 180	38	--	587,034	11,244,832	42,441	2,043,845	23,343	1,047,821	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
HODGEMAN COUNTY (Concl.)																
16343	No	Hanston-Oppy	Kaiser Francis*	(D) Sipes	Sipes	22-22S-22W	160	--	Top	3572	--	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
13232	No	Hanston-Oppy	Sun Production Co.	(P) So.Bamberger Re-pressuring	South Bamberger	20-22S-22W	640	0	Miss	4258	22	4	0	0	0	Yes
16441	No	Hummel Southeast	Petroleum, Inc.	(P) Work Pilot Flood Project	Work	8-22S-24W	160	0	Miss	4575	9	0	0	0	0	Yes
17767	No	Krankenberg	Donald C.Slawson	(W) Krankenberg B	Krankenberg B	9-24S-23W	160	0	Miss	4730	8	2	0	0	0	--
17586	--	Lippoldt	Texaco Inc.	(P) E.F.Lippoldt	Lippoldt "B"	13,14,15,24-23S-23W	--	--	Miss	4556	71	11	1	0	0	Yes
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	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	0	1	
JOHNSON COUNTY																
18466	No	Gardner	Mo-Kan Oil Group	(P) M,K,B & G	McCann, Knabe, Bigelow, Griffin	15-14S-22E	40	5	Bartl	825	10	11	0	1	0	Yes
18460	No	Gardner	Rader Oil Co.	(P) Knabe-A	Knabe-A, Andrews Roberts	10-14S-22E 11-14S-22E	400	0	Squir	700	10	10	0	3	0	No*
18461	No	Gardner	Rader Oil Co.	(D) Gardner	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)					900	5				37	0	6	0	
KEARNY COUNTY																
16958	No	Pleasant Prairie	Helmerich & Payne, Inc.	(P) Pleasant Prairie	White "O" USA "B"	13-26S-35W 14-26S-35W	960	--	Morr + Miss	4966	24	3	0	1	0	Yes
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 + KC + Viola + Simp	4345	10	18	3	0	0	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	West Broadway	Lario Oil & Gas Co.	(P) Clouse	Clouse	18-28S-5W	0	--	Miss	3850	50	1	0	0	0	Yes
7702 8651	No	Cunningham	Getty Oil Co.*	(W) Cunningham	Miles "B" Miles "A"	19-27S-10W 30-27S-10W	320	0	LKC	3400	8	6	3	0	0	Yes
12870	--	Orsemus	Texaco Inc.	(P) Orsemus	J.Graber	30-29S-5W	160	320	Simp	4472	--	1	1	0	0	Yes
16625	--	Spivey-Grabs-Basil	Pickrell Drilling Co.	(P) Maple G	Maple G	30-29S-6W	40	0	Miss	4116	36	1	0	0	0	Yes
5576	--	Spivey-Grabs-Basil	Sun Production Co.	(D) Higgins	Higgins	9-30S-8W	80	0	Miss Ch	4185	45	0	0	0	0	Yes
15840	Yes	Spivey-Grabs-Basil	Tenneco	(W) KGLKCU	Kinert-Gilchrist	15-30S-7W	240	--	LKC	3705	5	6	0	0	0	Yes
		KINGMAN COUNTY TOTALS (Reported)					3660	400				40	7	0	0	

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
16343	1	0	0	0	Irreg	Vac	800	Prod	--	--	U	1972	Gas Exp	--	34	--	273,750	1,436,275	1,912	390,498	0	0	*Was Shell Oil.
14233	1	0	0	0	Line	Vac	456	Prod	--	--	T	1968	Wat + S Gas	80/220	30	16	162,973	1,082,641	11,377	221,058	0	0	
13232	1	0	0	0	--	300	1305	Prod	--	--	U	1966	Wat	1/10.8	36	--	476,179	5,185,651	14,795	749,636	1,480	11,245	
16441	1	0	0	0	Line	Vac	194	Prod	--	--	T	1972	Wat + S Gas	0/0	--	--	67,160	421,142	0	0	0	0	
17767	1	0	0	0	Irreg	0	93	Prod	--	--	U	1975	Wat + S Gas	6/1	36	3.5	34,155	58,346	26,299	73,874	1,895	1,895	
17586	1	0	0	0	Irreg	500	1495	Prod	--	--	U	1974	S Gas	--	35.8	--	545,675	1,489,479	39,814	145,755	--	--	
12365	1	0	0	0	Irreg	580	852	Prod + Sh Sd	70	15	M	1966	Wat	--	36	--	311,179	2,569,320	5,826	193,293	4,734	56,567	*Was Beardmore Oil Co.
16908	1	0	0	0	Irreg	0	128	Prod	--	--	U	1973	S Gas	23/39	24	3.0	46,720	164,737	5,888	204,762	0	0	
	15	0	0	0													2,772,103	25,959,571	179,451	4,979,399	41,748	1,226,107	
18466	3	0	0	0	Irreg	300	20	Prod	--	--	U	1963	Grav	9/1	22	--	21,900	434,318	7,000	--	2,500	--	
18460	1	0	0	0	Irreg	0	5	Prod	--	--	U	1973	S Gas	25/1	30	--	1,800	7,420	1,141	--	0	0	*Insufficient water supply.
18461	4	0	0	0	Irreg	50	30	Prod	--	--	U	1964	Grav	9/1	22	--	43,800	300,825	7,000	--	1,500	--	
	8	0	0	0													67,500	742,563	15,141	--	4,000	--	
16958	1	0	0	0	Irreg	Vac	24	Prod	--	--	U	1973	S Gas	2/3	35.2	--	8,856	39,700	31,389	95,542	0	0	
13079 14912	8	0	0	0	Peri	635	346	Prod	--	--	U	1970	Wat	86550/29130	43	.71	1,009,371	7,767,111	156,171	6,229,179	54,618	411,290	
18070	1	0	0	0	Line	100	1108	Prod	--	--	U	--	S Gas	--	--	--	404,420	633,314	70,318	132,741	--	--	
16295	1	0	0	0	Irreg	Grav	3	Prod	--	--	U	1971	S Gas + Gas Exp	0/5	--	--	1,032	7,013	70	70	0	0	
7702 8651	4	0	0	0	Irreg	0	406	Prod + Wat Sd	40	22	M	1961	S Gas	--	34	--	592,220	7,177,328	20,565	1,879,385	20,565	567,259	*Merger: was Skelly Oil Co. 2/1/77.
12870	1	0	0	0	Irreg	Vac	704	Prod	--	--	U	1966	S Gas	144/171	36.8	--	256,960	2,653,468	2,430	36,380	0	0	
16625	--	--	-	-	Irreg	0	15	Prod	--	--	U	1972	S Gas	7/13	33	2.5	5,475	20,511	2,271	37,838	0	0	
5576	1	0	0	0	Irreg	--	122	--	--	--	-	1975	S Gas	2.3/1	--	--	44,650	760,654	0	353,652	0	353,652	
15840	4	0	0	0	Peri	--	250	Prod	--	--	T	1970	S Gas+ Wat	74/376	36.7	--	365,000	2,774,000	6,497	811,392	6,497	16,392	
	20	0	0	0													2,679,128	21,793,399	258,322	9,480,637	81,680	1,348,593	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
KINGMAN-PRATT COUNTIES																
6106	Yes	Cunningham	Getty Oil Co.*	(W) Cunningham "B" Unit	North Ratcliff J.M.Ratcliff, Interurban Realty Co. 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	3400	16	12	2	0	0	Yes
KINGMAN-SEDGWICK COUNTIES																
5288	--	Bartholomew	The Maurice L.Brown Co.	(W) Bartholomew	Bartholomew	29,30,31-27S-4W 6-28S-4W 36-27S-5W 1-28S-5W	0	0	Miss	3700	11	10	0	0	0	No
KIOWA COUNTY																
14550	--	Fruit	J.Mark Richardson	(P) Isham Unit	White Woodard, Fankhouser Davis	27-27S-16W 32-27S-16W 33-27S-16W	640	--	Kind	4630	20	6	0	-	-	Yes
14366	Yes	Nichols	MISCO Industries,Inc.*	(W) Nichols Unit	Beal, Pardoe, Unruh, Janson, Thorn, Yohn, Zentz, Koehn, Schmidt, Greenwood, McGary, Lewis, Brown, Willems, Dunn, Geo.Parkins, J.C.Parkins	20,21,22,27,28,31, 32,33,34-29S-18W 5,6-30S-18W	5800	--	Miss Ch	4904	5-50	6	0	0	0	No
		KIOWA COUNTY TOTALS (Reported)					6440	--				12	0	0	0	
LABETTE COUNTY																
6323	No	Mound Valley	Vot Oil Co.	(W) Merrick	Merrick	33-32S-18E	80	--	Bartl	579	23	12	--	0	0	Yes
14677	No	Coffeyville-Cherryvale	Davis Oil	(P) Coleman	Coleman	2-33S-17E	40	0	Bartl	750	20	2	0	0	0	Yes
7845	--	Coffeyville-Cherryvale	Dodson Production Co.	(P) Utter	Utter	23-32S-17E	40	--	Bartl	660	15	2	0	1	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
		LABETTE COUNTY TOTALS (Reported)					185	0				27	0	1	0	
LABETTE-MONTGOMERY COUNTIES																
14745	--	Coffeyville-Cherryvale	Wayne Gregory	(-) Gregory	Gregory	34,35-32S-17E	240	100	Bartl	670	15	12	10	2	0	No*†
LANE COUNTY																
16555	--	Pendennis South	Helmerich & Payne,Inc.	(P) Leighton "A"	Anderson, Jones "D" Leighton "A"	33-16S-27W 4-17S-27W	--	--	LKC	4120	20	5	0	0	0	Yes
18114	No	White Rock South	Beren Corporation	(W) Harlamert	Harlamert A Harlamert	30-17S-27W 25-17S-28W	120	0	LKC	4220	8	4	0	0	0	Yes
		LANE COUNTY TOTALS (Reported)					120	0				9	0	0	0	

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
6106	7	9	0	0	Irreg	57	391	Prod + Sh Sd	80	--	M	1958	S Gas	--	36	--	1,000,255	24,041,040	18,089	3,821,921	18,089	767,366	*Merger: was Skelly Oil Co. 2/1/77.
5288	0	0	0	0	Peri	0	0	Prod	--	--	U	1957	Wat + S Gas	--	36	--	0	9,369,243	10,746	3,361,714	0	269,371	
14550	1	--	-	-	Irreg	Vac	110	Prod + Kind	4650	20	U	1968	Wat + S Gas	4/1	35	--	40,000	501,150	10,600	146,621	--	--	
14366	0	0	0	0	--	--	--	--	--	--	-	--	--	--	--	--	0	--	12,954	--	--	--	*Was Gulf Oil Corp.
	1	0	0	0													40,000	501,150	23,554	146,621	--	--	
6323	1	--	0	0	Irreg	450	450	Prod + Pond	--	--	M	1958	Grav	1/5	31.7	--	102,200	--	3,288	120,465	8,821	--	
14677	2	0	0	0	Irreg	0	4	Prod	--	--	T	1960	S Gas	4/1	31	--	3,000	40,000	387	--	100	2,800	
7845	1	0	0	0	Irreg	250	30	Prod	--	--	U	1959	Gas Exp	--	33	--	--	--	--	--	--	--	
9483	2	0	0	0	Irreg	400	30	Prod	--	--	U	1962	Gas Exp	2/3	22	--	--	--	850	--	--	--	
16032	1	0	0	0	Irreg	Grav	10	Prod	--	--	U	1971	Grav	2/3	22	--	--	--	320	--	--	--	
	7	0	0	0													105,200	40,000	4,845	120,465	8,921	2,800	
14745	9	3	-	-	5-Spot	300	--	Prod	--	--	U	1974	Frac + Pump	1/4	31	--	--	--	--	--	--	--	*The 2 new wells are not producing yet. †Equipment trouble.
16555	1	0	0	0	Irreg	240	240	Prod	--	--	U	1972	S Gas + Wat	172/120	38	--	87,857	415,734	46,680	331,431	0	0	
18114	1	0	0	0	Irreg	Vac	149	Prod	--	--	U	1975	S Gas	45/180	36	--	46,227	112,977	8,590	47,945	1,203	1,203	
	2	0	0	0													134,084	528,711	55,270	379,376	1,203	1,203	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
LINN COUNTY																
9576	No	Beagle	Kent Drilling Co.*	(P) Linn Flood	Bertha Nolin	23-19S-22E	25	0	Bartl	650	15	4	0	0	0	No†
18443	No	Centerville	Hastert Oil Co.	(P) McGrew 1	--	19-21S-23E	40	0	Squir	460	20	10	0	0	0	Yes
18581	No	Centerville	Hastert Oil Co.	(P) Hill	--	10-21S-22E	640	--	Squir	520	20	6	0	0	0	Yes
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	105	0	4	0	Yes
18703	No	Goodrich-Parker	Oaks Petroleum,Inc.	(P) Diehm-Day	Diehm, Day	33-19S-22E	240	0	New Alb	360	12	9	0	0	0	Yes
3150	Yes	LaCygne-Cadmus	Energy Recovery Inc.	(W) Scott	Edna Scott	34,35-19S-23E 2,3-20S-23E	80	0	Peru	250	17	33	29	0	0	Yes
15486	No	LaCygne-Cadmus	Energy Recovery Inc.	(W) Cadmus	Burnett, Stroup, Baldwin Baker, No.Baker, Harvey, Croxton, Burnett, Light, Crisler, Snyder	21,31,33-19S-23E 4,5,8,9-20S-23E	2104	0	Peru	260	18	112	114	0	0	No*
12025	Yes	LaCygne-Cadmus	J & J Oil Co.*	(W) Persons	Person	11-20S-23E	240	0	Peru	160	7	35	0	4	0	Yes
15290	--	LaCygne-Cadmus	Charles Ogden	(W) Calvin (P)	Edith Calvin	35-19S-24E	105	0	Squir	200	9	--	--	-	-	Yes
12025	Yes	Teagarden	J & J Oil Co.*	(W) Teagarden	Teagarden	2-20S-23E	160	0	Peru	160	7	6	0	4	-	Yes
LINN COUNTY TOTALS (Reported)							3934	0				320	143	12	0	
LINN-MIAMI COUNTIES																
13055	--	Beagle	Robert A.Mason	(W) South Beagle	Cook-Day	15,22-19S-22E	40	0	Squir	480	15	16	0	5	0	Yes
LYON COUNTY																
4314	No	Atyeo-Pixlee	La Verna Ann Oil Co.*	(D) --	Lowe Jones	19-21S-10E	320	--	Bartl	2150	30	8	1	0	0	No†
5004	No	Rock Creek	Schankie Well Service,Inc.*	(D) R.B.Byrd	R.B.Byrd	32-21S-11E	110	0	Bartl	1900	17	3	0	0	0	Yes
18485	No	Welch-Mohr	Brandt Oil Co.	(D) --	Fair Estate (Brown)	29-20S-10E	80	--	Bartl	2275	80	2	1	0	0	Yes
LYON COUNTY TOTALS(Reported)							510	0				13	2	0	0	
MCPHERSON COUNTY																
17665	No	Welch-Bornholdt	Dick Hess	(D) Knackstedt	Knackstedt	30-20S-5W	80	40	Miss	3300	40	1	1	-	1	Yes
18710	--	Canton North	Homer G.Krehbiel Sr.	(D) Unit Lease	Haas Morrow	25-18S-1W 26-18S-1W	240	--	Miss	2858	2	3	--	-	-	Yes
18761	--	Chindberg	CAP Production	(D) Enberg	Enberg	18-19S-2W	80	--	Miss	3001	--	4	--	-	-	Yes
5631	--	Chindberg	George R.Hess	(P) Swanson	Swanson	13-19S-3W	340	0	Miss	2990	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	2995	30	5	0	0	0	Yes
18707	--	Chindberg	Homer G.Krehbiel Sr.	(D) Lull	Lull, Wall	13-19S-3W	240	--	Miss	2980	15	3	--	-	-	Yes
18708	--	Chindberg	Homer G.Krehbiel Sr.	(D) Dean	Dean	24-19S-3W	100	--	Miss	2992	17	--	--	-	-	Yes
18634	--	Chindberg	Elmer Unruh	(P) Bentson	Bentson	12-19S-3W	160	--	Miss Ch	2992	18	2	0	0	0	Yes
18623	No	Coons	Elmer Unruh	(P) Coons B	Coons B	13-19S-1W	160	--	Miss Ch	2910	24	2	0	1	0	Yes
7365	No	Georob	Gas Producing Enterprises	(D) Robinson	Robinson	1-18S-2W	±30	±10	Miss	2790	7	3	0	0	0	--
13747	Yes	Goessel	Donald C.Slawson	(W) Goessel Hunton Waterflood Unit	Goessel Hunton W.F.Unit	1,12-21S-1W 6-21S-1E	800	0	Hunt	3400	10	6	0	0	0	Yes
1911 2434	--	Graber	George R.Hess*	(D) Graber Waterflood	J.P.Huxman, J.C.Goering, F.A.Hetzke, A.K.Graber, J.M.Boeckner A.Hetzke & Kindblade D.B.& Carrie Jones	29-21S-1W 20-21S-1W 30,31-21S-1W†	980	640	Hunt	3280	30	14	1	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
9576	4	0	0	0	Irreg	300	8	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Buddrus & Woods. †Not enough water.
18443	6	0	0	0	Irreg	175	2	Prod + Pond	--	--	M	1977	Grav	3/1	31	--	3,240	3,240	614	614	120	--	
18581	1	0	0	0	Irreg	150	1/3	Prod	--	--	U	1977	Grav	9/1	31	--	120	120	986	986	0	0	
3165	87	0	0	0	5-Spot	600	6	Prod + Arb	1400	50	M	--	Wat	--	29	--	190,530	15,502,209	4,361	660,791	--	--	
18703	1	0	0	0	5-Spot	200	30	Prod	--	--	U	1977	Grav	7/3	26	--	--	5,000	--	100	0	--	
3150	20	26	0	0	5-Spot	270	24	Prod + Miss	1068	--	U	1940	S Gas	3/1	29	20	87,600	6,394,800	2,211	275,110	2,211	275,110	
15486	108	113	0	0	5-Spot+ Line	270	21	Lake	--	--	F	1974	S Gas	3/1	29	20	836,675 2,336†	1,931,173 110,371†	6,133	33,270	6,133	33,270	*Expanding number of inj. wells. †Inert gas injection.
12025	--	--	2	-	5-Spot	150	30	Prod + Fr Wat Pond	--	--	M	1955	Grav	3/1	28.9	--	27,975	--	5,637	--	--	--	*Was Roxbury Oil Co.
15290	1	--	-	-	4-Spot	200	15	Rural Pipeline	--	--	F	1969	Grav	10/1	30	--	100	--	42	--	--	--	
12025	3	--	1	-	5-Spot	150	30	Rain water	--	--	M	1955	Grav	3/1	29	--	60	--	1,400	--	--	--	*Was Roxbury Oil Co.
	231	139	3	0													1,146,300	23,836,542	21,384	970,871	8,464	308,380	
13055	10	0	0	0	5-Spot	500	6	Prod + Pond	--	--	F	1968	S Gas	5/1	27	--	21,672	769,300	2,015	70,346	--	--	
4314	1	1	0	0	--	Vac	30	Prod	--	--	U	--	Grav	--	35	--	10,950	--	--	--	--	--	*Was Chas. E.Gould. †Approx. 30 bbls produced wat. dumped into formation in past 10 years.
5004	1	0	0	0	Irreg	250	50	Prod	--	--	U	1973	Grav	1/9	37	--	10,000	45,000	1,000	--	0	--	*Was Leland Dreyer.
18485	1	--	0	0	Irreg	0	200	Prod	--	--	U	1976	Wat + S Gas	2/ 98.5	36	--	110,000	145,000	0	--	0	--	
	3	1	0	0													130,950	190,000	1,000	--	0	--	
17665	1	--	-	-	Irreg	0	350	Prod	--	--	T	1974	S Gas	1/200	34	--	127,750	284,750	789	24,090	789	2,603	
18710	1	--	-	-	Irreg	0	110	Prod + Miss	2858	5	T	1977	Grav	2/3	36	--	330	2,640	--	--	--	--	
18761	4	--	-	-	Irreg	Grav	1000	Prod	--	--	U	1977	Wat	--	35	--	365,000	--	4,693	--	--	--	
5631	1	0	0	0	Irreg	0	415	Prod + Ch	3000	4	T	1957	Wat	3/7	35	--	151,475	1,635,500	155	82,605	155	3,013	
18528	1	0	0	0	Irreg	0	462	Prod	--	--	T	1976	Gas Exp	1/4	37	--	168,630	210,210	4,049	169,923	4,049	5,517	
18707	--	--	-	-	--	0	750	Prod	2980	20	T	1977	Grav	1/9	37	--	4,500	4,500	--	--	--	--	
18708	1	--	-	-	Irreg	0	140	Prod + Miss	--	17	T	1976	Grav	5/95	35	--	840	840	--	--	--	--	
18634	1	0	0	0	Irreg	Vac	350	Prod	--	--	U	1976	Grav	2/98	33	--	128,000	--	1,400	--	70	--	
18623	1	0	0	0	Irreg	Vac	190	Prod	--	--	U	1976	Grav	2/98	34	--	70,000	--	1,625	--	244	--	
7365	1	0	0	0	Irreg	0	0	Prod	--	--	U	1959	S Gas	15/ 121	35	--	0	--	4,906	512,026	--	--	
13747	5	5	0	3	Irreg*	700	--	--	--	--	-	--	--	--	--	--	435,365	4,405,383	13,150	684,109	13,150	--	*Pattern changed during 1977 by converting interior prod. well to injection.
1911 2434	6	0	0	0	Irreg	0	750	Prod	--	--	T	--	S Gas	9/1	44	--	273,750	43,046,350	27,164	15,691,110	27,164	5,171,094	*Was Continental Oil Co. †C.C.Graber - 32-21S-1W.

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
MCPHERSON COUNTY (Cont.)																
3017	--	Graber	George R.Hess*	(W) Graber	Jones B Jones A	31-21S-1W 32-21S-1W	200	40	Hunt Lm	3285	25	2	0	0	0	Yes
17397	--	North Graber	George R.Hess	(P) Boesker	Chaves & Boesker Arnold B.Lagree & Goering	8-21S-1W 16-21S-1W 17-21S-1W	560	0	Hunt	3364	4	5	0	0	0	Yes
4038	--	North Henne	George R.Hess	(P) Buckeye "C"	Van Meter A, Van Meter B Bukey D	32-16S-1W 5-17S-1W	240	0	Miss	2622	20	4	0	0	0	Yes
13798	--	Hollow Nikkel	George R.Hess	(P) Schroeder	Schroeder	28-21S-3W	80	0	Hunt Lm	3418	20	2	0	0	0	Yes
CR-9775	Yes	Johnson	Ecco*	(D) FJ7 Unit	Fred Johnson	35-19S-3W 2-20S-3W	320	--	Miss	2990	80	7	0	0	0	Yes
15232	No	Johnson	David Litan*	(P) Kasey-Colburn	Kasey "A", Kasey "B", Colburn, Johnson	35-19S-3W	240	--	Miss	2990	110	5	2	0	0	Yes
15946	--	Lindsborg	Tenneco Oil	(D) Community B	Community B	8-17S-3W	40	--	Viola	3300	8	2	0	0	0	Yes
10429	No	McPherson	Lawrence & Bush	(P) 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 Lm	2300	10	15	2	0	0	Yes
7951	No	McPherson	Mead Production Co.	(P) O.T.Bentson	O.T.Bentson	32-18S-2W	80	30	KC Lm	2350	12	2	--	-	-	Yes
6179	--	McPherson	Jo Ray Rierson	(P) Rolander	Rolander	30-18S-2W	160	--	KC	2340	10	3	--	1	-	Yes
17480	No	Paden	Rocket Schusterman Oil Account*	(D) Schulz	Schulz	15-18S-1W	150	0	Miss	2685	25	6	0	12	4	Yes
18717	--	Ritz-Canton	Bandy Tank Co.	(D) Anderson	Anderson	30-19S-1W	--	--	Viola	3409	6	1	--	0	-	Yes
3476	--	Ritz-Canton	CAP Production	(D) Unruh	Unruh	26-19S-2W	80	--	Miss	3350	--	3	--	-	-	Yes
CR-3771	--	Ritz-Canton	CAP Production	(D) Suffield	Suffield	25-19S-2W	140	--	Miss	2942	--	5.5	1	-	-	Yes
CR-4775	--	Ritz-Canton	CAP Production	(D) Thompson	Thompson	17,18,19-19S-1W	80	--	Miss	2962	--	12	1	-	-	Yes
2158	--	Ritz-Canton	W.P.Carr	(D) Hull	Hull, Decker*, Fleming	11-19S-2W	560	240	Miss	2885	40	2	3	0	0	Yes
3034	No	Ritz-Canton	W.P.Carr	(D) Giffin	Meyers "B", Giffin "A"	16-19S-2W	320	160	Miss	2889	40	3	--	-	-	Yes
CR-4774	No	Ritz-Canton	Ecco*	(D) BDJT Unit	Thomas Dielman H.P.Unruh	26-19S-2W 35-19S-2W 3-20S-2W	720	--	Miss	2920	40	26	2	1	0	Yes
5630	--	Ritz-Canton	George R.Hess	(P) H.P.Unruh	Maude Smith H.P.Unruh	15-19S-2W 16-19S-2W	160	0	Miss	2976	25	4	0	0	0	Yes
5682	--	Ritz-Canton	George R.Hess	(P) Flook	Flook, Johnson	1-20S-2W	320	0	Miss	2945	8	2	0	0	0	Yes
8148	--	Ritz-Canton	George R.Hess	(P) Thompson B	Thompson A, Thompson B	22-19S-2W	240	0	Miss	2943	25	2	0	0	0	Yes
17373	--	Ritz-Canton	George R.Hess	(P) G.A. & Della Nelson	G.A.Nelson, Frank Hill W.W.Johnson	3-19S-2W 4-19S-2W	400	0	Miss	2953	9	14	0	0	0	Yes
17403	--	Ritz-Canton	George R.Hess	(P) Marvin Hill	Marvin Hill, Edna Hill, Peterson, Pitts & Sadey	2-19S-2W	640	0	Miss	2955	8	6	1	0	0	Yes
18480	No	Ritz-Canton	Hess & Bruce	(P) Hess & Bruce Unit	Hale, Gratton, Miller, Law, Boals	24-19S-2W	560	0	Miss	2945	11	20	3	0	0	Yes
2039	No	Ritz-Canton	Hillenburg Oil Co.*	(D) L.A.Lovett	F.A.Lovett	13-19S-2W	160	0	Miss	2916	60	3	0	0	0	Yes
9787																
6975	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Unruh	Unruh	34-19S-2W	160	0	Miss	2945	11	4	0	0	0	Yes
7969	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Kundson	Knudson	23-19S-2W	80	0	Miss	2930	30	3	0	0	0	No†
7971	No	Ritz-Canton	Hillenburg Oil Co.*	(D) Eaton	Eaton	26-19S-2W	160	0	Miss	2930	30	4	0	0	0	No†
7617	No	Ritz-Canton	Frank Jones Oil Operations	(P) Ritz-Canton	Finkle	23-19S-2W	160	0	Miss	2900	8	5	0	0	0	Yes
14280	No	Ritz-Canton	Frank Jones Oil Operations	(P) Ritz-Canton	Opal Russell	23-19S-2W	160	75	Viola Lm	3362	8	1	0	0	0	Yes
4067	--	Ritz-Canton	Homer G.Krehbiel Sr.	(D) Koehn B	Koehn	34-19S-2W	80	--	Miss	2963	5	2	--	-	-	Yes
8813	--	Ritz-Canton	Homer G.Krehbiel Sr.	(-) Locquement	Locquement	20-19S-1W	80	--	Miss	2980	5	--	--	3	-	--
6760	--	Ritz-Canton	Ray Perera	(D) Drum-Somers	Drum-Somers	35-19S-2W	160	--	Miss	2935	12-15	3	1	0	0	Yes
7076																
3387	--	Ritz-Canton	Elmer Unruh	(P) Wiles	Wiles	25-19S-2W	160	--	Miss Ch	2930	25	4	1	0	0	Yes
18633	--	Ritz-Canton	Elmer Unruh	(P) R.J.Koehn	R.J.Koehn	33-19S-2W	80	--	Miss Ch	2965	4	2	0	0	0	Yes
18635	--	Ritz-Canton	Elmer Unruh	(P) Anderson	Anderson	1-20S-2W	10	--	Miss Ch	2937	12	1	0	0	0	Yes
17536	No	Roxbury South	White Hawk Oil Co.*	(D) Bishop-Lilly Unit	Bishop, Lilly	30-17S-1W	60	0	Miss	2685	5	1	0	0	0	Yes
3219	--	Roxbury Southeast	Elmer Unruh	(P) Boyd	Boyd Tinkler 1, Tinkler 2	20-17S-1W 29-17S-1W	240	--	Miss Ch	2650	80	3	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
3017	1	0	0	0	Irreg	0	255	Prod	--	--	T	1952	Wat	26/0	40	--	93,075	1,756,922	1,039	1,683,033	1,039	448,730	*Was Cities Service Oil.
17397	1	0	0	0	Irreg	0	40	Prod	--	--	T	1974	S Gas	9/1	40	--	14,600	51,600	2,745	74,390	2,745	9,590	
4038	1	0	0	0	Irreg	0	515	Prod	--	--	T	1954	Wat	1/1	35	--	187,975	2,253,385	5,379	288,236	5,379	37,736	
13798	1	0	0	0	Irreg	0	200	Prod	--	--	T	1967	Wat	9/1	40	--	73,000	606,570	1,997	119,144	1,997	78,264	
CR-9775	1	0	0	0	Irreg	Vac	150	Prod	--	--	U	1977	Grav	5/95	39	--	365,000	--	25,620	765,000	5,124	--	*Was Norris Tickel.
15232	5	2	0	0	Irreg	0	900	Prod	--	--	U	1969	Wat + Gas Exp	1/13	38	--	328,000	2,363,500	11,353	--	3,000	--	*Was Clarence Warner.
15946	1	0	0	0	Irreg	0	1025	Prod	--	--	T	1972	S Gas	12/335	28.5	--	375,000	2,100,000	1,383	369,952	0	0	
10429	4	1	0	0	Irreg	350	182	Prod + Miss Lm	3000	--	U	1959	S Gas	4/1	35	--	266,538	3,259,820	13,915	281,447	13,915	281,447	
7951	1	1	-	-	Irreg	30	50	Prod	--	--	U	1960	S Gas	1/9	35	--	20,000	910,719	2,610	84,362	2,610	84,362	
6179	1	--	1	-	Irreg	400	300	Prod + Miss Ch	3000	15	T	1972	Grav	1/3	34	--	108,000	544,000	900	--	--	--	
17480	1	1	0	0	Irreg	0	197	Prod	--	--	T	1975	S Gas	1/4	36	--	72,087	200,774	16,469	1,401,094	0	0	*Was Union Texas.
18717	--	--	-	-	7-Spot	1	600	Prod	3409	6	M	1977	--	15/85	35	--	--	--	6,813	--	--	--	
3476	3	--	-	-	Irreg	Grav	850	Prod	--	--	U	--	--	--	35	--	310,250	--	1,931	--	--	--	
CR-3771	5	1	-	-	Irreg	Grav	1373	Prod	--	--	U	1977	Wat	--	35	--	501,145	--	2,971	--	--	--	
CR-4775	12	1	-	-	Irreg	Grav	3381	Prod	--	--	U	1977	Wat	--	35	--	1,234,065	--	15,934	--	--	--	
2158	1	1	0	0	--	Grav	5000	Prod	--	--	U	1949	S Gas	--	35	--	1,750,000	85,338,514	18,387	--	18,387	--	*Decker is shut down.
3034	1	1	0	0	--	Grav	6200	Prod	--	--	U	1952	--	--	--	--	2,170,000	68,348,696	15,899	--	15,899	--	
CR-4774	2	1	0	0	Irreg	Vac	60	Prod	--	--	U	1977	Grav	1/9	36	--	550,000	--	33,777	--	10,000	--	*Was Norris Tickel.
5630	1	0	0	0	Irreg	0	206	Prod	--	--	T	1957	Wat	1/1	35	--	75,190	1,318,030	7,212	172,026	7,212	29,026	
5682	1	0	0	0	Irreg	0	240	Prod	--	--	T	1958	Wat	7/3	35	--	87,600	770,950	6,985	184,515	6,985	20,299	
8148	1	0	0	0	Irreg	0	170	Prod + Ch	2950	--	T	1960	Wat	2/3	35	--	62,050	517,950	3,705	202,845	3,705	14,645	
17373	3	0	0	0	Irreg	0	910	Prod	--	--	T	1974	S Gas	1/9	37	--	332,150	992,075	13,710	607,233	13,710	56,483	
17403	1	0	0	0	Irreg	0	194	Prod	--	--	T	1974	S Gas	1/1	36	--	70,810	141,820	5,207	214,343	5,207	20,343	
18480	2	1	0	0	Irreg	0	2275	Prod	--	--	T	1976	Gas Exp	1/4	36	--	830,375	1,051,775	15,540	6,033,382	15,540	19,939	
2039	1	0	0	0	Irreg	Vac	2000	Prod	--	--	U	1948	S Gas	--	34	--	730,000	--	6,050	--	0	--	*Was Schusterman.
9787												1962											
6975	1	0	0	0	Irreg	Vac	800	Prod	--	--	U	1959	S Gas	--	35	--	292,000	1,814,000	3,908	--	0	--	*Was C.R.A.
7969	0	1	0	0	Irreg	0	0	--	--	--	-	1960	--	--	35	--	0	--	3,499	--	0	--	*Was C.R.A. †Injection well shut in.
7971	0	1	0	0	Irreg	0	0	--	--	--	-	1960	S Gas	--	35	--	0	--	6,930	--	0	--	*Was C.R.A. †Injection well shut in.
7617	1	0	0	0	Irreg	0	200	Prod	--	--	U	1952	Grav	8/92	35	--	73,000	--	7,454	--	0	--	
14280	1	0	0	0	Irreg	0	150	Prod	--	--	U	1968	Wat	4/96	36	--	54,750	--	2,200	--	0	--	
4067	1	--	-	-	Irreg	0	50	Prod + Miss	--	--	T	1965	Grav	1/2	36	--	1,760	169,460	--	--	--	--	
8813	--	--	-	-	Irreg	0	100	Prod	--	--	T	1961	Grav	2/3	37	--	3,000	616,600	--	--	--	--	
6760 7076	3	1	0	0	Irreg	0	400	Prod	--	--	T	1958	S Gas	--	35	--	--	--	1,801	--	--	--	
3387	1	0	0	0	Irreg	Vac	250	Prod	--	--	U	--	Grav	5/95	36.5	--	92,000	--	2,850	--	285	--	
18633	1	0	0	0	Irreg	Vac	275	Prod	--	--	U	1976	Grav	3/97	36	--	100,000	--	1,350	--	135	--	
18635	1	0	0	0	Irreg	Vac	75	Prod	--	--	U	1976	Grav	6/94	35	--	28,000	--	1,900	--	380	--	
17536	1	0	0	0	Irreg	0	370	Prod	--	--	U	1958	Wat	--	32	--	135,050	3,691,672	1,450	48,965	1,450	--	*Was Natural Gas & Oil.
3219	1	0	0	0	Irreg	Vac	475	Prod	--	--	U	1952	Grav	3/97	35	--	175,000	--	2,650	--	265	--	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
MCPHERSON COUNTY (Concl.)																
14203	--	Voshell	Herman J.Schrag	(W) Schrag Flood Project	Schrag, Goering	26-20S-3W	80	60	Miss	3090	3	3	0	0	0	Yes
17603	Yes	Winsinger	Thornton E.Anderson*	(W) Winsinger Unit	Winsinger Unit	18-21S-1W 13-21S-2W	240	0	Hunt	3354	8	4	0	0	0	Yes
		MCPHERSON COUNTY TOTALS (Reported)					12210	1295				245	19	18	5	
MARION COUNTY																
8119	No	Covert-Sellers	Hillenburg Oil Co.*	(-) D.K.Reamey	D.K.Reamey	17-21S-4E	240	0	LKC	1750	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	2445	--	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	2447	1	4	3	0	0	Yes
17659	--	Fanska	Dick Hess	(D) Law	Law	6-17S-1E	40	0	Miss	2691	20	2	1	0	8	Yes
		MARION COUNTY TOTALS (Reported)					760	0				16	6	0	8	
MEADE COUNTY																
4924	Yes	Novinger	Cities Service Co.	(W) Novinger Field Unit	Novinger Field Unit	22,23,26,27,34,35-33S-30W 2,3-34S-30W	3240	0	Marm	5297	--	9	1	0	0	Yes
MIAMI COUNTY																
590 13497	--	Black	Robert A.Mason	(W) South New Lancaster	Middaugh Crume Middaugh, Fernstrom	3-19S-24E 9-19S-24E 10-19S-24E	80	--	Prue	200	12	39	0	8	0	Yes
5762	Yes	Louisburg	Reese Exploration,Inc.*	(W) Louisburg	Richmond Briggs, Miller	28-16S-25E 34-16S-25E	75	9	Peru	330	9	--	--	-	-	No†
18249	--	Louisburg	Reese Exploration,Inc.*	(W) Louisburg	McHale, Rogers	9-17S-25E	105	--	Peru	400	11	25	--	-	-	No†
6816	--	Paola-Rantoul	Harold T.Beck	(W) Rantoul Pool	--	36-17S-21E 1-18S-21E	90	60	Squir	510	20	10	0	0	0	Yes
4829	No	Paola-Rantoul	Leo Blackstone*	(W) Schmitt	Schmitt	11-17S-22E	160	--	Squir	550	10	6	0	2	0	No†
18679	Yes	Paola-Rantoul	Floyd L.Jackson Jr.*	(P) --	Booze	26-16S-21E	80	0	Squir	675	25	4	0	1	0	No†
18513	No	Paola-Rantoul	Donald L.Johnson	(D) Perdue	Perdue	4-17S-22E	160	--	Squir	610	10	14	1	3	0	Yes
12704	--	Paola-Rantoul	Kepple	(D) Kepple	Kepple-Fee	17-17S-23E	54	--	Peru	360	28	3	--	0	0	No*
18289	Yes	Paola-Rantoul	Quinn Oil Lease*	(P) Wingert	Wingert, Cooper, Holinger	9-17S-22E	--	--	Squir	680	30	15	7	0	0	Yes
471 5273	Yes	Paola-Rantoul	Reese Exploration,Inc.*	(W) Miami Flood	Murphy, Schendel, Phillips, Cayot	24-16S-21E	480	--	Squir	670	12	36	2	-	-	Yes
2494	Yes	Paola-Rantoul	Reese Exploration,Inc.*	(W) K.C.S.	Robert I.Nicholson, F.W.Black	10-17S-22E	480	--	Squir	700	30	30	--	-	-	Yes
CR-3774	No	Paola-Rantoul	Dr.Jack Rowlett	(W) Geiger	Geiger	17-17S-23E	35	--	Way	382	6	3	1	2	0	No
		MIAMI COUNTY TOTALS (Reported)					1799	69				185	11	16	0	

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
14203	1	0	0	0	4-Spot	100	65	Prod + Sh Sd	80	12	M	1968	S Gas	2.5/22	36	--	23,725	178,525	985	45,014	985	11,107	
17603	1	0	0	0	Irreg	0	220	Prod + Sh Alluvial Sd	70	--	F	1975	S Gas	9/1	38	--	80,325	285,650	10,883	34,586	3,600	9,000	*Was Charles Carlock.
	89	19	1	3													13,591,160	227,773,180	343,322	29,773,430	185,175	6,303,198	
8119	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Terra Resources Inc. †No injection started.
18275	1	0	0	0	Irreg	0	400	Prod	--	--	T	1976*	Wat	--	40	--	146,000	169,725	9,593	19,792	--	--	*SWD well since 1953.
17154	1	0	0	0	Irreg	450	668	Prod	--	--	U	1973	Wat	1/7	36.9	--	243,825	1,265,023	2,086	141,637	0	0	*Was El Dorado Refining.
17659	1	--	-	-	Irreg	0	410	Prod	--	--	T	1975	Wat	1/50	35	--	150,000	296,000	1,566	32,702	1,566	3,823	
	3	0	0	0													539,825	1,730,748	13,245	194,131	1,566	3,823	
4924	9	3	0	0	Line	1307	224	Prod + Sh Sd	400	--	M	1956	S Gas	1000/140	45	3.4	735,358	22,685,904	64,999	4,780,342	64,999	2,560,632	
590 13497	16	0	1	0	5-Spot	300	9	Prod + Pond	--	--	F	1967	S Gas	3/1	27	--	58,622	814,982	4,478	75,851	--	--	
5762	--	--	-	-	5-Spot	350	40	Prod	--	--	M	1958	S Gas	95/5	32-34	1005	160,375	--	1,647	--	--	--	*Was E & J.M.Cook. †Freeze in winter.
18249	--	--	-	-	5-Spot	500	35	Prod + Hertha	260	5	M	1964	S Gas	95/5	32	--	270,000	--	5,049	--	--	--	*Was E.Buddrus et al. †Freeze in winter.
6816	11	0	0	0	5-Spot	500	20	Riv Gr + Fr Wat	--	--	M	--	Grav	1/4	28-29		--	--	262	--	--	--	
4829	3	0	0	0	4-Spot	600	2	Prod + Hertha	260	20	U	--	Gas Exp	--	29	--	730	--	1,200	1,200	0	0	*Was A.B.C.Oil Co. †Return water only.
18679	1	0	0	0	4-Spot	400	20	Prod	--	--	U	1977	Gas Exp	4/20	29	--	5,500	--	1,209	--	1,209	--	*Was I.R.Henery. †Not enough water to inject continuously.
18513	1	0	0	0	Irreg	0	8	Prod	--	--	U	1976	Grav	3/2	32	--	2,920	--	6,465	--	--	--	
12704	--	--	0	-	Irreg	0	5	Prod	--	--	M	--	Grav	1/10	32-33	--	--	--	235	--	--	--	*Dump only.
18289	12	10	0	0	Irreg	650	30	Prod + Pond	--	--	M	1950	Grav + Wat	9/1	29	--	100,000	--	4,000	--	4,000	--	*Was Authorized Oil Producers, Inc.
471 5273	17	2	-	-	5-Spot	680	97	Prod + Miss	--	5	M	--	S Gas	95/5	31	--	280,350	--	19,584	--	--	--	*Was Richard Moherman.
2494	24	--	-	-	5-Spot	680	18	Prod + Hertha Break	--	--	M	--	--	95/5	29	--	154,300	--	4,572	--	--	--	*Was Southern Enterprises, Inc.
CR-3774	1	--	-	-	5-Spot	0	10	Prod	--	--	U	1977	Grav	1/9	29	--	--	1,800	--	--	0	0	
	86	12	1	0													1,032,797	816,782	48,701	77,051	5,209	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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
MONTGOMERY COUNTY																
18649	No	Brewster	Davis Oil	(P) Brewster Flood	Mitchell, Bruington	3-33S-16E	10	0	Peru	450	20	2	0	0	0	Yes
18143	No	Brewster	Carl D.Wyckoff*	(D) Universal Atlas	Universal Atlas	4,5-33S-16E	584	--	Arb	1350	2	13	0	0	0	Yes
18071	No	Cherryvale	Hope Oil Investment Co.*	(W) Beckley-Smith	Jess Beckley, Robt.Smith	30-31S-17E	145	0	Bartl	858	16	7	2	4	-	Yes
4034	No	Coffeyville	Davis Oil Co.	(W) Coffeyville Flood	Vogt, Barnhill	19-34S-17E	140	0	Bartl	600	20	15	0	0	0	Yes
9081					Davis	20-34S-17E										
9082					King, Day	30-34S-17E										
18678	No	Coffeyville-Cherryvale	Davis Oil Co.*	(W) Schicke	Schicke	34-31S-17E	10	0	Bartl	700	15	5	0	0	0	Yes
CR-7775	--	Coffeyville-Cherryvale	Dodson Production Co.	(D) Holloway	Holloway	36-31S-16E	5	--	Bartl	918	9	14	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
13445	No	Jefferson-Sycamore	E & H Farms	(P) E & H	Guyat	13-34S-15E	30	0	Squir	400	10	9	0	0	0	Yes
18491																
10093	No	Jefferson-Sycamore	Layton Oil Co.	(W) Bolton Extension	McVey, Stoker	13-33S-14E	40	0	Bartl	1170	16	20	8	0	0	--
13620					Patterson	19-33S-15E										
					Blosser, Hadley, Vineyard	24-33S-14E										
14651	No	Jefferson-Sycamore	Layton Oil Co.	(W) Bolton Extension	Sewell & Browning	18-33S-15E	25	0	Bartl	1186	15	6	3	0	0	Yes
2045	--	Jefferson-Sycamore	Stekoll Petroleum Co.	(P) Field #3	H.O.Smith, S.R.Springer, L.C.Demott	6-33S-15E	400	--	Bartl	1160	13	11	--	0	-	Yes
7871	--	Jefferson-Sycamore	Stekoll Petroleum Co.	(P) Fitzgerald Unit	Hester, Banks, H.F.Adams	15-34S-15E	600	--	Way	450	13	53	--	0	-	Yes
					H.F.Adams, Fitzgerald	16-34S-15E										
					Weaver	21-34S-15E										
7077	No	Jefferson-Sycamore	Carl D.Wyckoff	(D) Zinser	Zinser	8-33S-14E	180	--	Bartl	1190	10	3	0	1	0	Yes
CR-4776	No	Neodesha	Geo. J.Hempen*	(P) Nantz	Nantz	11-31S-16E	160	0	Bartl	811	8	15	0	2	0	Yes
18002	No	Tyro	Collins Oil Co.	(D) Vinson	Vinson	18-35S-15E	60	--	Bartl	1240	23	1	1	0	0	No*
18298	--	Tyro	H & H Oil Well Service	(-) Tuggle	Tuggle	3,10-35S-15E	--	--	Bartl	--	--	--	--	-	-	--
14036	No	Tyro	Layton Oil Co.	(W) Tyro Unit-Friedline & Dunbar Leases	Dunbar, Friedline, Grother, Wilson, Krebs	33-34S-15E	30	0	Bartl	1164	17	16	17	0	0	Yes
CR-11771	No	East Tyro	Collins Oil Co.	(W) Newby-Folk	Newby-Folk	15,16-35S-15E	80	--	Bartl	1190	30	1	0	1	0	Yes
17353	No	East Tyro	Collins Oil Co.	(W) Collins	Collins (Harding)	4,5-35S-15E	100	--	Bartl	1220	28	4	0	1	1	Yes
11852	No	Wayside-Havana	Berry Petroleum Inc.*	(-) Dalby	Dalby	12-34S-13E	--	--	--	--	--	7	--	-	-	--
CR-10776	No	Wayside-Havana	Davis Oil Co.	(W) Watson	Watson	10-34S-14E	10	0	Way	640	15	3	0	1	0	Yes
CR-11773	--	Wayside-Havana	Dodson Production Co.	(D) Patterson	Patterson	26-33S-14E	5	--	Way	696	16	1	0	0	0	Yes
3222	*	Wayside-Havana	H.J.Horton	(P) Havener	Havener	33-33S-14E	160	120	Way	700	30	8	0	1	0	No†
7983	Yes	Wayside-Havana	H.J.Horton	(P) Smotherman	Smotherman	28-33S-14E	80	--	Way	700	30	1	--	1	-	*
15264	No	Wayside-Havana	H.J.Horton	(P) A.D.Berry	A.D.Berry	33-33S-14E	80	0	Way	735	30	13	0	0	0	No*
11712	*	Wayside-Havana	H.J.Horton	(W) Mantooth-Dunham	Mantooth-Dunham	28-33S-14E	240	0	Way	700	30	16	0	0	0	No†
17885	*	Wayside-Havana	H.J.Horton	(P) Kellenberger	Kellenberger	15-34S-14E	80	0	Weiser	760	14	5	0	0	0	No†
326	No	Wayside-Havana	Layton Oil Co.	(W) Bragg-Riggle	Bragg, Riggle	4-34S-14E	480	0	Way	660	30	25	86	25	0	Yes*
					Bragg	5-34S-14E										
1439	No	Wayside-Havana	Layton Oil Co.	(W) Wayside	Allen, Dyer-Brewer, Garret-Dyer	5-34S-14E	530	0	Way	700	18	105	48	7	0	Yes
9034					Dalby	7-34S-14E										
10447					Paull, Bowersock	8-34S-14E										
13726					Mitchell, Shearhart	32-33S-14E										

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
18649	1	0	0	0	Irreg	0	2.75	Prod	--	--	T	1976	S Gas	1/1	24	--	1,000	2,000	595	1,064	0	0	
18143	1	--	-	-	Irreg	50	175	Prod	--	--	U	1958	Wat	1/10	22	--	63,875	--	3,695	--	150	--	*Was E.W.Hayes.
18071	1	--	-	-	5-Spot	100	40	Prod + Oswego	600	30	U	1976	S Gas	1/1	34	--	12,000	29,200	2,780	14,700	2,000	3,620	*Was Richard VonFeldt.
4034 9081 9082	14	0	0	0	Line	500	10	Prod	--	--	T	1954	S Gas	9/1	32	--	50,000	2,519,561	2,600	723,774	2,600	118,195	
18678	2	0	0	0	Irreg	400	10	Prod	--	--	T	1977	S Gas	4/1	28	--	7,000	7,000	584	584	0	0	*Was Ross Welch.
CR-7775	1	0	0	0	Line	Grav	12	Prod	--	--	U	1977	Grav	55/45	34	--	--	--	1,000	--	--	--	
5236	6	0	0	0	Irreg	275	75	Prod	--	--	U	1968	Gas Exp	--	31	--	157,500	--	2,200	--	1,500	--	
13445	1	0	0	0	Irreg	300	10	Prod	--	--	U	1976	Grav	3/5	29	--	3,062	5,578	1,837	3,347	--	--	
18491																							
10093 13620	19	3	0	0	5-Spot	500	40	Prod + Miss Lm	1322	30	U	1967	S Gas	1/8	35	--	276,649	1,604,567	8,676	80,384	8,676	80,384	
14651	4	2	0	0	Irreg	500	30	Prod + Arb	1370	--	U	1968	S Gas	6/1	33	--	53,026	407,503	2,222	25,678	2,222	25,678	
2045	7	--	0	-	5-Spot	351	13	Prod + Fr	--	--	T+S	1959	Grav	9/1	36	--	--	31,025	--	3,325	--	--	
7871	42	--	0	-	5-Spot	275	15	Prod + Sh Sd	135	--	T+S	1957	Grav	7/3	32	--	--	255,865	--	16,849	--	--	
7077	1	0	0	0	Irreg	175	40	Prod	--	--	U	1960	Gas Exp	10/1	34	--	14,600	--	617	--	150	--	
CR-4776	1	1	0	0	5-Spot	140	40	Prod + Oswego	600	30	U	1977	Grav	7/3	37	5	3,200	3,200	5,157	15,356	960	960	*Was Jeanbro Oil Co.
18002	0	0	0	0	--	--	--	Prod	--	--	U	†	Grav	1/9	34	--	0	--	315	--	0	--	*Produced water going to offset lease. †Plan to start project in 1978
18298	--	--	-	-	--	--	--	Prod	--	--	U	1976	Grav	25.3/57.6	31.6	--	--	7,300	2,089	--	--	--	
14036	12	1	0	1	5-Spot	340	64	Prod + Tuck	1243	23	T	--	S Gas	--	32	--	284,049	1,359,658	5,268	27,465	5,268	27,465	
CR-11771	1	0	1*	0	Line	500	150	Prod	--	--	U	1977	Grav	2/98	32	--	22,500	22,500	419	419	0	0	*Rework.
17353	1	1	0	0	5-Spot	400	200	Prod	--	--	U	1974	Grav	1/9	33	--	60,000	206,750	476	1,645	300	1,065	
11852	3	10	0	-	Irreg	275	300	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was O.C.S.Inc.
CR-10776	1	0	0	0	5-Spot	575	25	Prod	--	--	T	1977	S Gas	9/1	29	--	6,500	6,500	707	707	0	0	
CR-11773	1	0	0	0	Irreg	Grav	3	Prod	--	--	U	1977	Grav	2/8	28	--	--	--	50	--	--	--	
3222	1	0	0	0	Peri	200	15	Prod	--	--	U	1954	Grav	1/2	30	--	5,475	2,032,450	2,281	15,163	0	0	*50%. †Pumped into well as storage tank fills.
7983	--	--	-	-	Line	--	--	Prod	--	--	U	--	--	--	29	--	--	--	1,100	--	--	--	*Lease started and one well drilled 7/1972. Water is being injected in adjoining flood unit -C16,712, Mantooth-Dunham.
15264	1	0	0	0	5-Spot	Grav	18	Prod	--	--	U	1969	Grav	1/2	29	--	6,570	34,354	1,964	16,791	480	3,207	*Pumped into well as storage tank fills.
11712	4	0	0	0	5-Spot	450	17	Prod	--	--	U	1965	Grav	1/2	29	--	25,865	122,557	5,404	62,576	2,500	25,000	*50%. †Pumped into well as storage tank fills.
17885	1	0	0	0	Peri	Grav	15	Prod	--	--	U	1975	Grav	1/4	30	--	5,400	1,260	876	3,116	0	0	*50%. †Pumped into well as storage tank fills.
326	3	42	36	11	5-Spot	200	--	Prod	--	--	U	1970	S Gas	1/2	30	--	1,179	7,019	11,697	17,010	--	--	*Injection started 12/77.
1439 9034 10447 13726	95	7	1	0	5-Spot	400	22	Prod + Salt Sd	430	30	U	1974	S Gas	1/5	30	--	748,539	1,417,472	86,683	247,249	86,683	247,249	

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 (1977) — Active	Oil producing wells (1977) — Inactive	Oil producing wells (1977) — Drilled	Oil producing wells (1977) — Abd.	Has inj. been continuous?
MONTGOMERY COUNTY (Concl.)																
10442	No	Wayside-Havana	Layton Oil Co.	(W) Schneider	Schneider (Hecht)	16-34S-14E	160	0	Wiser	720	0	4	0	0	0	*
13823	No	Wayside-Havana	Layton Oil Co.	(W) --	Boan	35-33S-14E	6	0	Way	650	30	2	0	0	0	Yes
17941	No	Wayside-Havana	Gene Nunneley	(P) Nunneley	Nunneley	13-34S-14E	80	0	Way	580	15	8	0	0	0	Yes
18598	No	Wayside-Havana	Nunneley & Powell	(P) Kellenberger	Kellenberger	5-34S-14E	50	0	Way	810	20	5	--	2	-	Yes
4513	No	Wayside-Havana	Raygary Oil Co.	(P) Watson	--	34-33S-14E	5	0	Way	722	20	5	0	0	0	Yes
18019	No	Wayside-Havana	Raygary Oil Co.	(P) Defenbaugh	Defenbaugh	34-33S-14E	10	0	Way	682	20	12	0	4	0	Yes
18026	--	Wayside-Havana	Raygary Oil Co.	(P) Davidson	--	30-33S-14E	5	0	Way	660	8	3	1	0	1	Yes
18029	No	Wayside-Havana	Raygary Oil Co.	(P) Circle C	Circle C, Gruver	20-33S-14E	60	0	Wiser	784	14	10	0	4	0	Yes
16035	No	Wayside-Havana	Wheeler & Haddan	(D) Snell Unit	Snell, Blix, Brown, Anderson	18-34S-15E	--	80	Way	550	30	42	7	4	-	Yes
MONTGOMERY COUNTY TOTALS (Reported)							4720	200				482	173	58	2	
MORRIS COUNTY																
15416	No	Comisky	Maurice L.Brown Co.	(D) Porter "A"	Porter "A"	13-16S-9E	40	0	Viola	2930	18	1	1	0	0	Yes
18263	No	Comisky Northeast	Maurice L.Brown Co.*	(D) Viar-Porter "B"	Viar-Porter "B"	23,24-16S-9E	240	0	Viola	2947	12	2	0	1	0	Yes
MORRIS COUNTY TOTALS (Reported)							280	0				3	1	1	0	
MORTON COUNTY																
18039	Yes	Berryman-Richfield	Ladd Petroleum Corp.	(W) Berryman Richfield Unit	--	26,27,34,35-32S-41W 2,3,8,9,10,16,17-33S-41W	4480	--	Morr	4925	20	16	5	0	0	Yes
15918	--	Elkhart	Texaco Inc.	(W) Carthage NE Morrow "A"	W.Pritchett "A", W.Pritchett "B"	23-35S-43W	100	--	Morr A	4300	15	2	0	0	0	Yes
11602	Yes	Interstate	Anadarko Production Co.	(W) Interstate Purdy Sand Oil Unit	Interstate Unit	8,9,16,17,20,21,28,29,30,31,32-34S-43W	3800	--	Purdy Morr	4192	35	31	37	2	0	Yes
15849	Yes	Interstate	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	4494	11	7	5	0	0	Yes
13899	Yes	Taloga South	Cities Service Co.	(W) Taloga S.Morrow G Sand Unit	Taloga S.Morrow G Sd Unit	1,10,11,12,13,14-35S-42W	3760	0	Morr G	4553	14	9	1	0	4	Yes
13848	Yes	Wilburton	Cities Service 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.	5050	.5	1	3	0	0	Yes
12571	Yes	Wilburton	Cities Service Co.	(P) Wilburton Morrow C Sand Unit	Wilburton Morr C Sand Unit	28,29,33,32-34S-41W 4,5-35S-41W	3840	0	Morr C	4900	20	12	2	1	2	Yes
MORTON COUNTY TOTALS (Reported)							17900	0				78	53	3	6	
NEOSHO COUNTY																
11382	No	Erie	Graybol-Patton Co.*	(W) Shaw Unit	Luther, Waggoner, McCan	13-28S-19E	40	80	Bartl	600	10-20	8	6	0	0	Yes
15249	No	Erie	Graybol-Patton Co.*	(W) Kinne Unit	O.A.Kinne B & M Kinne	13-28S-19E 18-28S-19E	80	0	Bartl	600	10-20	19	0	0	0	Yes
15761	No	Erie	Graybol-Patton Co.*	(W) Hudson Unit	Carlson-Torrey, Hudson Leatherman, Wells-LaRue, Hines, McCan "B" & "C" Swiler	10-28S-19E 11-28S-19E 14-28S-19E	75	20	Bartl	600	10-20	30	2	0	0	Yes
15675	--	Erie	Jackson Oil Co.	(W) Maphies	Maphies	27-28S-20E	--	--	Bartl	480	20	9	--	-	-	Yes
17765	No	Erie East	A.H.Alcock & Son*	(-) M.Stegman	--	2-29S-20E	80	0	Bartl	500	520	6	3	0	0	No†

Project no.	Injection Wells: Active	In-active	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
10442	0	1	0	0	4-Spot	--	--	Prod	--	--	-	1964	S Gas	1/3	--	--	0	26,000	46	5,051	0	0	*Operated as stripper production due to mechanical difficulties.
13823	1	0	0	0	Peri	350	13	Prod	--	--	U	1967	S Gas	1/2	--	--	4,710	69,005	112	2,917	112	2,917	
17941	--	--	-	-	Irreg	175	15	Prod	--	--	U	1974	Grav	1/2	30	--	--	6,000	--	3,457	0	--	
18598	2	--	1	-	Irreg	250	60	Prod	--	--	U	1976	Grav	1/5	30	--	22,000	--	4,640	--	0	--	
4513	1	0	0	0	Irreg	200	8	Prod	--	--	T	1976	Wat	2/3	29	--	2,920	--	1,825	--	--	--	
18019	2	0	0	0	Line	300	12	Prod	--	--	T	1975	Wat	1/2	29	--	8,000	--	1,850	--	--	--	
18026	2	0	1	0	Irreg	300	20	Prod	--	--	T	1975	Wat	4/14	29	--	14,600	--	480	--	--	--	
18029	5	0	3	0	Irreg	250	30	Prod	--	--	T	1975	Wat	12/65	31	--	65,700	--	4,620	--	--	--	
16035	3	--	0	-	5-Spot	0	10	Prod	--	--	U	1971	Grav	7/3	30.9	--	10,800	--	1,000	--	--	--	
	241	68	42	12													1,936,719	10,184,324	165,865	1,288,627	113,601	535,740	
15416	1	0	0	0	Irreg	0	350	Prod	--	--	T	1970	Wat	--	--	--	384,345	2,243,662	3,989	104,441	0	0	
18263	1	0	0	0	Irreg	0	800	Prod	--	--	T	1976	Wat	--	--	--	24,000	24,000	0	0	0	0	*Was W.H.Campbell.
	2	0	0	0													408,345	2,267,662	3,989	104,441	0	0	
18039	9	0	0	0	Irreg	4569	886	Ground Wat	--	--	F	1976	S Gas	--	38	--	2,913,617	5,750,000	225,417	395,025	225,417	395,025	
15918	1	0	0	0	--	1220	399	Prod + Ogal	225	400	F	1971	S Gas	--	40.4	2.0	145,724	888,582	9,363	100,144	9,363	97,815	
11602	10	4	0	0	Peri	717	1746	Prod + Ogal	200	100	M	1965	S Gas	160/1245	39	2.49	6,371,305	82,585,181	770,595	13,873,102	770,595	11,739,604	
15849	2	1	0	0	Peri	419	548	Prod + Ogal	140	80	M	1971	S Gas	30/5	43.5	2.0	399,805	4,681,886	6,900	59,081	6,900	59,081	
13899	9	0	0	2	Peri	604	437	Prod + Ogal	200	45	M	1969	S Gas	42/1	39	3.15	1,116,884	7,517,018	96,711	723,375	96,711	521,570	
13848	2	--	-	1	Irreg	632	125	Prod + Ogal	200	45	F	1968	S Gas	3499/0	40.2	4.5	91,463	1,367,249	6,032	211,326	6,032	114,511	
12571	7	0	0	0	Peri	593	979 921*	Prod + Ogal	200	45	M	1966	S Gas+ Gas Cap	11.7 /1	40.2	4.51	1,784,781 673,696*	17,380,409 6,868,312*	302,503	5,869,200	302,503	3,357,797	*MCF.
	40	5	0	3													12,823,579	120,170,325	1,417,521	21,231,253	1,417,521	16,285,403	
11382	2	8	0	0	Line	600	74	Prod + Canville Crk.	--	--	M	1963	S Gas	1/0	32	--	54,277	700,304	1,207	22,425	--	22,425	*Was Graybol Oil Corp.
15249	13	2	0	0	Line	600	39	Prod + Canville Crk.	--	--	M	1969	S Gas	1/0	32	--	183,034	1,491,013	12,734	187,973	--	187,973	*Was Graybol Oil Corp.
15761	15	2	0	0	Line	600	32	Prod + KC Lime + Surface Wat	150	10	M	1970	S Gas	1/0	32	--	174,328	--	18,900	128,061	--	128,061	*Was Graybol Oil Corp.
15675	4	--	-	-	5-Spot	550	480	Prod + Arb	1200	10	T	1975	Grav	1/1	32	--	17,529	57,279	2,466	5,810	739	2,325	
17765	1	2	0	0	Irreg	500	10-25	Prod + Fr	55	10	F+ Phospate	1975	Wat	95/5	32	--	14,010#	--	--	2,230#	0	0	*Was Homer Ellsworth. †Brine inj.into another form.#Primary production.

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
NEOSHO COUNTY (Concl.)																
17823	No	Humboldt-Chanute	Graybol-Patton Co.*	(W) LaRue	LaRue "A"	33-27S-19E	80	80	Bartl	740	10	1	4	1	0	No†
18660	--	Humboldt-Chanute	Geo. A.Hoffman Oil Co.	(W) Claus-Waltermire	Worth Waltermire Eben Claus	23-27S-19E 24-27S-19E	160	--	--	--	--	6	--	0	-	Yes
18268	--	Humboldt-Chanute	Kepley Oil Account	(W) Kepley	Kepley	2-28S-17E	320	--	Squir + Cattle	695 824	8 20	5	--	1	-	No*
4121	No	Humboldt-Chanute	Walter Lacey	(S) --	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	0	5	0	2	No*
18363	--	Humboldt-Chanute	F.B.Shook	(P) --	Burris	6-27S-19E	--	--	Bartl	800	3-8	6	3	0	-	--
11 264 290 514 741	--	Humboldt-Chanute	Texaco Inc.*	(W) Russell Block	Russell Block	1,2,10,11,12,14, 15,21,22,26,27- 27S-18E 6,7-27S-19E	3336	--	Bartl	700	0- 40	343	34	0	0	Yes
6713	--	St.Paul-Walnut	Kanalta Resources Ltd.	(-) Butler	Butler	30-28S-21E	100	--	Bartl	500	16	10	9	-	-	Yes
4612 8930	No	St.Paul-Walnut	T & G Oil Co.	(D) T & G	T.P.Dent, H.Van Leeuween	33-28S-21E	320	--	Bartl	395	16	20	6	0	-	Yes
16629	--	Thayer South	Wright-Erbe - Ross Oil Association	(W) Wright-Erbe-Ross Oil Association	Gildarb & Gildarb	11-30S-17E	160	--	Bartl	931	10	4	2	0	4	No*
10766	No	Trent	Drilex Oil & Gas Inc.*	(W) Neosho	Johnson, Blaine Cleaver	23-28S-20E 25-28S-20E	280	--	Bartl	470	10	40	20	2	0	Yes
8145	--	Trent	Erie Oil Co.Inc.	(W) Edwards Stanley	Edwards & Stanley	22-28S-20E	60	--	Bartl	475	16	10	--	0	-	Yes
8378	--	Trent	Jackson Oil Co.	(W) McDermed	McDermed, Metzger	22-28S-20E	10	--	Bartl	480	20	26	--	-	-	Yes
16939	--	Trent	Jackson Oil Co.	(W) Yarnell	Blaine, Cooney, Perry	22-28S-20E	20	--	Bartl	480	20	40	--	-	-	Yes
7073	--	Trent	Kanalta Resources Ltd.	(W) Dagget-Hazen	Roy L.Dagget	23-28S-20E	160	--	Bartl	500	16	12	11	-	-	Yes
9986	--	Trent East	Jackson Oil Co.	(W) Casady	Madl, Mitchell, Morgan, Dowling	29-28S-21E	120	--	Bartl	380	20	47	--	-	-	Yes
		NEOSHO COUNTY TOTALS (Reported)					5451	180				646	105	4	6	
NESS COUNTY																
9920	No	Aldrich	Thornton E.Anderson*	(D) Edwards	Edwards	22-18S-26W	40	0	Miss	4500	10	1	0	0	0	Yes
14618	--	Aldrich	Continental Oil	(W) Aldrich	C.R.Aldrich	7,8-18S-25W	320	0	Miss	4350	12	4	0	-	-	Yes
2952 4376 7632	--	Aldrich	Hillenburg Oil Co.*	(W) Aldrich	Everett A Lythe, Harkness C Sutton A, Thompson, Daisy, Bateman A	22-18S-26W 23-18S-26W 24-18S-26W	100	60	Miss	4430	8	5	0	0	0	Yes
18583	No	Aldrich	Reed Oil Co.	(-) Palomino-Reed	Reed Olson Reed	27-17S-25W 33-17S-25W 34-17S-25W	--	0	Miss	4303	6	5	0	1	0	Yes
7751	--	Aldrich	Tenneco	(D) --	Louise Everett	8-18S-25W	40	20	Miss	4390	37	1	1	0	0	Yes
13484	No	Aldrich Northeast	Barnett Oil,Inc.	(P) Shearer "B"	Shearer "B"	26-17S-25W	80	--	Miss	4300	30	2	0	0	0	Yes
14896	No	Bellesprit	Walters Drilling Co.	(P) Ryan	Ryan	22-16S-21W	80	80	Cher Sd	4260	15	1	1	0	1	Yes
10347	No	Dickman	Walters Drilling Co.	(P) Dickman	Tilley Dickman, Elmore Humphry	8-17S-24W 17-17S-24W 18-17S-24W	--	--	Miss	4500	40	6	1	0	0	Yes
CR- 7776	No	Dickman Southeast	Palomino Petroleum	(D) Habiger-Keilman	Habiger-Keilman	16,21-17S-24W	320	0	Miss	4393	10	3	0	2	0	Yes
16067	--	Nirvana	Leben Oil Corp.	(-) Debes	Debes	23-18S-24W	160	--	Miss	4310	2	1	0	0	0	Yes
CR- 77713	--	Petersilie	Continental Oil	(W) Petersilie SE	Petersilie SE	30-20S-24W	200	0	Miss Ft.Scott	4410 4319	8 11	4	0	-	-	Yes
10676	No	Petersilie	Kewanee Oil Co.	(P) Petersilie	Petersilie	14-20S-24W	80	0	Miss	4388	22	2	1	0	0	Yes
17321	--	Petersilie	Meltzer Oil Co.*	(D) Petersilie	Petersilie "A", Petersilie "B"	14-20S-24W	320	--	Miss	4406	4	3	--	-	-	Yes
17417	--	Prairie Ridge	Empire Drilling Co.	(P) Armstrong	Armstrong	7-16S-26W	120	--	Miss	4520	--	2	--	-	-	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17823	0	2	0	0	Line	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Was Graybol Oil Corp. †Water injection discontinued.
18660	1	--	0	-	Irreg	250	25	--	--	--	-	--	--	--	--	--	--	--	741	2,060	--	--	
18268	1	--	-	-	Irreg	600 300	15 45	Prod + KC + Tuck	178 932	220 --	U	1976	Grav	9/1	27	34.5	23,800	--	900	2,600	--	1,250	*Cold weather and breakdowns.
4121	1	0	0	0	Irreg	550	--	Prod	--	--	U	1963	Grav	1/20	33.6	--	1,750	--	540	--	0	0	*Disposal of lease water.
14681	0	11	0	0	5-Spot	--	--	Prod + Sd	400	60	U	1968	S Gas	1/8	0	--	0	300,347	0	16,455	0	16,284	*Inactive due to mechanical problems.
18363	--	--	-	-	--	450	--	Prod + Bartl	740	3-8	U	1976	--	--	--	--	--	--	--	--	--	--	
11 264 290 514 741	103	257	0	21	5-Spot	780	33	Prod + Arb	1500	--	M	1974	S Gas	--	32	--	1,254,051	4,440,590	16,288	62,851	17,126	63,689	*Was Ross Keas Oil Inc.
6173	13	--	-	-	Line	500	17	Prod + Miss	--	--	M	1958	Grav	2/1	27	--	--	--	403	--	403	--	
4612 8930	22	6	0	-	Irreg	380	9	Prod + Miss	550	--	-	--	Wat	4/1	32	33	65,700	--	2,372	--	--	--	
16629	1	--	0	-	5-Spot	300	20	Prod + Oswego	620	--	U	1973	Grav	99/1	27	22.7	6,000	--	500	--	100	--	*Weather.
10766	8	--	0	0	5-Spot	350	10	Prod	--	--	P	1977	Grav	98/2	29	--	24,000	24,000	--	9,800	4,000	--	*Was Polumbus Corp.
8145	9	--	-	-	5-Spot	--	--	--	--	--	M	--	Grav	--	29	--	1,500	187,000	1,800	--	1,800	--	
8378	4	--	-	-	5-Spot	550	--	Prod + Arb	1200	10	T	1968	Grav	1/1	30.1	--	--	--	4,110	30,736	--	--	
16939	24	--	-	-	4-Spot	550	235	Prod + Arb	1200	10	T	1976	Grav	1/1	26	--	85,449	140,531	5,980	10,232	1,794	6,046	
7073	--	--	-	-	5-Spot	350	17	Prod	--	--	M	--	--	--	29	--	--	--	1,432	--	1,432	--	
9986	24	--	-	-	Line	500	1114	Prod + Arb	1280	20	T	1973	Grav	10/1	31	--	305,095	2,020,293	18,294	334,993	5,488	100,497	
	246	290	0	21													2,210,523	9,361,357	88,667	816,226	32,882	528,550	
9920	1	0	0	0	Irreg	0	50	Prod	--	--	U	1963	Partial Wat	1/4	37	--	16,000	226,500	1,507	67,079	307	307	*Was High Plains Production Co.
14618	1	0	-	-	Line	550	652	Prod	--	--	U	1968	Wat	--	36.1	--	238,012	1,752,630	9,795	91,989	9,795	41,989	
2952 4376 7632	1	2	0	0	5-Spot	52	1210	Prod	--	--	T	1956	Wat	44/ 56	36	--	441,650	--	15,810	--	15,810	--	*Was Terra Resources Inc.
18583	1	0	0	0	Irreg	550	182	Prod + Miss Lm + Dak Sd	4310	10	T	1976	Wat	43/ 57	37	--	66,460	82,269	29,797	44,197	--	--	
7751	1	0	0	0	Irreg	250	140	Prod	--	--	T	1955	S Gas	--	35.7	--	51,100	840,000	1,827	300,884	0	0	
13484	1	0	0	0	Irreg	380	650	Prod	--	--	U	1967	S Gas	1/4	37	--	237,000	1,865,750	18,828	498,357	6,000	48,900	
14896	1	--	-	-	Irreg	200	143	Prod	--	--	T	--	Partial Wat	95/5	38	--	52,016	--	10,578	292,561	5,289	71,289	
10347	--	--	-	-	Irreg	250	1260	Prod	--	--	T	1963	Partial Wat	95/5	35	--	460,000	--	15,405	696,648	7,703	348,324	
CR-7776	1	0	0	0	Irreg	0	77	Prod	--	--	U	1977	Wat + S Gas	2/3	36	--	11,090	11,090	30,371	30,371	0	0	
16067	1	0	0	0	Irreg	Vac	23	Prod	--	--	T	1971	S Gas	--	--	--	8,000	54,805	1,000	21,611	0	0	
CR-77713	1	0	-	-	Irreg	900	180	Prod	--	--	U	1977	*	--	36.4	--	16,524	16,524	3,283	3,283	--	--	*Fluid expansion.
10676	1	0	0	0	Irreg	0	240	Prod	--	--	U	1964	Wat	80/ 81	38	--	87,686	1,345,906	6,551	401,566	0	0	
17321	--	--	-	-	Irreg	0	200	Prod	--	--	U	1974	--	1/9	36	--	56,000	--	3,911	--	--	--	*Was Artnell Co.
17417	1	--	-	-	Peri	800	20	Prod	--	--	T	1974	S Gas	78/ 22	37.8	--	7,300	50,297	9,007	215,415	2,407	4,338	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
NESS COUNTY (Concl.)																
17407	No	Stutz East	Patrick Petroleum Corp. (Oil Property Management)	(P) Rupp "F"	Stutz Rupp "B", Rupp "E" Rupp "A" Ryan "C", Ryan "E"	8-17S-25W 9-17S-25W 10-17S-25W 16-17S-25W	--	0	Miss	4440	20	10	0	1	1	Yes
CR-7774	No	Sunshine	Palomino Petroleum*	(D) McDonald	McDonald, Shauers Bondurant	7-19S-24W 12-19S-25W	480	0	Miss	4390	10	3	0	2	0	Yes
NESS COUNTY TOTALS (Reported)							2340	160				53	4	6	2	
NORTON COUNTY																
15718	--	Hansen Estate	Leben Oil Corp.*	(-) Stenger	Stenger	2-5S-22W	160	--	Gorham Sd	3575	2	1	--	-	-	--
17985	No	Harting	Robert E.Davis*	(W) Harting	Harting	2-4S-23W	120	0	Reag	3701	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	4200	10	3	0	0	0	Yes
6115	Yes	Benson Southeast	Cities Service Co.	(W) Benson Southeast Unit	Benson Southeast Unit	31,32-23S-15W	77	35	LKC	3700	35	4	1	0	0	Yes
18063	No	Dunes North	Kaiser Francis	(D) Fertig B	Fertig B	15-22S-15W	80	0	LKC	3512	231	1	0	0	0	Yes
8878	No	Garfield	A.L.Abercrombie,Inc.	(D) Hutchinson "D"	Hutchinson "D"	9-23S-17W	20	280	Miss	4228	26	2	0	0	0	Yes
12708 10116	No	Garfield	Maurice L.Brown Co.	(P) Garfield	Fergus "A", Fergus "C" Hutchinson B-C, Hutchinson D Spence Wilson	16-23S-17W 17-23-17W 18-23S-17W 20,21-23S-17W	480	960	Miss Mise	4200	15	3	0	0	0	Yes
17322	No	Hurray	A.Scott Ritchie	(P) Compton	Compton, Stan Compton	3-22S-15W	180	0	Arb	3947	103	4	0	0	0	Yes
17123	--	Lovett	Leben Oil Corp.	(-) Guffy	Guffy	35-22S-15W	320	--	Top + LKC	3686	6	1	0	0	0	Yes
14971	No	Oro Northwest	NCRA	(W) Van Rensselaer	Van Rensselaer	5-20S-19W	160	0	Pawnee	4194	7	2	1	0	0	Yes
18538	No	Point View	F & M Oil Co.,Inc.	(P) Point View	Barstow #3	25-22S-15W	320	0	Lans	3570	5	1	0	0	0	Yes
14328	No	Rutherford	Murfin Drilling Co.	(P) Almquist WF	Almquist	5-20S-16W	160	125	Arb	160	125	2	0	0	0	Yes
8460 12417	--	Shiley	Cities Service Co.	(W) Shiley Waterflood	Jennings "C" & Jennings "D" Risse "A"	13-20S-20W 14-20S-20W	70	130	B Penn	4170	7	2	0	0	0	Yes
PAWNEE COUNTY TOTALS (Reported)							1987	1530				25	2	0	0	
PHILLIPS COUNTY																
16225	--	Beckman South	Petroleum Management,Inc.	(W) Beckman South Project	Roeder Beckman, Flanigan, Roeder, Clark	9-4S-19W 10-4S-19W	680	0	LKC	3248	116	10	1	0	0	Yes
8011	--	Dayton	Sierra Petroleum Co.,Inc.*	(W) Dayton Unit	Schluntz Kaiser C.G.Eltiste, F.L.Dusin E.C.Garber	25-2S-19W 26-2S-19W 35-2S-19W 36-2S-19W	640	0	KC	3200	23	7	0	0	0	Yes
15367	--	Della	Petroleum Management,Inc.	(W) Slinker	Lutz Boethin, Lutz White, Merklein, Slinker Slinker	17-4S-19W 18-4S-19W 19-4S-19W 24-4S-20W	40	20	LKC	3180	152	2	0	0	1	Yes
15214	Yes	Fredricksburg	Ladd Petroleum Corp.	(W) Seyler	Seyler "A", Seyler "B", Seyler "C", Imm	9-1S-18W	160	0	LKC	3050	450	3	0	0	0	Yes
17919	--	Hansen	Cities Service Co.	(W) Hansen LKC	Brown "B", Hansen "C", Templeton "A", Lappin "A" Reese "F" Brown "B", Hansen "C"	14-5S-20W 22-5S-20W 23-5S-20W	960	0	LKC	2926	30	23	0	0	0	Yes
17918	No	Hansen	Getty Oil Co.*	(W) B.O.Graham	B.O.Graham	22,23-5S-20W	160	0	Lans Arb	3232	32	10	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17407	1	0	0	0	Irreg	250	590	Prod	--	--	T	1974	Grav	1/1	37	--	215,350	593,470	57,413	280,830	--	--	
CR-7774	1	0	0	0	Irreg	0	110	Prod	--	--	U	1977	Wat + S Gas	21/79	38	--	10,100	10,100	8,467	8,467	0	0	* Was D.L.Heller & Earl Knighton.
	14	2	0	0													1,974,288	6,849,341	223,550	2,953,258	47,311	515,147	
15718	--	--	-	-	Irreg	--	5	Prod	--	--	T	1970	S Gas	60/5	36	--	1,825	13,375	1,993	22,393	--	--	*Was T.I.Leben
17985	1	0	0	0	--	Vac	90	Prod	--	--	U	1975	S Gas	10/1	28	--	32,946	153,507	5,854	119,852	754	6,054	*Was A.Ainsworth.
	1	0	0	0													34,771	166,882	7,847	142,245	754	6,054	
16981	--	--	-	-	Irreg	Vac	275	Prod	--	--	T	--	S Gas	95/5	41	--	100,499	--	35,117	426,442	11,706	134,206	
6115	3	1	0	0	Peri	506	366	Prod + Wat Sd	67	--	M	1958	S Gas	68/160	41	--	321,470	8,041,144	6,394	876,444	6,394	361,312	
18063	1	0	0	0	Irreg	Vac	30	Prod	--	--	U	1975	Gas Exp	--	26	--	5,900	16,263	2,400	--	0	0	
8878	1	0	0	0	Irreg	Vac	12	Prod	--	--	U	1965	S Gas	1/1	35	--	4,030	1,412,193	1,667	605,518	0	0	
12708	1	0	0	0	Irreg	0	122	Prod	--	--	T	1963	Wat	--	37	5.61*	39,440	1,403,619	5,219	1,376,188	1,305	44,114	*@100.
10116																							
17322	4	0	0	0	Irreg	0	500	Prod	--	--	U	1974	S Gas + Part. Wat	1/4	60	--	166,440	346,440	13,052	118,016	13,052	--	
17123	1	0	0	0	Irreg	Vac	11	Prod	--	--	T	1973	S Gas	--	36	--	14,965	27,999	1,613	49,869	0	0	
14971	1	0	0	0	Irreg	630	393	Prod	--	--	U	1969	S Gas	1/0	45.4	--	143,389	681,099	14,239	369,200	0	0	
18538	1	0	0	0	Peri	Vac	30	Prod	--	--	U	1975	S Gas	1/1	24	--	10,950	28,290	4,564	16,074	--	--	
14328	1	0	0	0	Irreg	800	106	Prod	--	--	T	1968	S Gas	--	42	--	38,768	667,074	2,423	348,279	2,423	54,403	
8460	1	0	0	0	Line	775	280	Prod + Dak	362	--	M	1961	S Gas	1/1	36	5	338,378	2,638,269	5,550	535,010	5,550	312,630	
12417																							
	15	1	0	0													1,184,229	15,262,390	92,238	4,721,040	40,430	906,665	
16225	5	0	0	0	Irreg	600	135	Prod + Dak Sd	--	--	T	1971	--	2.2/1	36	--	230,442	1,166,872	18,637	313,091	18,637	136,339	
8011	6	0	0	0	Line	815	130	Prod + Chey	1060	--	T	1960	S Gas	--	36	6	284,796	4,272,911	23,442	592,044	23,442	592,044	*Was Humble Oil & Ref. Co.
15367	1	0	0	0	Irreg	500	147	Prod	--	--	U	1970	S Gas	99/1	35	--	53,518	386,374	2,600	18,876	2,600	12,860	
15214	1	0	0	0	Irreg	508	92	Dak	1055	75	T	1969	S Gas	3.5/1	35	--	19,315	334,336	5,421	81,242	5,421	81,242	
17919	9	0	0	0	Peri	144	254	Prod	--	--	T	1976	S Gas	--	36	--	810,318	1,255,809	194,177	1,801,115	164,102	225,617	
17918	5	0	0	0	Irreg	92	132	Prod	--	--	U	1976	S Gas	77/175	34	--	240,814	387,649	52,902	1,681,303	33,402	40,443	*Merger: was Skelly Oil Co., 2/1/77.

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
PHILLIPS COUNTY (Concl.)																
6746	Yes	Huffstutter	Ladd Petroleum Corp.	(W) North Huffstutter	--	16,17,20,29-1S-18W	3240	--	LKC	3400	254	28	2	1	0	Yes
8461	Yes	Huffstutter	Petroleum Management,Inc.	(W) Center Huffstutter Unit	--	31-1S-18W 5,6,7-2S-18W	1220	280	LKC	3365	235	37	8	-	-	Yes
13834	--	Huffstutter	Petroleum Management,Inc.	(W) Huffstutter NW	W.A.Jackson, Rakestraw, Huffstutter "C"	31-1S-18W	130	0	LKC	3350	235	4	1	0	0	Yes
8141	Yes	Huffstutter	Phillips Petroleum Co.	(W) Huffstutter Coop Unit	Huffstutter Coop Unit	13-2S-19W	345	0	LKC	3400	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	3400	50	12	1	0	0	Yes
8195	--	Huffstutter SW	Sierra Petroleum Co.,Inc.*	(W) Kelly Unit	Hopper, Kelly	23-2S-19W	80	160	LKC	3280	176	2	0	0	0	Yes
15283	No	Huffstutter North	Good & Phillips Oil Co.	(P) O'Neill Pressure Maintenance	O'Neill	22-1S-18W	80	20	LKC	3327	20	1	0	0	0	Yes
14227 14228	--	T.W.Jackson	Petroleum Management,Inc.	(-) T.W.Jackson	Elsie #5, Jackson #3	20-4S-18W	400	--	Lans	--	--	--	--	-	-	Yes
16645	--	Kinter	Petroleum Management,Inc.	(W) Adee Unit (PMI Project)	Schneider B Schneider B, Schneider A Adee, Schneider A, Schneider B	19-4S-19W 29-4S-19W 30-4S-19W	--	0	Lans	3162	150	5	0	0	0	Yes
13887	--	Logan	Dane G.Hansen Trust	(D) Stephens-Ross	Stephens Ross	34-4S-20W 35-4S-20W	200	0	LKC	3200	220	2	0	0	0	Yes
6898 15215	--	Mont Sol	Petroleum Management,Inc.	(W) Mont Sol LKC Unit	Krause "B" Krause "A" Sophia Meyers	6-4S-18W 7-4S-18W 1-4S-19W 12-4S-19W	100	--	LKC	3200	28	2	0	0	0	Yes
13967	--	Slinker	Cities Service Co.*	(W) Slinker Toronto & LKC	Donahey, Lynch "B", Slinker Fox Lynch "A", Radloff	25-4S-20W 30-4S-20W 36-4S-20W	425	--	Tor + LKC	3098 3118	20	6	4	0	0	Yes
12729 12730	--	Stoneman	Petroleum Management,Inc.	(-) Stoneman	Stoneman Morgan Sutley,Quanz, Van Der Wege	20-4S-18W 21-4S-18W 29-4S-18W	1140	0	LKC	3105	235	11	5	0	0	Yes
12731	--	Stoneman	Santa-Fe Pipe & Supply,Inc.*	(W) Bredemeier	Bredemeier	28-4S-18W	80	40	KC	3050	18	2	0	0	0	Yes
6131	--	Stuttgart	Petroleum Management,Inc.	(W) Stuttgart	--	13,14,23-3S-19W	165	--	LKC	3200	35	2	2	0	0	Yes
16728	--	Veeh	Petroleum Management,Inc.	(W) Grau	Grau	35-3S-19W	160	--	Lans	3208	223	2	--	-	-	Yes
		PHILLIPS COUNTY TOTALS (Reported)					10925	520				176	24	1	1	
PRATT COUNTY																
14279	No	Barnes Southwest	Bowers Drilling Co.,Inc.	(P) Barker	Barker, Bergner, Bergner A	35-27S-12W	320	160	KC	3626	8	7	0	0	0	Yes
4080	--	Chitwood	Raymond Oil Co.,Inc.*	(W) Chitwood	--	14,22,23,26,27-28S-12W	1200	--	Simp	4390	23	4	--	-	-	Yes
16091	Yes	Cunningham	Braden-Deem Inc.	(W) Cunningham WF	--	3-28S-11W	400	--	LKC	3430	15	4	--	0	0	Yes
16624	No	Frisbie	Energy Reserves Group	(W) Frisbie	Frisbie,A.E.	5-26S-13W	80	0	LKC	3948	50	2	0	0	0	Yes
15235	Yes	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	3980	6	5	0	0	0	Yes
7970	--	Iuka-Carmi	B M & N Oil Co.,Inc.	(-) --	Honeman	31-26S-12W	160	--	Simp	4210	48	4	--	-	-	No*
6895	Yes	Iuka-Carmi	Getty Oil Co.*	(W) Iuka-Carmi-Helmke Unit	Helmke "H", Helmke "J" Helmke "B", Beck "A", Luders "B" F.B.Wagner	6-27S-12W 7-27S-12W	680	100	Simp	4230	18	7	10	0	0	Yes
8202	Yes	Iuka-Carmi	Getty Oil Co.*	(W) South Iuka-Carmi Unit	Luders "B", F.B.Wagner J.E.Brown, M.D.Burkner, M.A.Justice S.Beck	7-27S-12W 18-27S-12W 12-27S-13W	680	0	Simp	4270	16	8	6	0	0	Yes
11297	No	Iuka-Carmi	Getty Oil Co.*	(W) V.E.Miskimen Water-flood	V.E.Miskimen	32-26S-12W	100	50	Simp	4200	25	4	0	0	0	Yes
13600	No	Iuka-Carmi	Getty Oil Co.*	(W) Miskimen-Simpson	V.E.Miskimen L.R.Freymiller	32-26S-12W 5-27S-12W	160	0	Simp	4214	30	5	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
6746	22	4	0	1	Irreg	397	75	Prod + Dak	1055	75	T	1956	S Gas	--	36	--	605,105	11,943,048	62,466	3,521,124	62,466	3,521,124	
8461	13	--	-	-	--	475	133	Dak Sd	1050	--	T	1961	S Gas	1/0	37.3	--	630,938	8,836,433	76,311	2,250,644	76,311	2,250,644	
13834	2	1	0	0	Irreg	250	141	Dak Sd	--	--	T	1967	--	1/0	37	--	102,849	1,395,818	7,937	239,327	7,937	239,327	
8141	2	1	0	0	Irreg	0	495	Prod + Dak	871	30	U	1972	S Gas	3/2	35	--	361,473	2,851,030	13,812	872,012	11,772	290,554	
9984	6	0	0	0	Irreg	260	220	Prod + Dak	1000	--	U	1963	S Gas	1/1.7	36	9	482,210	4,640,521	28,336	938,491	25,671	506,110	
8195	1	0	0	0	Irreg	--	123	Prod	--	--	T	1961	S Gas	--	32	--	45,018	1,277,740	1,985	115,178	1,985	115,178	*Was Sam Wallingford, Inc.
15283	1	0	0	0	Irreg	405	70	Prod	--	--	T	1969	S Gas	--	34	--	25,915	215,325	1,946	22,421	1,946	12,636	
14227	1	1	0	0	--	500	105	--	--	--	-	--	--	--	--	--	36,912	218,776	--	--	--	--	
14228 16645	1	0	0	0	Irreg	400	301	Prod	--	--	U	1972	Wat	2/1	36	--	109,883	395,090	8,456	103,355	8,456	33,190	
13887	1	0	0	0	Irreg	Vac	46	Prod	--	--	T	1967	S Gas	1/1	*	--	16,790	207,345	3,942	45,252	--	--	*28-31 & 33-36.
6898 15215	2	--	-	-	Line	450	137	Prod + Dak	1130	50	T	1960	S Gas	10/3	36	--	95,478	1,521,762	2,981	329,734	2,981	329,734	
13967	5	0	0	0	Peri	785	400	Prod + Dak Sd	740	220	M	1967	S Gas	1/ 1.09	37	3.6	699,471	5,630,479	29,448	1,263,220	29,448	415,565	*Was C.H.Todd Inc.
12729 12730	5	1	-	-	Irreg	350	136	Prod + Dak Sd	960	100	T	1966	S Gas	1/1	38	--	245,028	3,082,839	35,871	952,489	35,871	367,799	
12731	1	0	0	0	--	550	20	Prod + Ced H	950	150	U	1966	S Gas	3/2	38.4	--	11,164	267,862	1,444	34,494	--	--	*Was Hershberger Explorations.
6131	2	5	0	0	Irreg	225	251	Prod	--	--	U	1952	S Gas	2/1	35.3	--	183,514	6,598,144	2,371	62,212	2,371	62,212	
16728	1	--	-	-	Irreg	600	177	Prod	--	--	U	1973	--	--	--	--	55,733	258,087	4,012	77,268	4,012	36,594	
	93	13	0	0													5,346,684	57,144,250	578,497	15,314,892	518,831	9,269,212	
14279	1	0	0	0	Irreg	800	1000	Prod + Fr Wat	200	50	M	1972	Grav	7/3	38	--	360,000	810,000	16,956	441,836	6,500	24,500	
4080	3	--	-	-	Irreg	Vac	534	Prod	--	--	U	1955	S Gas	--	38	--	585,460	39,956,871	7,786	3,824,899	--	--	*Was Lion Oil Co., Inc.
16091	2	2	0	0	Irreg	800	300	Prod + Ground	40	60	M	1971	S Gas	1/1	36	--	293,875	3,551,400	6,873	61,879	2,400	9,200	
16624	1	0	0	0	Irreg	0	63	Prod	--	--	U	1972	S Gas	8/9	31.5	--	22,953	123,714	4,350	404,363	4,350	24,006	
15235	6	0	0	0	Peri	300	228	Prod + Meade	50	100	M	1969	S Gas	4/1	38	--	500,226	5,750,519	10,823	86,913	7,787	55,686	*Was Petrominerals Corp.
7970	0	4	0	-	Irreg	0	0	Prod + Fr	90	--	F + M	--	Wat	--	--	--	--	--	--	--	--	--	*We have not used them since we took over ownership in 1973.
6895	5	4	0	0	Irreg	156	714	Prod + Sh Sd	90	--	M	1961	S Gas	3314/ 347	38	--	1,303,870	21,255,085	17,870	3,818,122	17,870	1,681,322	*Merger: was Skelly Oil Co., 2/1/77.
8202	6	2	0	0	Irreg	0	357	Prod + Sh Sd	90	--	M	1961	S Gas	3929/ 2792	38	--	782,229	11,558,625	14,758	2,474,373	14,758	1,094,161	*Merger: was Skelly Oil Co., 2/1/77.
11297	3	0	0	0	Irreg	0	474	Sh Sd	90	--	F	1964	S Gas	236/ 334	40	--	519,456	4,734,976	14,491	869,438	14,491	276,369	*Merger: was Skelly Oil Co., 2/1/77.
13600	1	0	0	0	Irreg	200	622	Prod + Sh Sd	90	--	M	1967	S Gas	1.71/ 1	39	--	227,205	774,837	31,331	459,453	31,331	459,453	*Merger: was Skelly Oil Co., 2/1/77.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
PRATT COUNTY (Concl.)																
11041	No	Iuka-Carmi	Ronald Russ Prater Inc.	(W) C.J.Binger	C.J.Binger	31-26S-12W	144	--	Simp	4175	30	3	--	-	-	No*
15384	No	Iuka-Carmi	TGT Petroleum Corp.	(P) Knop (Hoeme)	Knop	25-26S-13W	160	0	Viola	4120	25	3	0	1	0	No*
11392	No	Iuka-Carmi	Terra Resources, Inc.	(D) Iuka-Carmi	McFadden "C"	6-27S-12W	160	130	Simp Sd	4236	33	4	0	0	0	Yes
					Calbeck "A"	1-27S-13W										
16490	No	Moore West	Thornton E.Anderson*	(P) Henderson	Collins	3-26S-14W	80	0	LKC	3804	8	1	0	0	0	Yes
					Henderson	4-26S-14W										
13954	Yes	Rolingson North	Beren Corp.*	(W) North Rolingson-Simpson Unit	Helmke	19-27S-12W	560	160	Simp	4310	7	6	4	0	0	Yes
					Josserand, Rolingson	30-27S-12W										
					Humphrey	31-27S-12W										
					Grier, Bergher	25-27S-13W										
					Humphrey	36-27S-13W										
		PRATT COUNTY TOTALS (Reported)					5304	600				67	20	1	0	
RAWLINS COUNTY																
16643	Yes	Cahoj	Getty Oil Co.*	(W) Cahoj LKC Waterflood	Cahoj (LKC) Unit	3,4,8,9,10,16,17, 18,20-1S-34W	2880	0	LKC	4062	156	32	6	0	0	Yes
15518	Yes	Cahoj	Halliburton Oil Producing Co.	(P) S.E.Cahoj	Thieler, Fikan, Rosa Dozbaba	15-1S-34W	1120	60	LKC	4047	20	8	1	0	0	Yes
					Cahoj "H"	16-1S-34W										
					Micek, Richard Dozbaba	21,22-1S-34W										
18631	--	Cahoj East	Empire Drilling Co.	(-) Fikan B	Fikan B	14-1S-34W	--	--	LKC	--	--	2	0	0	0	Yes
11929	No	Cahoj West	Burch Exploration Inc.	(D) Cahoj West	Sis	12-1S-35W	400	200	LKC	4154	24	2	0	0	1	Yes
					Chadderdon	13-1S-35W										
					Savage*	14-1S-35W										
18265	--	Cahoj West	Empire Drilling Co.	(P) Ruda Pressure	Horinek B	11,12-1S-34W	--	--	LKC	--	--	5	--	-	-	Yes
					Ruda	13,14-1S-34W										
14615	--	R.H.P.	Empire Drilling Co.	(P) R.H.Palmer W.F.	R.H.Palmer	6-1S-33W	100	40	LKC	4078	6	7	0	0	0	Yes
18632					Cora Graves	7-1S-33W										
15426	--	R.H.P.	Petroleum Management, Inc.	(W) Palmer	Palmer "B"	5-1S-33W	160	10	Oread	3825	8	4	0	0	0	Yes
					Palmer "C", Bucy	8-1S-33W										
17400	Yes	Wilhelm	Getty Oil Co.*	(W) Wilhelm Unit	Wicke "C", W.J.Wicke	16-1S-32W	1440	0	LKC	3900	13	13	2	3	0	Yes
					E.W.Wicke	17-1S-32W										
					Meyer "B", Wilhelm Meyer, E.H.Wicke,	20-1S-32W										
					Meyer "A", Meyer "C"											
					Wicke "A", Wicke "B", Harrison	21-1S-32W										
					Wicke "B", Harrison E.H.Wicke											
					Harrison R.A.Rueber	28-1S-32W										
					Harrison Rueber, D.Leseberg	29-1S-32W										
16985	No	Wilhelm	Donald C.Slawson	(W) Wicke "C"	Wicke "C"	17,18-1S-32W	240	0	LKC	3900	6	2	0	0	0	Yes
		RAWLINS COUNTY TOTALS (Reported)					6340	310				75	9	3	0	
RENO COUNTY																
10925	No	Albion North	Harry A.Sprague	(D) Graber Pressure Maintenance Project	H.D.Graber, Martin Graber, Krehbiel "A", Krehbiel "B"	11-26S-6W	240	0	Viola-Simp	3990	10	3	2	0	0	Yes
13754	--	Beck West	Santa Fe Pipe & Supply, Inc.*	(W) Roach	Roach	14-23S-9W	40	80	B Penn	3720	7	1	0	0	0	Yes
13167	No	Burrton	R.L.Evans Trust	(D) Evans B	Evans "B"	23-23S-4W	160	80	Miss	3285	10	3	0	0	0	Yes
9228	--	Burrton	Fell & Wolfe Oil Co.*	(D) Westfahl "A" & "B"	Westfahl	19-24S-4W	40	--	Miss	--	--	3	1	0	0	Yes
10414	No	Burrton	Harold J.Milburn*	(D) Haury	--	1,2-23S-4W	100	40	Miss	3243	40	2	0	0	0	Yes
11618	No	Burrton	Okmar Oil Co.*	(P) Evans & Base	Evans, Base	36-23S-4W	80	0	Miss	3258	40	8	0	0	0	Yes
18191	No	Burrton	A.Scott Ritchie	(P) Bethel College	Bethel College	33-23S-4W	320	0	Miss	3310	85	6	0	0	1	Yes
					Grandon, Hoffman	4-24S-4W										
5368	--	Burrton	S & K Oil Co. - Louis Kahan*	(D) Teten	Teten	12-23S-4W	20	60	Miss	3400	15	6	0	0	1	Yes
12044	--	Burrton	S & K Oil Co. - Louis Kahan*	(D) Fast-Smith	Fast, Roberts	25-23S-4W	640	0	Miss	3308	52	6	0	0	0	Yes
					Smith	36-23S-4W										

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
11041	1	3	0	0	Peri	0	76	Sd	150	--	U	1964	S Gas	--	38	--	27,700	3,001,480	7,600	122,948	7,600	122,948	*Mechanical problems.
15384	0	1	0	0	Irreg	0	0	Sh Sd	35	10	F	--	S Gas	1/10	36	--	0	0	2,262	19,587	0	--	*Well is sanded up.
11392	1	0	0	0	Irreg	25"Vac	1160	Prod + Pleist Gr	117	55	T	1959	S Gas	34/66	38	--	422,139	10,706,963	10,107	2,039,456	10,107	1,067,261	
16490	1	0	0	0	Irreg	0	70	Prod	--	--	U	1972	S Gas	1/4	36	--	22,000	136,000	4,197	184,392	500	2,600	*Was Dunne-Gardner.
13954	1	2	0	0	Peri	150	177	Prod	--	--	U	1968	S Gas	40/33	38	--	64,464	--	8,571	789,704	6,857	--	*Was Amerada-Hess.
	32	18	0	0													5,131,577	102,360,470	157,975	15,597,363	124,551	4,817,506	
16643	17	2	0	0	5-Spot	46	432	Prod + Dak	2312	78	U	1973	S Gas	7104/8664	34.2	--	2,683,026	11,276,479	118,029	4,544,420	118,029	321,318	*Merger: was Skelly Oil Co., 2/1/77.
15518	8	0	0	0	Peri	800	127	Prod + Dak	2215	335	T + S	1970	S Gas	3.5/1	36	--	371,593	1,528,539	25,964	790,268	25,964	41,890	
18631	1	0	0	0	--	400	180	Prod	--	--	T	1975	S Gas	57/43	35	--	67,860	119,720	4,936	91,512	2,180	2,180	
11929	1	0	0	0	Irreg	0	50	Ced H	2500	70	T	1964	S Gas	8/50	36	6	18,250	655,721	10,217	148,365	11,929	--	*Plugged.
18265	1	--	-	-	Irreg	800	55	Prod	--	--	T	1976	S Gas	13/7	34	--	43,680	50,040	9,348	359,557	1,010	3,010	
14615	1	1	-	-	Irreg	750	200	Prod	--	--	T	1968	S Gas	67/33	38	--	55,905	759,495	13,395	412,312	5,300	158,760	
18632 15426	2	0	0	0	Irreg	100	100	Prod	--	--	T	1970	S Gas	8/24	25	--	69,800	515,078	12,034	216,565	12,034	92,894	
17400	4	0	0	0	Irreg	473	326	Prod + Dak	1660	50	T	1974	S Gas	1/1	34	--	475,645	1,358,872	66,220	1,095,981	45,020	134,838	*Merger: was Skelly Oil Co., 2/1/77.
16985	1	0	0	0	Irreg	0	228	Prod	--	--	U	1973	--	1.5/1	32	6	83,408	141,520	6,314	54,309	1,767	--	
	36	3	0	0													3,869,167	16,405,464	266,457	7,713,289	223,233	754,890	
10925	1	0	0	0	Peri	0	570	Prod	--	--	U	1964	Wat	--	39	--	207,470	3,743,770	6,951	288,872	250	77,850	
13754	1	0	0	0	--	Vac	50	Prod	--	--	U	1967	Wat	19/31	34	--	18,250	277,961	838	52,434	--	--	*Was Shenandoah Oil Corp.
13167	1	0	0	0	Irreg	0	800	Prod	--	--	U	1967	S Gas	1/9	33	--	292,000	3,867,000	2,660	--	0	--	
9228	1	0	0	0	Irreg	Vac	40	Prod	--	--	U	--	Wat	--	--	--	--	--	2,513	--	--	--	*Was Sun Oil Co.
10414	1	0	0	0	Irreg	0	160	Prod	--	--	U	1963	S Gas	1/9	33	--	58,400	474,400	2,000	22,016	1,000	--	*Was Tomlinson Oil Co. - 1973.
11618	1	0	0	0	Peri	0	878	Prod	--	--	U	1965	S Gas	--	34	--	320,560	2,053,813	35,205	570,451	33,445	295,651	*Was Sarobee.
18191	6	0	0	1	Irreg	0	1300	Prod	--	--	U	1976	S Gas + Wat	1/9	34	--	500,000	1,000,000	15,275	210,030	--	--	
5368	1	0	0	0	Irreg	0	884	Prod	--	--	U	1961	Wat	1/26	38	--	325,886	4,214,925	5,844	1,018,190	5,844	1,018,190	*Was General American.
12044	1	0	0	0	Irreg	0	2434	Prod	--	--	U	1966	Wat	1/11	38	--	888,410	5,428,487	25,183	133,194	755	4,107	*Was General American.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
RENO COUNTY (Concl.)																
12204	--	Burrton	S & K Oil Co. - Louis Kahan*	(D) Sabin B	Sabin B	11-23S-4W	30	30	Miss	3260	80	3	0	0	0	Yes
14675	No	Burrton	TGT Petroleum Corp.	(P) Strawn	Nelson Miller, Miller A, Sabin A Banz, Harper, Hill	15-23S-4W 22-23S-4W 27-23S-4W	760	0	Miss	3330	12	19	0	0	0	Yes
15881	No	Burrton	J.A.Allison*	(P) Seedle "A"	Collins "A", Seedle "A"	16-24S-4W	--	--	Hunt	3318	30	2	1	0	0	Yes
15373	No	Hilger Southwest	Woodman-Iannitti Oil Co.	(P) C.J.Genbelle	C.J.Genbelle A.J.Genbelle	20-26S-4W 29-26S-4W	320	--	Mise	3970	5	3	0	0	0	Yes
5139	No	Nicklaus	Phillips Petroleum Co.	(P) Prough	Prough	3-26S-4W	40	--	LKC	2880	20	2	0	0	0	Yes
4456	Yes	Peace Creek	Cities Service Co.	(W) Peace Creek Unit	Peace Creek Unit	30,31-22S-9W 6-23S-9W 35,36-22S-10W 1,2,11,12-23S-10W	380	1840	Viola	3750	16	5	2	0	0	Yes
		RENO COUNTY TOTALS (Reported)					3170	2130				72	6	0	1	
RENO-RICE COUNTIES																
6188	Yes	Sterling	Phillips Petroleum Co.*	(P) Stubbs Mayer Unit	Stubbs Mayer Unit	4,9-22S-8W	400	--	Miss	3420	10	7	0	0	0	Yes
RENO-STAFFORD COUNTIES																
12893	Yes	Zenith-Peace Creek	Braden-Zenith Inc.	(W) Zenith W.F.Unit	Zenith W.F.Unit	6,7,18-24S-10W 1,2,3,10,11,12,13, 14,15,23,24-24S- 11W	500	5735	Mise + Viola	3760 3780	20 40	4	2	0	1	Yes
RICE COUNTY																
12968	Yes	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	3400	4	2	0	0	0	Yes
16326	--	Calf Creek	Range Oil Co.,Inc.	(P) Buehler "B"	Buehler "B"	33-18S-10W	90	--	Lans	2850	7	4	--	-	-	Yes
18065	No	Car Southwest	Malone Oil Co.	(W) --	D.Keesling C.Malone H.Malone	20-20S-9W 29-20S-9W 30-20S-9W	170	0	Simp	1543	4	2	0	0	0	No*
13524	No	Chase-Silica	Icer Addis	(W) Schubert	Schubert	9-20S-10W	160	--	Simp	3400	5	1	1	0	0	Yes
15792	No	Chase-Silica	Icer Addis	(W) Merrill J.Behnke	Brandenstein Ott Appleton Behnke	10-19S-10W 11-19S-10W 14-19S-10W 15-19S-10W	480	--	Doug	2842	7	9	1	0	0	Yes
7885	--	Chase-Silica	Bergman Oil Co.	(W) Eatinger	Eatinger	20-19S-10W	80	20	LKC	2975	50	2	0	0	0	Yes
9634	--	Chase-Silica	Bergman Oil Co.	(W) Soeken	--	11-19S-9W	40	--	Simp	3305	12	1	0	0	0	Yes
11507	No	Chase-Silica	Ralph G.Bowen	(D) Specht A & B	Specht A & B	16-20S-10W	120	0	LKC + Arb	3300	20	2	0	0	0	Yes
16251	--	Chase-Silica	Cities Service Co.	(W) DeWitt	DeWitt	33-19S-9W	105	40	Arb	3195	31	3	1	0	0	Yes
7692	No	Chase-Silica	Energy Reserves Group,Inc.*	(W) Heinrich Roth	Heinrich Roth	29-19S-10W	160	0	LKC	2957	107	2	0	0	0	Yes
16477	--	Chase-Silica	Fell & Wolfe Oil Co.*	(D) Tatlock Unit	H.Drews, Steuder A.J.Bayer	5-20S-10W 7-20S-10W	490	--	Arb	3264	8	3	0	0	0	Yes
12543	--	Chase-Silica	F.G.Holl	(W) Wenke	Wenke Hirsch	18-20S-10W 19-20S-10W	60	0	LKC	3106	8	1	0	0	0	Yes
9916	--	Chase-Silica	I & F Oil & Farm	(D) --	Keller	5-19S-9W	80	80	Arb	3235	--	2	0	0	0	Yes
CR-4773	No	Chase-Silica	Kaiser Francis	(D) Reese	Reese	22-19S-9W	160	--	Arb	3209	22	1	0	0	-	Yes
18383	No	Chase-Silica	Scott T.Lutz	(D) Robbins	Robbins	19-19S-9W	160	0	LKC	2980	148	7	0	0	0	Yes
18514	No	Chase-Silica	Scott T.Lutz	(D) Grove	Grove	29-19S-9W	40	0	Arb	3220	24	2	0	0	0	Yes
15526	No	Chase-Silica	Meltzer Oil Co.*	(P) Layton Project	Layton	29-19S-9W	80	--	KC	2937	4	1	0	1	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
12204	1	0	0	0	Irreg	0	2400	Prod	--	--	U	1965	Wat	--	37	--	876,000	5,008,208	10,752	62,364	10,752	62,364	*Was Sun Oil Co.
14675	2	--	-	1	Irreg	0	5191	Prod	--	--	U	1970	Wat	1/30	38	--	1,894,715	10,026,380	93,347	633,754	19,817	74,409	
15881	--	--	-	-	Irreg	Vac	600	Prod	--	--	T	1970	Wat	3/2	40	--	108,000	1,184,000	--	--	--	--	*Sold to Braden Deem, 8/77.
15373	1	0	0	0	7-Spot	0	35	Prod	--	--	T	1967	S Gas	98/2	36	--	12,785	71,155	6,000	48,700	5,000	20,300	
5139	1	0	0	0	Irreg	15	73	Prod	--	--	U	1956	S Gas	1/0.8	35	10	26,555	883,016	1,634	306,834	0	0	
4456	8	0	0	0	Line	12	960	Prod + Wat Sd	185	--	F	1951	S Gas	175/950	39	--	3,233,628	52,472,946	37,401	8,134,593	37,401	1,741,370	
	27	0	0	2													8,762,659	90,706,061	245,603	11,481,432	114,264	3,294,241	
6188	2	0	0	0	Peri	0	160	Sh Sd	50	20	M	1958	S Gas	9/1	35	--	116,540	1,118,971	4,869	470,949	4,251	127,044	*Was Thomas H.Allen.
12893	5	3	0	3	Line	60	1380	Prod + Meade Sd	40	60	M	1966	S Gas + Grav	7/93	40	5	2,518,607	56,785,805	23,669	394,379	23,669	368,358	
12968	1	0	0	0	Irreg	100	124	Prod	--	--	U	1967	Gas Exp	19/31	36	--	45,220	1,755,982	3,873	66,697	0	0	*Was Union Oil of California.
16326	1	--	-	-	Irreg	--	200	Prod	--	--	U	1971	S Gas	1/4	30	--	73,000	450,000	2,588	17,790	647	4,539	
18065	1	0	0	0	Peri	1000	10	Fr Wat	40	100	F	1976	S Gas	1/0	45	--	3,000	7,000	5,300	11,000	2,500	4,500	*Mechanical problems.
13524	1	0	0	0	Irreg	0	290	Prod	--	--	U	1967	Gas Exp	1/9	52	--	105,850	846,611	3,632	17,108*	2,000	23,760	*Since 1973.
15792	2	0	0	0	Irreg	300	450	Prod	--	--	U	1970	Gas Exp	7/3	28	--	164,250	1,068,742	7,892	227,907*	2,000	38,185	*Since 1967.
7885	--	--	-	-	Irreg	0	50	Prod	--	--	T	1960	S Gas	1/0	38	--	18,000	249,000	7,865	303,215	3,930	39,210	
9634	1	--	-	-	Irreg	500	50	Prod	--	--	T	1962	--	1/0	38	--	2,000	348,650	869	124,396	0	499,445	
11507	1	0	0	0	Irreg	300	345	Prod	--	--	U	1965	S Gas	3/97	40	--	125,925	1,740,943	2,760	32,887	--	--	
16251	2	0	0	0	Irreg	200	168	Prod	--	--	U	1971	S Gas	46/279	47.7	--	109,484	627,377	11,262	2,459,341	1,426	22,875	
7692	1	0	0	0	Irreg	0	160	Prod	--	--	U	1960	S Gas	1/1	44.9	--	58,327	848,288	6,460	679,917	6,460	105,955	*Was Pan American.
16477	1	0	0	0	Irreg	Vac	600	Prod + Arb	3325	--	U	--	--	--	40	--	--	--	2,653	--	--	--	*Was Herman Geo.Kaiser.
12543	1	0	0	0	Peri	0	250	Prod	--	--	T	1966	S Gas	6/30	37.3	--	91,250	1,155,750	1,508	198,615	--	--	
9916	2	0	0	0	Irreg	0	120	Prod	3235	--	T	1963	Wat	--	42	--	--	--	1,819	23,068	--	--	
CR-4773	1	0	0	0	Irreg	Vac	50	Prod	--	--	T	1977	S Gas	--	42.9	--	13,500	13,500	3,416	--	0	--	
18383	1	0	0	0	7-Spot	40	225	Prod	--	--	T	1976	Grav	1/9	42	--	73,000	90,000	8,044	10,000	--	--	
18514	1	0	0	0	Irreg	20	250	Prod	3220	24	T	1976	Wat	8/92	40	--	73,000	81,000	6,313	--	--	--	
15526	0	0	0	0	Irreg	550	220	Prod + Arb	3300	--	U	1969	--	7/3	46	--	3,600	--	3,900	--	--	--	*Was Siegrist 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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
RICE COUNTY (Cont.)																
15609	No	Chase-Silica	Phillips Petroleum Co.	(P) Kate	Kate	18-19S-9W	40	0	Arb	3270	10	2	0	0	0	Yes
6043	No	Chase-Silica	Range Oil Co., Inc.*	(W) Bernstorf "D"	Bernstorf "D"	23-19S-10W	80	--	LKC	3140	12	3	--	-	-	Yes
6044	No	Chase-Silica	A.Scott Ritchie*	(P) Bernstorf "B"	Bernstorf "B"	23-19S-10W	80	0	LKC	2630	280	4	0	0	0	Yes
16354	No	Chase-Silica	Rocket Schusterman Oil Account*	(D) Houston Community	Houston Community	19-20S-10W	0	--	Lans	3020	6	0	0	0	0	Yes
11993	No	Chase-Silica	Southern States Oil Co.	(P) Altenbaumer	Brandenstein Altenbaumer	11-19S-10W 12-19S-10W	160	--	LKC	2956	50	9	1	0	7	Yes
14299	No	Chase-Silica	Southern States Oil Co.	(P) Feldman	Feldman	15-19S-10W	160	--	LKC + Doug	2870	18	5	2	0	0	Yes
10600	--	Chase-Silica	Everett Swander	(W) B.G.Profitt	B.G.Profitt	25-19S-10W	0	0	LKC	3020	18	1	--	-	-	No*
18413	No	Chase-Silica	Carl Todd	(P) Murphy A-5	Murphy A-5, Long Six	22-19S-9W 27-19S-9W	320	240	Arb	3200	30	4	0	0	0	Yes
11795	Yes	Frederick	NCRA*	(W) Staatz-Schroeder Unit	Schroeder Staatz, Staatz "A"	10-18S-9W 11-18S-9W	320	0	Simp Sd	3252	12	6	1†	0	0	Yes
7243	--	Geneseo -Edwards	Continental Oil	(W) Geneseo Simp. Sd. Unit	Geneseo Simp. Sd. Unit	30,31-18S-7W 25,30,36-18S-8W	290	0	Simp	3170	16	10	8	-	-	Yes
12620	--	Geneseo -Edwards	Continental Oil	(P) Geneseo LKC Repr.	S.Ainsworth, J.R.Lansing, J.R.Lansing "A"	25-18S-8W	260	0	Lans	2875	50	22	1	-	1	Yes
15998	--	Geneseo -Edwards	Continental Oil	(P) Gray-Hamilton "A"	B.C.Gray, Wm.Hamilton "A"	19-18S-7W	320	0	Lans	2850	8	7	1	-	1	Yes
11875	No	Geneseo -Edwards	Kaiser Francis*	(-) Zajic	Zajic	13-18S-8W	--	--	Lans	2789	250	5	0	0	6	Yes
17026	No	Geneseo-Edwards	Energy Reserves Group	(W) Geneseo WFS	C.Wood, Johnson, R.Michells Williams J.A.Lewis	12-18S-8W 13-18S-8W 14-18S-8W	480	0	Penn Congl	3150	10	12	8	0	0	Yes
9585	--	Geneseo-Edwards	Fell & Wolfe Oil Co.*	(D) Bolton	Ira O.Bolton	31-18S-7W	80	40	Simp	3216	8	2	0	0	0	Yes
12712	Yes	Geneseo-Edwards	Murfin Drilling Co.	(W) Geneseo WF	Geneseo Unit	3,4,9,10-18S-8W	720	630	B.Penn Congl	3200	9	6	4	0	2	Yes
14317	No	Glen Sharrold NE	J.A.Allison	(P) Feist #2	Feist, Manke*	20-18S-10W	110	30	Lans	3218	10	5	1	0	0	Yes
13839	Yes	Lyons West	Kewanee Oil Co.	(W) W.Lyons Unit	West Lyons Unit	16,17,20,21,28,29,30,31,32,33-19S-8W 5-20S-8W	1980	1540	Kinder	3320	15	14	33	0	0	Yes
12960	Yes	Mary Ida South	Pioneer Operations Co., Inc.	(W) Mooney-Manke	Mooney-Manke	6,7,8-19S-10W	640	0	LKC	2950	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	3090	8	9	0	0	0	Yes
3953	No	Orth	Getty Oil Co.*	(W) Volkland "A"	Volkland "A"	27-18S-10W	60	0	Top Lm	2670	16	3	0	0	0	Yes
14786	No	Orth West	Brougher Oil, Inc.*	(P) Reichuber	Oberle Reichuber, Heinz, Poppelreiter R.Bieberle	16-18S-10W 17-18S-10W 20-18S-10W	800	320	Lans	3180	20	18	0	1	4	Yes
18258	No	Ponce	Sterling Drilling Co.	(P) Arbuckle	--	28-21S-7W	160	--	Miss	3420	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	2930	39	3	1	0	0	Yes
10813	No	Rino	NCRA*	(W) Rino Pressure Maintenance	Wellman "G", Wellman "I"	33-21S-9W	40	0	Simp Sd	3499	10	4	0	0	0	No†
13650	No	Tobias	I.O.Miller, Inc.*	(D) Lipp	Lipp, Read, Brown	11-21S-9W	160	--	LKC	2948	8	3	0	-	-	Yes
10096	Yes	Tobias	Thunderbird Drilling, Inc.	(W) Tobias Simpson Unit	Tobias Fair "B" Schafer, Fair "C", Pulliam Koons, Cuskoy, Fair "A" Faler, Gillen, Harrison	25-20S-9W 26-20S-9W 35-20S-9W 36-20S-9W 2-21S-9W	830	675	Simp	3300	16	17	17	0	0	Yes
16771	Yes	Tobias Southwest	Aspen Drilling Co.	(W) SW Tobias Lansing Unit	Shuyler, Altman, Mosher, Lipp, Werner Werner	3-21S-9W 4-21S-9W	476	0	LKC	2958	4	4	0	0	0	Yes
9071 10733 10740 12187 12367	No	Welch-Bornholdt	Phillips Petroleum Co.*	(P) Welch-Bornholdt	Unit "B" Fry "G" Fry "C", Fry "E" Fry "J", Hubenett Malm Unit	11-20S-6W 15-20S-6W 22-20S-6W 23-20S-6W 24-20S-6W	1400	840	Miss	3300	--	33	4	0	0	Yes

(Cont. on p.77)

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
15609	1	0	0	0	Irreg	0	254	Prod	--	--	U	1970	Wat	1/34	47	--	92,617	681,352	1,948	412,636	0	0	
6043	--	--	-	-	Irreg	0	250	Prod	--	--	U	1958	S Gas	--	37	--	9,250	--	1,475	38,219	369	9,193	*Was Skelly Oil Co.
6044	4	0	0	0	Irreg	0	115	Prod	--	--	U	1958	S Gas	--	35	--	72,000	652,500	2,365	454,992	2,365	--	*Was Skelly Oil Co.
16354	1	0	0	0	Irreg	0	71	Prod	--	--	T	1972	Wat	1/50	39	--	26,123	217,381	5,350	434,687	0	0	*Was Union Texas.
11993	1	0	0	0	Irreg	1600	414	Prod	--	--	T	1965	Grav	--	38	--	151,110	1,216,263	4,870	91,561	4,870	91,561	
14299	2	2	0	0	Irreg	1200	305	Prod	--	--	F	1967	Grav	--	30	--	222,880	1,745,192	6,985	129,414	6,985	129,414	
10600	1	0	0	0	Irreg	180	260	Prod	--	--	U	1963	S Gas	5/95	45	--	17,875	--	9,295	--	--	--	*Irregular or random.
18413	1	0	0	0	Irreg	100	300	Prod	--	--	-	--	--	7/93	47	--	100,000	114,000	10,800	11,500	1,000	--	
11795	3	0	0	1	Irreg	570	179	Prod	--	--	T	1963	Limit Wat	6/13	46#	2.4	196,008	924,694	25,687	900,198	16,964	19,899	*Was Maurice L.Brown. †Converted #@60.
7243	3	10	-	-	Line	1400	307	Prod + Arb + Lans	3200	50	T	1960	S Gas	--	36.2	--	336,071	10,406,614	7,958	1,309,399	7,958	1,125,615	
12620	3	2	-	-	Irreg	1000	258	Prod	--	--	U	1966	Wat	--	36.2	--	282,624	6,088,589	0	0	0	0	
15998	2	0	-	-	Irreg	0	236	Prod	--	--	U	1971	S Gas	--	32.9	--	172,012	1,718,601	0	0	0	0	
11875	1	0	0	0	Irreg	380	1000	Prod	--	--	T+S	1965	Gas Exp	--	32	--	383,615	3,973,230	7,292	3,488,519	2,000	22,800	*Was Shell Oil Co.
17026	2	1	0	0	Irreg	1635	238	Prod	--	--	U	1973	S Gas	1/ 2.5	36.2	--	173,407	737,293	23,627	5,980,419	12,630	95,907	
9585	2	0	0	0	--	400	300	Prod + Simp	3230	11	U	--	--	--	30.3	--	--	--	1,330	--	--	--	*Was Sinclair Oil & Gas Co.
12712	2	4	0	1	Peri	1175	910	Prod + Arb	3400	15	T	--	S Gas	25/5	40	10	332,300	4,369,136	5,122	242,516	5,122	188,667	
14317	2	1	0	0	--	1000	50	Prod	3266	20	T	1968	Gas Exp	99/1	39	--	18,250	364,450	10,241	330,791	10,241	171,849	*Adj. lease - incl. because prod. increase.
13839	10	9*	0	0	9-Spot	1150	349	Prod + City of Lyons	--	--	F + U	1968	S Gas	1363/ 475	40	--	1,274,811	18,310,045	80,612	5,037,350	80,612	826,855	*Corrected.
12960	5	0	0	0	Irreg	990	237	Prod + Arb	3200	30	T	1966	S Gas	2/3	38	--	432,525	4,615,626	17,899	--	17,000	--	
4823	7	0	0	0	Irreg	274	205	LKC	2290	90	U	1959	S Gas	70/ 36	29	--	523,698	8,918,812	23,234	1,325,042	23,234	979,951	
3953	1	0	0	0	Irreg	200	904	Prod	--	--	U	1954	S Gas	442/ 882	30	--	329,873	3,551,815	5,974	307,308	5,974	223,342	*Merger: was Skelly Oil Co., 2/1/77.
14786	3	0	0	-	Irreg	1800	347	Prod	--	--	U	--	Gas Exp	--	39.8	--	380,224	--	24,650	--	--	--	*Was R.M.Edwards.
18258	1	0	0	0	Irreg	1100	250	Prod	--	--	U	1976	S Gas	1/4	35	--	91,250	127,490	2,969	3,814	0	0	
14300	2	0	0	0	Irreg	1050	531	Prod	--	--	T	1961	S Gas	1/4	40	--	193,697	2,875,635	13,489	972,068	12,029	243,281	*Was Union Texas.
10813	0	0	0	1	--	0	0	Prod	--	--	T	1973	S Gas	19/ 463	39+	--	0	254,010	3,602	25,552	0	2,103	*Was Thunderbird Drlg.Inc. †Project has been temporarily inactive since 8/76. +@60.
13650	--	--	-	-	--	Grav	50	Prod	--	--	-	--	--	1/3	40	--	--	--	2,027	146,655	--	--	*Was I.O.Miller Estate.
10096	5	1	0	0	Peri	275	500	Arb	3350	200	T	1968	S Gas	698/ 11	45	1.88	1,048,460	10,489,265	88,755	4,814,911	--	3,118,941	
16771	1	0	0	0	Irreg	500	26	Prod + Fr Wat Sd	46	--	M	1972	S Gas	1/0	41	3.6	38,478	462,315	8,282	167,116	6,176	15,689	
9071 10733 10740 12187 12367	5	8	0	0	Irreg	500	144	Prod	--	--	U	1958	S Gas + Grav	--	36	--	261,922	12,930,070	21,260	1,650,980	6,860	283,774	*Was Cardinal Petroleum 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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
RICE COUNTY (Concl.)																
9071	(Lease names and locations continued from p.75.)				Malm "D", Mattson	25-20S-6W										
10733					Johannsen, Lindholm "C"	26-20S-6W										
10740					Lee, Wernet, Lindholm "B"	27-20S-6W										
12187					*Belden, Fair "B"	*33-20S-6W										
12367					Duvall "A", Duvall "B", Libby, Moll	34-20S-6W										
18250	No	Welch-Bornholdt	Braden Oil Co.	(D) Nina Joy	Nina Joy	11-20S-6W	80	40	Miss Ch	3239	16	1	0	0	0	Yes
17667	No	Welch-Bornholdt	Dick Hess*	(D) G.W.Carlson	G.W.Carlson	36-20S-6W	160	80	Miss	3286	60	2	0	0	2	No†
6848	--	Welch-Bornholdt (Smyres)	Shade and Berry	(D) --	Mattson, Anderson, Mattson Estate	25-19S-6W	--	--	Miss Ch	3435	14	11	0	0	0	Yes
16994	No	Wherry	Kaiser Francis*	(D) Gossman	Gossman	8-21S-7W	80	50	Miss	3352	18	2	0	0	3	Yes
		RICE COUNTY TOTALS (Reported)					1418I	488S				290	85	2	26	
ROOKS COUNTY																
14067	Yes	Andreson	Davis Bros. Oil Producers, Inc.	(W) Andreson Waterflood	Andreson C, Gasaway D, Gasaway E, Gasaway F	31-10S-18W	110	75	LKC	3500	75	2	0	0	0	Yes
13518	Yes	Barry	Continental Oil	(W) Barry	Barry LKC Unit	35-8S-19W 1,2,3,10,11,12-9S-19W	1540	0	Lans	3200	12	18	4	-	-	Yes
16976	--	Barry	Continental Oil	(-) Barry "C" No.4	D.Barry "C"	10-9S-19W	--	--	--	--	--	--	--	-	-	No*
16334	No	Barry Southeast	Rocket Schusterman Oil Account*	(D) Bedard WI	Cabbage	7-9S-18W	0	0	Arb	3495	0	0	0	0	0	Yes
16776	No	Basgall West	Energy Reserves Group,Inc.	(W) D.R.Roth	D.R.Roth	4-16S-17W	70	0	LKC	3200	13	3	0	0	0	Yes
CR-4779	No	Baumgarten	Oil Property Management,Inc.	(W) Baumgarten	Baumgartner "A" T.Jelinek, S & F Jelinek, John "A"	29-9S-18W 30-9S-18W	360	0	KC	3344	3562	5	0	1	1	No*
16521	No	Baumgarten	Thomason Oil Co.	(D) Sollenberger	Sollenberger	30-9S-18W	160	--	--	--	--	1	--	0	-	Yes
9977	--	Chesney	Kaiser-Francis Oil Co.*	(P) Chesney	Chesney	12-8S-17W	60	0	LKC	3060	13	3	1	0	0	Yes
12545	--	Dopita	Cities Service Co.	(W) Reeder	Reeder	19-8S-17W	40	0	Tor + LKC	3090	20	4	0	0	0	Yes
16960					McMillen "B"	25-8S-18W										
4089	No	Dopita	Energy Reserves Group,Inc.*	(W) McMillen	P.McMillen	24-8S-18W	80	0	Tor + LKC	3136	197	3	0	0	0	Yes
8544																
16100	No	Dopita	Murfin Drilling Co.	(W) Thompson WF	Thompson	5-9S-17W	160	0	Tor + LKC	3150	60	3	0	0	0	Yes
CR-9774	No	Dopita	Murfin Drilling Co.	(W) Garvert WF	Garvert	6-9S-17W	280	0	Tor + LKC	3072	50	4	0	0	0	Yes
15831	No	Dopita	Okmar Oil Co.	(W) Moos	Moos	6-9S-17W	40	0	Arb	3370	3	2	0	0	0	Yes
11324	No	Dopita	Samson Resources Co.*	(W) Krug WF	Krug	19-8S-17W	150	0	Tor + Lans	3100	6	5	0	0	0	Yes
2957	Yes	Dorr	Cities Service Co.	(W) Dorr Unit	Dorr Unit	16,17,20,21-9S-16W	601	19	Dodge + LKC	3141	45	20	2	0	0	Yes
9161																
13728	--	Dorr	Theodore Gore	(P) Casey	Meyers	16-9S-16W	240	--	LKC	3445	251	2	0	0	0	Yes
					Casey	21-9S-16W										
15586	--	Dorr	Harold Krueger Co.	(P) Overholser	Overholser	20-9S-16W	20	0	KC Lm	3350	4	2	0	0	0	Yes
					Andreson	21-9S-16W										
15048	No	Eilers	Davis Bros. Oil Producers, Inc.	(P) Eilers	Eilers B, Eilers C, Shepard I Eilers A	22-10S-18W 27-10S-18W	100	60	LKC	3500	75	8	0	0	0	Yes
7789	Yes	Finnesy South	Davis Bros. Oil Producers, Inc.	(W) South Finnesy Water-flood	Shepard A Shepard A, Shepard C	23-10S-18W 24-10S-18W	190	90	LKC	3500	75	5	0	1	0	Yes
14007	No	Finnesy South	Davis Bros. Oil Producers, Inc.	(P) Shepard B	Shepard B	23-10S-18W	80	55	LKC	3376	22	1	0	0	0	Yes
12595	No	Grover	A.L.Abercrombie,Inc.	(D) Roy "B"	Roy "B", Roy, Grover	22-7S-19W	90	330	LKC	3085	10	5	1	0	0	Yes
10258	Yes	Kruse	Cities Service Co.	(W) Kruse Unit	Kruse Unit	2,11-10S-16W	93	12	Dodge + LKC	3050	34	4	0	0	0	Yes
3504	--	Laton	Cities Service Co.	(W) Laton Pool Coop	Adams "A", "B", "C"	33-8S-16W	370	0	Dodge + LKC	3070	53	16	2	0	0	Yes
					Adams "D", Holy Cross	4-9S-16W										
					Dennis & Hodson	34-8S-16W										
6619	No	Laton	Co-Co,Inc.*	(W) Doane-Swisher	Doane, Swisher	34-8S-16W	320	250	Tor + LKC	3020	52†	6	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
9071																							*Johnson "D", 28-20S-6W.
10733																							
10740																							
12187																							
12367																							
18250	1	0	0	0	Irreg	0	30.2	Prod	--	--	U	1976	S Gas	4/1.2	33	--	10,877	21,304	2,789	7,507	0	--	
17667	1	1	-	-	Irreg	0	150	Prod	--	--	T	1975	S Gas	5/300	34	--	54,750	108,750	1,131	12,775	1,131	2,747	*Was Continental Oil Co. †Started up and stopped.
6848	1	0	0	0	--	Vac	180	Prod	--	--	U	1959	S Gas	--	33.6	--	66,000	1,116,000	16,400	196,800	5,400	91,800	
16994	1	0	0	0	Irreg	Vac	6	Prod	--	--	T + S	1973	Gas Exp	3/6	35	--	2,100	11,575	2,528	669,512	0	0	*Was Grace Oil Co.
	93	39	0	3													8,254,213	106,284,850	520,100	33,334,182	247,883	2,143,975	
14067	2	0	0	0	Peri	480	269.5	Prod	--	--	T	1968	Grav	3/2	34	5	196,770	1,302,664	8,895	221,393	8,895	--	
13518	8	18	-	-	Peri	450	489	Prod	--	--	U	1968	S Gas	--	35.3	--	1,427,040	15,789,433	47,839	739,971	47,839	564,971	
16976	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Project not started as yet.
16334	0	0	0	0	Irreg	0	2425	Prod	--	--	U	1972	Wat	1/50	28	--	885,054	5,153,236	13,858	1,183,182	0	0	*Was Union Texas.
16776	1	0	0	0	Irreg	1529	212	Prod + Dak	268	75	M	1973	S Gas	9/1	35.3	--	77,453	322,527	9,503	183,677	9,503	63,786	
CR-4779	0	1	0	0	Irreg	0	--	Prod	--	--	T	--	Gas Exp	3/97	33	--	0	0	0	0	0	0	*Have not begun due to Dakota contamination.
16521	1	--	0	-	Line	0	15	Prod	--	--	T	1974	--	3.5/15	32	39	5,475	21,900	--	--	--	--	
9977	--	--	-	-	--	210	410	Prod	--	--	T	1963	S Gas	1/1	36	--	149,650	2,971,893	4,185	147,881	--	--	*Was Cities Service.
12545	2	0	0	0	Irreg	25	34	Prod	--	--	T	1966	S Gas	21/23	27	--	38,457	202,521	8,158	283,268	5,236	64,106	
16960																							
4089	1	0	0	0	Irreg	0	196	Prod	--	--	U	1965	S Gas	1/8.6	29.5	--	71,550	1,168,402	6,727	321,419	6,727	113,137	*Was Pan American.
8544																							
16100	1	0	0	0	Irreg	Vac	787	Prod	--	--	T	1971	S Gas	1/4	36	--	287,291	1,046,854	4,598	--	4,000	21,380	
CR-9774	1	0	0	0	Irreg	Vac	270	Prod	--	--	T	1977	S Gas	1/8.8	32	--	24,793	24,793	1,065	1,065	0	--	
15831	1	0	0	0	Line	350	200	Prod	--	--	U	1974	S Gas	--	30	--	62,050	305,398	1,932	125,631	580	2,469	
11324	3	0	0	0	Irreg	80	329	Prod	--	--	T	1965	S Gas	1/3	29	--	120,022	2,744,912	8,257	760,619	8,257	186,526	*Was Shell.
2957	15	0	0	0	5-Spot	55	318	Prod + Dak	800	--	T	1962	S Gas	148/209	38	--	1,676,807	22,600,796	45,918	3,038,570	45,918	1,247,662	
9161																							
13728	1	0	0	0	Irreg	200	468	Prod	--	--	T	1962	Wat	--	39	--	189,070	2,725,800	3,817	281,257	1,260	65,430	
15586	1	0	0	0	Line	Vac	50	Prod	--	--	T	1970	S Gas	1/2	37	--	18,050	139,550	1,424	66,285	0	0	
15048	1	0	0	0	Irreg	0-70	88	Prod	--	--	T	1969	Grav	3/7	32	15	32,198	541,150	17,508	596,148	4,225	--	
7789	2	0	0	0	Peri	675	473	Prod + Dak	450	300	T	1960	Grav	9/1	34	6	345,088	7,285,525	17,678	407,855	8,839	--	
14007	1	0	0	0	Peri	180	264	Prod	--	--	T	1967	Grav	1/2	34.5	--	96,249	1,808,788	2,089	87,953	630	--	
12595	1	1	0	0	Irreg	75	245	Prod	3085	10	U	1966	S Gas	--	33	--	89,319	799,514	10,546	270,495	3,500	97,412	
10258	2	2	0	0	Peri	840	370	Prod + Dak	730	--	T	1963	S Gas	2/3	37	--	268,883	2,760,805	9,179	577,021	9,179	213,646	
3504	7	0	0	0	Irreg	277	392	Prod + Dak	850	--	T	1953	S Gas	124/55	33	--	2,553,604	12,728,362	45,247	2,183,319	45,247	1,277,034	
6619	2	1	0	0	Irreg	675	307	Prod + Dak Sd	800	50	M	1962	S Gas + Grav	3/7	39-40	--	224,409	2,754,798	12,419	612,238	12,419	612,238	*Was Max Cohen. †Cumulative porosity.

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
ROOKS COUNTY (Cont.)																
7166 12140	No	Laton	Co-Co, Inc.*	(W) Gamble-McFadden "E"	Gamble, McFadden "E"	3-9S-16W	320	290	Tor + LKC	3070	52†	6	1	0	0	Yes
7831	No	Laton	Co-Co, Inc.*	(W) Luhman Cooperative W.F.	Co-Co - Luhman, Jones - Campbell - Sarier	11-9S-16W 12-9S-16W	160	100	Tor + LKC	3180	34†	2	0	0	1	Yes
12702	No	Laton	Co-Co, Inc.*	(W) Blank Coop. W.F.	Blank	14-9S-16W	100	80	Tor + LKC	3190	45	2	0	0	0	Yes
10499	--	Laton	Krueger Oil Co.	(W) Laton Field Project	Beardmore, Luhman-Johnson, Buell, Tatkenhorst B, Tatkenhorst E Tatkenhorst C, Home	10-9S-16W 11-9S-16W	420	0	KC Lm	3240	3-6	15	1	0	0	Yes
6050 9350 11184 11185 11333	No	Laton	Murfin Drilling Co.	(W) Li-Be-Bax WF	Baxter A & B, Beardmore Baxter D & E Livingood	2-9S-16W 3-9S-16W 11-9S-16W	800	0	LKC	3100	30	14	0	0	0	Yes
13043	Yes	Laton	Murfin Drilling Co.*	(W) No.Laton Unit	North Laton Unit	27,28-8S-16W	400	320	LKC	3060	50	6	0	0	0	Yes
14469	No	Lone Star	Okmar Oil Co.	(W) Luther-Arndts Coop	Luther Arndts	8-8S-17W 9-8S-17W	40	0	LKC	3037	5	2	0	0	0	Yes
15529	No	McClellan	Robert E.Davis*	(W) McClellan Flood	Bayard, McClellan, Stull, Whisman	8-9S-19W	320	0	LKC	3500	5	13	0	0	0	Yes
15302	No	McClellan Southwest	Energy Reserves Group, Inc.	(D) McClellan	V.McClellan	9-9S-19W	80	0	LKC	3267	180	3	0	0	0	Yes
16628	--	Marcotte	Kaiser-Francis Oil Co.	(D) Gish	Gish "C"	36-9S-20W	80	65	Arb	3825	4	1	0	0	2	No*
12517	No	Marcotte	Nadel and Gussman	(W) Stithem-Eliza	Stithem & Eliza	14-10S-20W	60	30	LKC	3693	17	17	13	0	-	Yes
15992	No	Marcotte	Nadel and Gussman	(W) Gish	Gish	6-10S-19W	0	0	LKC	3480	10	2	4	0	0	No*
10570	No	Marcotte	Okmar Oil Co.	(W) Marcotte	Marcotte A	18-10S-19W	74	30	LKC	3500	5	2	3	0	0	Yes
18410	--	Marcotte	Phillips Petroleum Co.	(P) Earl C	Earl "C"	13-10S-20W	160	130	LKC	3460	92	2	6	0	0	Yes
16483	--	Natoma	Cities Service Co.	(W) Natoma LKC Unit	Natoma LKC Unit	14,15-10S-16W	92	0	LKC	3250	8	4	0	0	0	Yes
15354	--	Nettie	Leben Oil Corp.*	(-) Nettie East	Nettie East	2-10S-17W	1120	--	Tor + LKC + Marm	3181	269	7	1	0	0	Yes
15389	No	Nettie Northwest	Davis Bros. Oil Producers, Inc.	(D) Rempe A & B	Rempe A & B	28,29-9S-17W	75	50	LKC	3289	30	2	0	0	0	Yes
11302 15129	No	Nyra	Southern States Oil Co.	(P) Thompson	Thompson	9-9S-17W	160	--	Arb + KC	3194	10	3	1	0	0	Yes
15855	Yes	Paradise Creek	Paul H.Williams*	(-) South Paradise Creek	--	27,28-9S-18W	80	--	LKC	3324	5	1	--	-	-	Yes
12384	Yes	Plainville	Davis Bros. Oil Producers, Inc.	(W) Plainville Waterflood Unit	Bice Unit, Collins E Kleinschmidt B, Ross C, Ross D	6-10S-17W 7-10S-17W	790	450	LKC	3500	75	17	0	0	0	Yes
13187	Yes	Plainville	Davis Bros. Oil Producers, Inc.	(W) Winters Plante No.2 (Plainville WF No.2)	Plante B, Winters C, White A, White B	8-10S-17W	550	390	LKC	3500	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 Garvert O - Hoffman D	17-10S-17W 18-10S-17W	380	250	LKC	3500	75	9	0	0	0	Yes
16341	--	Riffe	Sierra Petroleum Co., Inc.	(W) Riffe Unit	Riffe Dryden Desmarteau	4-7S-19W 5,8-7S-19W 9-7S-19W	460	0	LKC + Tor	3180	7	9	0	0	0	Yes
16831	No	Simons	Thornton E.Anderson	(P) Simons	Simons	11-7S-17W	60	0	LKC+Top	2758	20	2	0	0	0	Yes
9412*	--	Trico	B-J Oil Co.	(W) --	Trible	28-10S-20W	--	--	--	--	--	--	--	-	-	--
16056	Yes	Trico	Cities Service Co.	(W) Trico LKC Arb Unit	Trico LKC Arbuckle Unit	33-10S-20W	280	0	LKC + Arb	3580	24	8	0	0	0	Yes
13998	--	Trico	Kaiser-Francis Oil Co.	(D) Williams	Williams	28-10S-20W	80	--	Arb	3747	6-11	2	0	0	0	Yes
10794	No	Trico	Murfin Drilling Co.	(P) Briggs-Harlan WF	Briggs	34-10S-20W	40	24	LKC	3500	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	Upper Pleas	3426	7	.5	0	1	0	Yes
12298	No	Vohs	Atlantic Richfield Co.	(W) H.J.Vohs "A"	H.J.Vohs	13-10S-19W	120	--	LKC	3280	32	5	0	0	0	Yes
13602	No	Vohs	Energy Reserves Group, Inc.*	(W) Senecal	Felix Senecal	12-10S-19W	40	0	LKC	3303	105	1	0	0	0	Yes
14335	No	Webster	Phillips Petroleum Co.	(W) Fidelis	Fidelis	33-8S-19W	100	0	LKC	3180	20	3	1	0	0	Yes
10080	No	Westhusin	Atlantic Richfield Co.	(W) Robert J.McClay	Robert J.McClay	12-9S-17W	80	--	LKC	3130	254	4	0	0	1	Yes
13645	--	Westhusin	Harold Krueger Co.	(P) Colahan-Dougherty B	Colahan, Dougherty B	18-9S-16W	80	0	KC Lm	3150	3-5	2	1	0	0	Yes
13647	--	Westhusin	Harold Krueger Co.	(P) Mary Dougherty	Mary Dougherty	13-9S-17W	120	0	KC Lm	3150	3-6	8	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
7166	3	2	0	0	Irreg	309	213	Prod + Dak Sd	870	50	M	1963	S Gas + Grav	1/2	39-40	--	233,552	4,848,077	18,682	404,109	18,682	404,109	*Was Max Cohen.
12140																							†Cumulative porosity.
7831	2	0	0	0	Irreg	250	284	Prod + Dak Sd	950	50	M	1965	S Gas + Grav	3/7	39-40	--	207,473	1,529,653	1,921	55,527	1,921	55,527	*Was Max Cohen.
12702	2	0	0	0	Irreg	275	141	Prod + Dak Sd	950	50	M	1966	S Gas + Grav	7/13	39	--	102,764	1,255,514	4,884	85,096	4,884	85,096	†Cumulative porosity *Was Max Cohen.
10499	2	2	0	0	Irreg	Vac	65	Prod	--	--	T	1965	S Gas + Grav	1/1	38-40	--	43,994	2,031,803	28,168	1,315,862	21,126	469,571	
6050	10	6	0	0	Irreg	200	254	Prod + Dak	600	200	M	1966	Grav	6/94	38	--	926,016	5,860,300	21,437	--	21,437	1,345,534	
9350																							
11184																							
11185																							
11333																							
13043	4	0	0	0	Peri	325	270	Prod + Dak	600	200	M	1966	S Gas + Grav	6/94	38	--	394,704	3,912,562	15,565	--	15,565	233,473	*Was D & D Drilling Co., Inc.
14469	1	0	0	0	--	130	215	Prod + Arb	3300	5	U	1969	S Gas	3/60	33	--	66,704	574,132	3,363	215,248	2,220	10,657	
15529	3	0	0	0	--	0	368	Prod	--	--	U	1969	Wat	2/3	35	--	403,236	3,019,604	20,170	416,497	16,750	96,031	*Was Kathol Petroleum.
15302	1	0	0	0	Irreg	0	375	Prod	--	--	T	1970	S Gas	1/6.9	32	--	136,994	513,984	2,599	46,403	2,599	25,074	
16628	--	--	-	-	--	0	0	Prod	--	--	U	--	Gas Exp	9/226	27	--	--	--	2,763	244,995	--	--	*Produced water goes into SWDS Wilson "A".
12517	1	1	0	0	Peri	18	170	Prod	--	--	T	1966	S Gas	4/1	29	--	61,780	447,197	35,800	--	5,800	26,664	
15992	0	0	0	0	Irreg	0	0	Prod	--	--	T	--	Other	1/3	29	--	0	0	1,061	--	0	0	*Has not started.
10570	1	0	0	0	Peri	Vac	492	Prod + Arb	3770	10	U	1969	S Gas	--	33	--	152,643	1,617,901	1,858	507,622	1,115	37,512	
18410	1	0	0	0	Irreg	500	445	Prod	--	--	U	1976	S Gas*	1/99	35	--	162,509	180,846	5,885	80,648	0	0	* + Grav.
16483	4	0	0	0	Peri	230	303	Prod + Chey	690	62	T	1972	S Gas	27/167	35	--	429,670	2,191,316	13,823	434,424	13,823	117,410	
15354	3	0	0	0	5-Spot	--	--	Prod	--	--	T	1970	--	1/1	36	--	730,000	6,683,150	12,789	241,117	--	--	*Was T.I.Leben, et al.
15389	1	0	0	0	Peri	0	301	Prod	--	--	T	1969	Grav	3/2	30.4	--	109,859	624,365	2,022	90,484	1,202	--	
11302	1	0	0	0	Irreg	--	402	Prod	--	--	T	1965	Grav	--	28	--	146,566	1,033,786	6,016	282,129	6,016	282,129	
15129																							
15855	3	--	-	-	4-Spot	100	220	Prod	--	--	M	1972	S Gas	--	37	--	232,000	--	--	2,190	--	--	*Was C.S.O.
12384	5	0	0	0	5-Spot	880	295	Prod + Dak	700	300	T	1965	Grav	3/1	34	5	537,823	7,945,120	30,890	772,059	15,445	--	
13187	3	0	0	0	5-Spot	745	380	Prod + Dak	700	300	T	1967	Grav	3/1	34	6	416,897	3,190,124	18,528	366,661	9,260	--	
14009	2	0	0	0	5-Spot	560	30.4	Prod	--	--	T	1968	Grav	3/1	34	5	22,210	1,551,311	5,318	139,475	1,330	--	
16341	2	0	0	0	Line	575	640	Prod + Chey	945	50	T	1972	Grav	17/83	34.5	--	233,593	1,377,755	13,570	96,793	0	0	
16831	1	0	0	0	Irreg	150	70	--	--	--	U	1973	S Gas	3/7	38	--	23,000	124,000	5,795	105,508	1,200	3,450	
9412	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--*	--	--	--	*Project inactive.
16056	5	0	0	0	Peri	772	386	Prod + Dak	650	40	T	1972	S Gas	34/94	31	--	4,287	2,916,662	17,418	1,187,959	17,418	162,825	
13998	2	0	0	0	--	--	98	Prod	--	--	U	1968	Gas	--	29.5	--	35,770	107,310	5,654	303,497	--	--	
10794	1	0	0	0	Irreg	Vac	70	Prod	--	--	T	1964	S Gas	3/2	28	--	25,437	266,557	3,582	79,196	3,200	--	
17404	2	0	1	0	Irreg	309	190	Lo Dak	509	135	U	1974	S Gas	35/13	34	2.5	69,334	179,487	27,572	326,227	18,447	55,663	
12298	2	0	0	0	Irreg	Vac	571	Prod + Arb	3596	6	U	1966	Grav + Wat + Gas Exp	32/68	34	5.5	416,673	2,577,121*	16,362	1,263,260	16,362	255,420	*Corrected.
13602	1	0	0	0	Irreg	0	139	Prod	--	--	T	1967	S Gas	1/5.8	35.4	--	50,631	440,555	4,252	374,658	4,252	84,689	*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	247,105	1,547,184	3,045	314,034	2,457	8,943	
10080	4	0	0	0	Irreg	Vac	293	Prod	--	--	U	1963	S Gas	2/5	35	4.8	534,120	11,379,701	9,822	1,069,134	9,822	320,908	
13645	1	1	0	0	Line	Vac	100	Prod	--	--	T	1967	S Gas	4/1	37	--	34,850	521,075	6,999	210,935	2,333	28,687	
13647	1	0	0	0	Irreg	Vac	165	Prod	--	--	T	1967	S Gas	7/3	37	--	59,920	906,197	7,424	270,222	2,474	55,424	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
ROOKS COUNTY (Concl.)																
10108	No	Westhusin	Terra Resources, Inc.	(D) Westhusin	Westhusin Unit, J.Westhusin Baxa, Dora Smith, McClay	11-9S-17W 12-9S-17W	80	70	LKC	3130	20	10	1	0	0	Yes
17039	Yes	Zurich	Cities Service Co.	(W) Zurich Townsite Unit	Zurich Townsite Unit	27-9S-19W	560	0	Tor + LKC	3360	1	6	0	0	0	Yes
6581	No	Zurich	Murfin Drilling Co.*	(W) McCullough	Johnson "A" McCullough, Johnson "B", Casey	26-10S-19W 35-10S-19W	380	100	LKC	3300	25	5	0	2	0	Yes
		ROOKS COUNTY TOTALS (Reported)					14535	3270				331	42	5	5	
RUSH COUNTY																
16358	Yes	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	3300	6	5	0	0	0	Yes
RUSSELL COUNTY																
14534	--	Baxter	Cities Service Co.	(W) Baxter "A"	Baxter "A"	33-14S-15W	24	0	Tor + LKC	3082 3118	28	2	0	0	0	Yes
17274	No	Boxberger West	Helmerich & Payne, Inc.	(-) Morgenstern	Morgenstern	34-15S-15W	160	--	Lans	3200	26	3	0	0	0	Yes
14451	Yes	Eulert	Atlantic Richfield Co.	(W) Eulert Unit	Eulert Unit	35-11S-15W	400	100	Top + LKC	2990	14-30	9	0	0	0	Yes
16754	--	Eulert	Shields Oil Producers, Inc.	(D) Eulert	Eulert	34-11S-15W	80	0	Arb	3260	10	1	0	0	0	Yes
11553	No	Fairport	Aylward Drilling Co.	(P) Booth	Booth	32-11S-15W	70	20	LKC	2850	22	6	0	0	0	Yes
11344	No	Fairport	Energy Reserves Group, Inc.*	(W) Oswald	Ed Oswald	8-12S-15W	130	30	LKC	2911	31	13	0	0	0	Yes
14502	No	Fairport	John O.Farmer, Inc.	(P) Fairport WF	Cleve Miller, Driscoll	20-12S-15W	160	--	LKC	3000	5	3	1	0	0	No*
12911	No	Fairport	Mai Operations	(W) Beller	Beller "A" Beller "C" Beller "B"	10-12S-15W 15-12S-15W 16-12S-15W	160	20	LKC	2970	6	11	0	0	0	Yes
13149	--	Fairport	Mai Operations	(W) Sutton "B"	Sutton "B"	9-12S-15W	80	0	LKC	2961	6	7	0	0	0	Yes
16012	No	Fairport	Mai Operations	(W) Milke-Krug	Milke, Krug	20-12S-15W	120	0	LKC	3000	6	10	0	0	0	Yes
15693	--	Fairport	R.P.Nixon Operations	(D) Gibbs	Gibbs	20-12S-15W	160	0	LKC	3001	30	3	4	0	0	Yes
13056	No	Fairport	Sohio Petroleum Co.	(W) Deckert	Deckert	30-12S-15W	46	--	LKC	3020	36	3	0	0	0	Yes
13057	No	Fairport	Sohio Petroleum Co.	(W) Rusch "A"	Rusch "A"	19-12S-15W	50	--	LKC	3020	36	3	2	0	0	Yes
13058	No	Fairport	Sohio Petroleum Co.	(W) Rusch "B"	Rusch "B"	19-12S-15W	50	--	LKC	3020	36	3	0	0	0	Yes
16180	No	Fairport	Sohio Petroleum Co.	(W) Oswald-Wilcox Coop	Ed Oswald "A", Ed Oswald "B" Oswald-Wilcox "B"	8-12S-15W 17-12S-15W	320	0	LKC	2954	--	10*	6*	-	0	Yes
18706	No	Fairport	Sohio Petroleum Co.	(W) Middle Fairport	C.C.Oswald, Oswald-Wilcox "A"	8-12S-15W	320	0	Tark + LKC	--	--	20	2	1	0	Yes
6472	--	Fairport	Texaco Inc.	(W) P.Jacobs	P.Jacobs	31-12S-15W	155	--	Lans	3000	34	6	1	0	0	--
4976 15009	No	Fairport North	Energy Reserves Group*	(W) Booth "A"	Booth,F. "A"	32-11S-15W	80	0	Dodge + Lans	2875	10	3	0	0	0	Yes
13077	--	Gorham	C.L.Hanes	(P) VonFeldt	VonFeldt	6-15S-14W	80	0	Reag + Arb + KC	2964	5	3	0	0	0	Yes
9137 9846	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" Marg Dortland, Mermis "B", J.Dortland, Dortland "C", Mills "B", Witt "D", Foster "A", Foster "B", Witt "E" Marg Dortland, Mermis "B", J.Dortland, Dortland "C"	32,33-13S-15W 3-14S-15W 4-14S-15W 5-14S-15W	1080	720	LKC	3050	28	31	--	0	0	Yes
10922	--	Gorham	Leben Oil Corp.	(-) Mills B	Mills B	33-13S-15W	--	--	--	--	--	--	--	-	-	--*

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
10108	3	0	0	0	Irreg	114	438	Prod	--	--	T	1963	S Gas	34/66	34.7	--	472,506	8,370,843	22,265	1,395,913	22,265	524,886	
17039	3	0	0	0	Peri	45	522	Prod + Wat Sd	48	30	M	1974	S Gas	1/77	--	--	537,205	1,523,174	21,141	493,127	21,141	52,216	
6581	1	0	0	0	Irreg	920	290	Prod + Dak	600	200	M	1958	S Gas	2/5	32	--	105,885	326,343	9,383	110,063	9,383	101,001	*Was Veeder Supply & Development Co.
	138	35	1	0													17,206,992	166,774,330	708,668	25,390,319	512,183	9,472,696	
16358	2	0	0	0	Irreg	0	100	Prod	--	--	U	1972	S Gas	9/1	36	--	36,500	270,100	5,201	34,096	1,733	11,365	
14534	1	0	0	0	Irreg	0	23	Prod	--	--	-	1968	S Gas	8/6	32.2	--	9,251	45,103	3,900	78,760	3,900	6,455	
17274	1	0	0	0	Irreg	0	158.5	Dak Sd	345	70	U	1974	S Gas	700/1223	32	--	57,856	215,780	5,633	276,380	0*	0*	*Corrected.
14451	6	0	0	0	Peri	Vac	737	Prod + Arb + B LKC	3290	14-400	U	1968	S Gas	104/771	38.8	--	1,612,867	13,437,134	33,102	481,175	33,102	476,398	
16754	1	0	0	0	Irreg	0	225	Prod	--	--	U	1972	Wat	--	33	--	82,125	563,875	2,849	19,558	1,200	3,200	
11553	1	0	0	0	Irreg	Vac	435	Prod	--	--	T	1965	S Gas	--	30	--	158,914	2,271,377	9,685	335,604	9,685	134,300	
11344	5	0	0	0	Irreg	0	659	Prod + Dak	325	233	U	1964	S Gas	2.6/1	35.9	--	1,203,354	9,200,311	56,359	3,276,492	56,359	511,397	*Was Pan American.
14502	1	0	0	0	Irreg	0	50	--	--	--	U	1968	Grav	--	39	--	Not metered	Not metered	1,087	--	0	--	*Pump only lease water.
12911	4	0	0	0	Irreg	600	172	Prod	--	--	T	1966	S Gas	1/2.25	36	--	252,015	3,104,646	19,109	1,208,589	14,332	303,752	
13149	3	0	0	0	Irreg	500	274	Prod	--	--	T	1970	S Gas	1/2	37.6	--	300,195	1,552,823	14,481	238,693	7,240	72,962	
16012	2	0	0	0	Irreg	50	286	Prod	--	--	T	1971	S Gas	1/4	36	--	208,891	1,821,557	14,244	425,257	9,971	57,464	
15693	2	0	0	0	Irreg	0	480	Prod	--	--	T	1970	S Gas	3/2	38	--	168,000	1,014,665	15,654	74,797	15,654	23,526	
13056	1	0	0	0	Irreg	474	247	Prod + Dak *	409	24	T	1967	S Gas	1/15	34.9	--	90,281	975,599	9,299	235,633	9,299	113,582	*Brackish.
13057	1	0	0	0	Irreg	466	474	Prod + Dak *	409	24	T	1967	S Gas	1/14	37.5	--	172,871	1,287,059	6,171	177,518	6,171	126,466	*Brackish.
13058	2	0	0	0	Irreg	474	377	Prod + Dak *	409	24	T	1967	S Gas	1/11	38.6	--	274,691	2,396,063	5,663	89,958	5,663	65,012	*Brackish.
16180	1	0	0	0	Irreg	0	190	Prod	--	--	M	1972	S Gas	1/11	37	--	69,247	433,586	37,963	392,583*	13,052	165,534*	*Corrected well count and production.
18706	2	0	0	0	5-Spot	240	247	Prod + Dak	329	198	T	1977	S Gas	1/5.5	33.5	--	195,419	195,419	61,366	61,366	0	0	
6472	1	1	0	0	Irreg	25	167	Prod	--	--	U	1958	S Gas	3000/223	33	--	61,122	6,281,403	16,855	533,118	16,855	360,180	
4976	1	1	0	0	Irreg	0	149	Prod	--	--	U	1956	S Gas	1/4.1	33.4	--	54,500	3,137,425	6,338	1,052,909	6,338	291,942	*Was Pan American.
15009																							
13077	1	0	0	0	Peri	475	450	Prod	--	--	T	1966	Grav	2/3	34	--	161,500	1,273,075	10,758	133,963	--	--	
9137	11	1	0	0	5-Spot	560	700	Prod	--	--	T	1962	S Gas	--	36	--	2,810,500	54,418,309	64,065	2,230,628	64,065	2,230,628	
9846																							
10922	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	---	*Inactive.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
10923	No	Gorham	Leben Oil Corp.	(-) Mills A	Mills A	4-14S-15W	40	--	Lans	3050	90	--	--	-	-	Yes
17573	--	Gorham	R.P.Nixon Operations	(-) Atherton	Atherton	4-13S-14W	160	0	LKC	3070	35	5	0	0	0	Yes
12345	No	Gorham	Okmar Oil Co.	(W) Vaughn	Vaughn, Krug	17-14S-14W	90	0	Lans	3180	8	4	2	0	0	--
1354	No	Gorham	Phillips Petroleum Co.	(W) Carroll	Carroll	18-14S-14W	70	0	LKC	3100	50	4	1	0	0	Yes
--	Yes	Gorham	Roy Vonfeldt	(W) --	Dumler Unit	11-14S-15W	160	40	KC	--	--	2	2	-	0	--
15950	No	Gorham	Terra Resources, Inc.	(D) Reinhardt	Reinhardt "D"	19-14S-14W	30	100	LKC	3055	18	3	0	0	0	--
4098	--	Gorham	Texaco Inc.	(W) D.Brandenburg	D.Brandenburg	20-14S-14W	160	--	Lans	3100	--	1	0	0	0	Yes
10618																
9974	--	Hall Gurney	AB Oil Co., Inc.*	(P) --	Carl Dumler	16-14S-13W	160	--	Tark	2370	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	2315	10	5	5	0	0	Yes
9395	--	Hall Gurney	American Petrofina Co. of Texas*	(W) J.Blehm	J.Blehm	11-14S-14W	160	0	Tark	2380	10	3	0	0	0	Yes
9516	--	Hall Gurney	American Petrofina Co. of Texas*	(W) Rein	G.Rein H.Rein G.Rein	17-14S-13W 19-14S-13W 20-14S-13W	320	120	Tark	2410	10	3	6	0	0	Yes
14923	--	Hall Gurney	American Petrofina Co. of Texas*	(D) Kuhnle	Kuhnle	4-15S-12W	80	0	LKC	2953	28	2	0	0	0	Yes
4543	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "A"	Holl "A"	22-14S-14W	60	40	LKC	3000	22	8	0	0	0	Yes
7165	No	Hall Gurney	Aylward Drilling Co.	(P) Herbel "B"	Herbel "B"	26-14S-14W	80	0	LKC	2924	20	3	0	0	0	Yes
7167	No	Hall Gurney	Aylward Drilling Co.	(P) J.Boxberger	J.Boxberger	26-14S-14W	70	20	LKC	2292	18	4	0	0	0	Yes
7946	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "A"	Holl "A"	22-14S-14W	10	50	Tark	2425	22	1	0	0	0	Yes
7950	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "B"	Holl "B"	22-14S-14W	140	20	LKC	2950	22	9	0	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	3000	22	1	0	0	0	Yes
9425	No	Hall Gurney	Aylward Drilling Co.	(D) Anschutz	Anschutz	21-14S-14W	140	20	LKC	3127	20	6	1	0	0	Yes
13157	No	Hall Gurney	Aylward Drilling Co.	(P) Holl "C"	Holl "C"	21-14S-14W	80	60	LKC	3027	60	4	0	0	0	Yes
15814	No	Hall Gurney	Carl W.Boxberger	(D) Boxberger B	Boxberger B	14-14S-14W	160	0	LKC	3000	10	2	0	0	0	Yes
2328	--	Hall Gurney	Cities Service Co.	(W) Carter-Graham Coop Waterflood	Graham Carter	28-14S-13W 29-14S-13W	76	74	LKC	2880	23	2	0	0	0	Yes
2030	--	Hall Gurney	Cities Service Co.	(W) Hall Gurney LKC Coop Waterflood	Ebel "A" & Ebel "B" Strecker "B"	24-14S-14W 26-14S-14W	259	191	LKC	2880	66	11	2	0	0	Yes
4738																
7524																
16582	--	Hall Gurney	Cities Service Co.	(D) Weimeister	Weimeister	25-14S-13W	120	0	LKC + Tark	2862	26	3	2	0	0	Yes
4592	No	Hall Gurney	Continental Oil	(W) Hall - Lansing	Wm.Letsch, A.C.Rogg, R.S.Hall R.Lipprand	26-14S-13W 35-14S-13W	275	0	Lans	2800	20	6	12	-	-	Yes
9407	--	Hall Gurney	Continental Oil	(W) Rein Area	H.Rein, H.Rein "A"	27-14S-13W	160	0	Lans	2860	13	4	2	1	-	Yes
14758	--	Hall Gurney	Continental Oil	(W) Hall Tarkio	R.S.Hall, Wm.Letsch	26-14S-13W	80	0	Tark	2250	9	4	1	-	-	Yes
4587	No	Hall Gurney	Energy Reserves Group*	(W) Krug-Olson WFS	Krug "A", Krug "B", Driscoll J, Olson "A" & "C"	27-14S-14W	640	0	LKC	3000	136	23	0	0	0	Yes
4595					Olson "B"	28-14S-14W										
14620																
5437	No	Hall Gurney	Energy Reserves Group*	(W) Ben Rein	Ben Rein	25-14S-14W	160	0	LKC + Tark	2290 2950	8 20	6	0	0	1	Yes
8926																
12387	No	Hall Gurney	Energy Reserves Group*	(W) Newcomer	C.L.Newcomer	10-14S-14W	160	0	LKC	3000	60	4	0	0	0	Yes
9415	No	Hall Gurney	John O.Farmer, Inc.	(P) Rein WF	Rein	27-14S-13W	80	--	LKC	2850	--	3	--	-	-	Yes
16068	Yes	Hall Gurney	John O.Farmer, Inc.	(P) Smoky Flood	JOF, Inc., Kuhnle T-1, Sohio, Kuhnle T-2, Cities Service Tract 3, Shelburne Oil Tract 4	4-15S-12W	--	--	LKC	2990	5	14	3	0	-	Yes
9985	No	Hall Gurney	Gas Producing Enterprises	(D) Weimaster	Weimaster	36-14S-13W	30	50	LKC	2850	150	1	1	0	0	Yes
1088	No	Hall Gurney	Getty Oil Co.*	(P) T.B.Carter	T.B.Carter	33-14S-13W	160	0	LKC	2885	10	5	0	0	0	Yes
2439	No	Hall Gurney	Getty Oil Co.*	(W) Hall Gurney	Ben Rein C.Colliver W.Opdycke	25-14S-14W 28-14S-13W 29-14S-13W	890	0	LKC	2890	18	22	2	0	0	Yes
5195																
5781																
16911	No	Hall Gurney	Getty Oil Co.*	(W) A.Ehrlich LKC	A.Ehrlich	25-14S-15W	160	0	LKC	2944	84	3	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	Injection Pattern	Wellhead 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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
10923	--	--	-	-	Irreg	40	200	Prod	--	--	T	1964	S Gas	--	56	--	65,700	945,700	1,237	434,715	--	--	
17573	3	0	0	0	Irreg	0	350	Prod	--	--	T	1974	S Gas	3/1	36	--	122,500	553,000	4,849	11,076	4,849	7,962	
12345	1	0	0	0	Peri	520	807	Prod	--	--	U	1966	S Gas	--	40	--	250,372	7,613,743	8,313	690,295	8,313	188,900	
1354	2	1	0	0	Irreg	0	564	Prod	--	--	U	1957	S Gas	1/11.5	41	5	411,812	12,080,095	6,437	1,257,259	6,437	386,835	
--	3	1	0	1	Line	0	130	Gor Sd + KC	3300	6	T	--	--	1/6	36	--	35,000	--	1,800	--	--	--	
15950	1	0	0	0	Irreg	Vac 28"	1368	Prod	--	--	T	1954	S Gas	42/58	38.3	--	499,308	10,193,022	5,443	1,121,711	5,443	323,277	
4098 10618	1	0	0	0	4-Spot	155	485	Prod	--	--	U	1954	S Gas	759/426	34	--	177,025	7,676,403	4,987	278,556	4,987	240,513	
9974	1	--	-	-	Irreg	400	420	Prod	--	--	U	1974	Wat	--	36	--	153,300	445,200	1,159	4,462	--	--	*Was Carl Dumler.
6968	1	0	0	0	Irreg	800	20	Prod + Dak	356	30	U	1967	S Gas	1/3	41	--	7,349	4,534,900	4,170	80,721	4,170	80,721	*Was The El Dorado Refining Co.
9395	1	0	0	0	5-Spot	475	65	Prod + Dak	336	25	U	1962	S Gas	1/9	36	--	23,435	1,121,550	1,791	85,063	1,791	28,014	*Was The El Dorado Refining Co.
9516	2	3	0	0	5-Spot	500	52	Prod + Dak	232	50	U	1962	S Gas	1/5	38	--	37,914	3,610,093	3,530	578,149	3,530	193,642	*Was The El Dorado Refining Co.
14923	1	0	0	0	Irreg	920	90	Prod + Gorham Sd	3204	4	U	1969	--	1/6	38.3	--	33,004	354,755	4,228	377,712	4,228	38,929	*Was The El Dorado Refining Co.
4543	3	0	0	0	Irreg	300	467	Prod	--	--	T	1954	S Gas	--	36	--	511,872	2,875,982	9,629	1,041,139	9,629	880,031	
7165	1	0	0	0	Irreg	600	35	Prod	--	--	T	1959	S Gas	--	38	--	12,765	461,893	2,751	111,782	2,751	97,450	
7167	1	0	0	0	Irreg	200	521	Prod	--	--	T	1959	S Gas	--	39	--	190,015	3,198,555	8,284	272,239	8,284	260,050	
7946	1	0	0	0	Irreg	125	985	Prod	--	--	T	1957	S Gas	--	36	--	359,663	1,414,668	650	52,290	650	52,290	
7950	3	0	0	1	Irreg	600	363	Prod + Dak	275	65	T	1970	S Gas	--	37	--	397,402	2,925,705	12,190	618,329	12,190	529,485	
8293	1	0	0	0	Irreg	1900	151	Prod	--	--	T	1975	S Gas	--	--	--	55,351	183,556	1,800	6,686	1,800	6,686	*Inj. well for benefit of Holl "B".
9425	2	0	0	0	Irreg	750	230	Prod	--	--	T	1962	S Gas	--	37	--	168,208	2,391,118	4,666	93,479	4,666	71,965	
13157	2	0	0	0	Irreg	1350	347	Chey	175	90	M	1966	S Gas	1/1	33	--	253,063	1,842,642	16,483	588,920	16,483	378,590	
15814	1	0	0	0	Irreg	650	130	Prod	--	--	U	1970	S Gas	1/5	38	--	47,450	449,350	1,503	388,574	1,503	13,121	
2328	2	1	0	0	Irreg	715	117	Prod + Dak	300	--	M	1950	S Gas	1/1	37	--	62,727	3,391,549	3,002	1,211,700	3,002	505,862	
2030 4738 7524	6	0	0	0	Peri	773	760	Prod	--	--	T	1948	S Gas	180/100	39	--	1,532,485	25,290,922	31,446	3,311,338	31,446	1,557,473	
16582	1	0	0	0	Irreg	0	99	Prod	--	--	F	1972	S Gas	5/3	39.1	--	34,000	77,000	12,965	258,849	0	0	
4592	6	3	-	-	Irreg	1050	220	Wat Sd + Granite	40-26	25-40	F	1956	S Gas	--	39.2	--	482,058	9,788,109	12,776	948,582	12,776	879,323	
9407	3	2	-	-	Irreg	300	322	Chey Sd	88	242	U	1972	S Gas	--	38.9	--	352,534	6,049,797	13,379	550,101	8,399	376,226	
14758	2	0	-	-	Irreg	925	143	Wat Sd	40	26	F	1969	S Gas	--	37	--	104,449	990,387	4,485	71,171	4,485	53,383	
4587 4595 14620	10	1	0	1	Irreg	582	441	Prod	--	--	U	1953	S Gas	4/1	37.4	--	1,610,528	20,842,744	103,913	6,337,797	86,573	4,104,029	*Was Pan American.
5437 8926	1	1	0	0	Irreg	633	416	Prod	--	--	U	1957	S Gas	1/6.1	36.4	--	227,771	4,138,079	5,505	1,067,747	5,505	365,613	*Was Pan American.
12387	1	0	0	0	Irreg	1003	424	Prod	--	--	U	1966	S Gas	1/1.5	36.4	--	154,862	2,346,353	8,425	728,300	8,425	141,744	*Was Pan American.
9415	1	--	0	-	Irreg	500	425	Prod	--	--	U	1962	Grav	--	37	--	158,214	2,501,783	5,313	--	3,000	--	
16068	6	1	0	-	Irreg	750	2000	Prod + Dak	488	90	U	1971	Grav	--	38	--	717,915	6,993,239	18,081	261,913	8,000	--	
9985	1	0	0	0	Irreg	475	480	Prod	--	--	U	1963	S Gas	20/66	37	--	174,900	2,853,803	2,534	462,002	--	--	
1088	3	0	0	0	Irreg	1150	277	Prod + Dak + Chey	200	--	T	1944	S Gas	--	34	--	303,403	2,830,284	13,648	504,031	13,648	268,113	*Merger: was Skelly Oil Co., 2/1/77.
2439 5195 5781	14	2	0	1	Irreg	873	286	Prod + Dak + Chey	200	--	T	1950	S Gas	2421/3670	39	--	1,459,278	24,585,056	54,061	3,726,755	54,061	2,667,321	*Merger: was Skelly Oil Co., 2/1/77.
16911	1	0	0	0	Irreg	0	654	Prod	--	--	T	1973	S Gas	358/669	32	--	238,625	871,983	10,857	480,944	10,857	40,688	*Merger: was Skelly Oil Co., 2/1/77.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
4032	--	Hall Gurney	Theodore Gore	(P) J.Boxberger SWD	Gurney A, Gurney B	23-14S-14W	480	--	Tark +	2300	100	10	0	0	0	Yes
4499					J.Boxberger	26-14S-14W			LKC	3000						
13980																
17491																
6101	--	Hall Gurney	Theodore Gore*	(P) Kastrup	Kastrup N.W.	15-15S-12W	160	0	LKC	2930	48	2	0	0	0	Yes
12581	--	Hall Gurney	Theodore Gore	(P) Kaufman B	Kaufman B	22,27-15S-12W	320	--	LKC +	2774	300	6	0	0	0	Yes
					Luerman	28-15S-12W			Tark							
13036	--	Hall Gurney	Theodore Gore	(P) Ruby A	Ruby A	36-14S-13W	80	--	LKC	2835	90	3	0	0	0	Yes
16112	--	Hall Gurney	Theodore Gore	(P) Weber	Weber, Luerman	28-15S-12W	200	--	LKC	3000	150	2	0	0	0	Yes
11343	--	Hall Gurney	Great Bend Hydrotest & Supply*	(D) --	Ray Long	20-14S-12W	20	--	Tark	2300	--	1	0	0	0	Yes
12992	No	Hall Gurney	Gulf Oil Corp.	(W) Abraham Heard	Abraham Heard	30-14S-12W	160	0	LKC	2850	--	2	0	0	0	No*
15078	No	Hall Gurney	J.J.Hall Operating Co.,Inc.	(P) Miller	Elizabeth Miller 1,A,B,C,D,E,F	30-14S-13W	320	--	LKC	2859	25	18	2	0	0	Yes
					Guy O Miller C,D	31-14S-13W										
					Lavon Miller "A"	31-14S-13W										
6727	No	Hall Gurney	Ivan Holt Well Service Inc.*	(P) Strecker Tarkio	Strecker A, Strecker B	25-14S-14W	45	115	Tark	2257	7	4	2	0	0	Yes
4691																
7366	No	Hall Gurney	Jayhawk Well Servicing Co.	(D) Michel B	Michel B	2-15S-14W	160	--	KC	2900	4	3	--	-	-	Yes
8456	No	Hall Gurney	Jayhawk Well Servicing Co.	(D) Cody	Cody	16-14S-14W	160	--	KC	2900	4	5	1	-	-	Yes
11860	No	Hall Gurney	Jayhawk Well Servicing Co.	(D) Holl B	Holl B	21-14S-14W	80	--	KC	2900	4	1	--	-	-	Yes
				Holl	Holl							4				
17046	--	Hall Gurney	K & P Oil Co - Louis Kahan	(D) Rusch	Rusch	33-14S-14W	80	0	Tark	2351	8	2	0	0	0	No*
15052	Yes	Hall Gurney	Koch Exploration Co.	(W) Ney WF Unit	Hilgenberg, Hafeman	32-15S-12W	80	--	LKC	3020	--	5	1	0	0	Yes
8345	--	Hall Gurney	Mai Operations	(D) Rudiger-Shaffer	Rudiger-Shaffer	3-15S-13W	80	0	LKC	2970	6	5	0	0	0	Yes
9091	No	Hall Gurney	Mai Operations	(W) Campbell-Graham	Graham	21-14S-13W	220	20	Tark	2275	20	11	0	0	0	Yes
11296					Campbell	22-14S-13W										
11301																
9417	No	Hall Gurney	Mai Operations*	(P) Wm.Letsch	Wm.Letsch	26-14S-13W	160	110	Tark	2280	28	5	0	0	0	Yes
13594																
11111	No	Hall Gurney	Mai Operations*	(W) Bond-Jones	Anna Bond, Jones "A"	22-14S-13W	40	160	Tark	2265	20	5	0	0	0	Yes
11509																
11620	No	Hall Gurney	Mai Operations*	(W) Shaffer "C"	Shaffer "C"	26-14S-13W	80	0	Tark +	2200	8	8	0	0	0	Yes
									LKC	2890	25					
15796	--	Hall Gurney	Mai Operations*	(W) Rogg-Rein	Rogg, Rein (plugged)	27-14S-13W	80	40	Tark	2265	8	4	0	0	0	Yes
13313	Yes	Hall Gurney	Mobil Oil Corp.	(W) Smoky Hill River Unit	Cities Service-Marsh "C"	29-14S-12W	520	0	LKC	2860	18	18	0	0	0	Yes
					Cities Service-Marsh "B", Farmer-Marsh "B"	30-14S-12W				2880						
					Farmer-Hupfer, Mobil-Trapp, Skelly-Pekarek	31-14S-12W										
					Cities Service-Steinle, Farmer-Steinle	32-14S-12W										
8566	--	Hall Gurney	Carl Motzkus	(-) --	Major	4-15S-12W	--	--	--	--	--	--	--	-	-	--
13536	No	Hall Gurney	Murfin Drilling Co.	(P) Carter WF	Carter	33-14S-13W	20	0	LKC	2868	48	2	0	0	0	Yes
CR-	No	Hall Gurney	Murfin Drilling Co.	(W) Berrick WF	Berrick	6-15S-13W	120	0	LKC	3014	25	4	0	0	0	Yes
6771																
11738	No	Hall Gurney	NCRA	(W) Mai	Mai	34-14S-14W	20	0	Lans	2920	8	2	0	0	0	Yes
10610	--	Hall Gurney	R.P.Nixon Operations	(-) Dumler	Dumler	24-14S-14W	100	0	Tark	2300	10	6	0	0	0	Yes
11459	--	Hall Gurney	R.P.Nixon Operations	(P) Boxberger	Boxberger	2-14S-14W	20	0	LKC	3050	25	2	0	0	0	Yes
8022	No	Hall Gurney	Okmar Oil Co.*	(W) Bond	Bond A, Bond B	23-14S-13W	125	10	Tark	2275	10	4	1	0	0	Yes
15415	No	Hall Gurney	Okmar Oil Co.	(W) Boxberger A-B-D	Boxberger A-B, Boxberger D	15-14S-14W	40	0	LKC	2980	10	6	0	0	0	Yes
16088	No	Hall Gurney	Okmar Oil Co.*	(P) Miller	Gore-Miller	15-15S-12W	160	--	LKC	2865	100	1	1	0	0	Yes
5033	--	Hall Gurney	Petroleum Management,Inc.	(W) Boxberger	Boxberger	22-14S-14W	70	70	LKC	2960	20	1	--	-	-	No
13201																
13121	No	Hall Gurney	Lee Phillips Oil Co.	(W) Letsch	Letsch	34-14S-13W	140	20	Tark +	2240	10	9	0	0	0	Yes
									Lans	2810	20					
8065	--	Hall Gurney	Pioneer Operations Co.,Inc.	(P) Flegler	Flegler	28-14S-14W	160	80	LKC	2950	150	1	1	0	0	Yes
18327	--	Hall Gurney	Pioneer Operations Co.,Inc.	(P) Boxberger C	Boxberger C	16-14S-14W	120	40	LKC	2975	160	5	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
4032	4	0	0	0	Irreg	860	350	Prod	--	--	T	1955	S Gas	--	37	--	333,250	3,975,640	16,442	1,400,100	8,220	481,340	
4499																							
3980																							
7491																							
6101	1	0	0	0	Irreg	0	99	Prod	--	--	T	1958	S Gas	--	--	--	148,000	677,000	3,202	133,490	0	0	*Was Cities Service Co.
2581	1	0	0	0	Irreg	750	300	Prod	--	--	T	1967	S Gas	--	40	--	114,240	1,303,170	8,660	737,810	3,740	60,750	
3036	1	0	0	0	Irreg	1030	419	Prod	--	--	T	1966	Wat	--	37	--	207,320	2,055,440	13,414	728,363	8,730	124,780	
6112	1	0	0	0	Irreg	0	200	Prod	--	--	T	1971	S Gas	8/92	40	--	209,880	627,190	7,573	1,113,166	2,760	5,910	
1343	--	--	-	-	--	0	3	Prod	--	--	U	--	S Gas	1/1	34.5	--	--	900	--	200	--	--	*Was Fluter Estate.
2992	0	0	0	0	--	--	--	Prod	--	--	-	--	--	278/ 13253	--	--	--	--	3,890	249,500	--	--	*Injection has not begun yet.
5078	2	0	0	0	Irreg	950	320	Prod	2859	25	-	1967	Grav	3/8	38	--	233,600	2,144,000	38,617	2,967,269	38,617	323,175	
6727	3	1	0	0	Irreg	820	300	Prod	--	--	T + S	1959	Wat	1/ 12.5	38.5	--	109,000	4,263,838	9,371	280,601	65,441	--	*Was Kaiser Francis.
4691																							
7366	1	--	-	-	Irreg	500	100	Prod	--	--	U	1959	Gas Exp	1/9	38.5	--	1,200	87,650	2,400	--	1,000	--	
8456	--	--	-	-	Irreg	300	200	Prod	--	--	U	1961	Gas Exp	1/9	38.6	--	200	366,500	5,000	--	1,000	12,550	
11860	1	--	-	-	Irreg	400	300	Prod	--	--	U	1965	--	1/9	39.2	--	36,000	135,650	500	--	100	--	
						300	200					1967			38.6		6,000	83,000	2,400	--	1,000	38,825	
17046	0	1	0	0	Irreg	0	0	Prod	--	--	U	1973	Wat	1/8	36	--	0	129,693	826	66,890	0	11,165	*Injection well is inactive.
15052	2	1	0	0	Irreg	375	267	Ced H	446	60	F	1969	Gas Exp	1/1	38.5	--	195,145	1,868,924	28,513*	883,904	18,933	273,522	*Approx. 7933 from Top.
8345	1	0	0	0	Irreg	Vac	25	Prod	--	--	T	1960	S Gas	1/5	39	--	9,125	106,450	3,549	302,371	2,307	34,641	
9091	6	0	0	-	Irreg	1150	104	Prod + Up Dak	295	35	T	1964	S Gas	1/4	39	--	227,270	3,042,357	11,007	421,158	8,255	174,664	
11296																							
11301																							
9417	3	0	0	0	Irreg	500	169	Prod	--	--	T	1962	S Gas	1/6	38	--	184,596	3,519,440	5,095	920,804	2,548	111,679	*Was Sun-Ray DX.
13594																							
11111	1	0	0	0	Irreg	600	89	Prod	--	--	T	1965	S Gas	--	38	--	32,294	1,562,719	2,393	286,907	2,393	109,496	*Was C.R.A.
11509																							
11620	3	0	0	0	Irreg	800	144	Prod	--	--	T	1967	S Gas	1/5	36	--	158,158	3,095,564	6,786	881,704	2,036	41,994	*Was Continental Oil Co.
15796	1	0	0	0	Line	800	76	Prod	--	--	T	1970	S Gas	1/4	36	--	27,660	258,739	11,979	557,175	4,792	32,628	*Was Magnolia Petroleum.
13313	7	1	0	1	Peri	1550	604	Prod + Alluvial Plains	80	20	M	1967	S Gas	--	36.4	9	1,542,261	13,532,261	34,676	1,071,448 (Since 1/1/67.)	34,676	767,448	
8566	--	--	-	-	--	--	--	Prod + Lans	2955	5	U	1967	S Gas + Wat	14/ 86	37	--	54,350	--	2,735	--	--	--	
13536	1	0	0	0	Irreg	Vac	44	Prod	--	--	T	--	S Gas	3/1	37	--	16,060	158,558	1,580	--	1,580	22,157	
CR-6771	1	0	0	0	Irreg	Vac	185	Prod + Dak	250	25	M	1977	S Gas	1/2	38	--	17,050	17,050	1,134	1,134	35	35	
11738	1	0	0	0	Irreg	800	140	Prod + Dak	420	--	U	1965	S Gas	1/1	37.6	--	51,167	593,721	6,394	83,453	1,881	33,261	
10610	3	0	0	0	Irreg	650	110	Prod	--	--	U	1963	S Gas	3/7	38	--	38,500	917,024	7,294	185,347	7,294	178,800	
11459	1	0	0	0	Irreg	625	0	Prod	--	--	T	1964	S Gas	3/1	34	--	52,500	593,475	1,623	8,289	1,623	8,289	
8022	2	1	0	0	Irreg	Vac	62	Prod	--	--	U	1960	S Gas	--	36	--	19,236	2,114,578	2,765	284,104	2,765	87,339	*Was R.P.Nixon.
15415	2	0	0	0	Peri	225	877	Prod	--	--	U	1970	S Gas	73/ 870	34	--	319,996	2,193,952	13,284	641,155	7,306*	39,333*	*Area has history of accidental dump floods - hard to sep. prim and sec prod.
16088	1	0	0	0	Irreg	Vac	353	Prod	--	--	T	1971	Wat	--	38	--	109,518	374,533	1,686	--	253	2,970	*Was Theodore Gore.
5033	0	1	-	-	Irreg	--	--	Prod	--	--	-	1966	--	--	37	--	0	2,551,198	1,699	291,361	0	284,756	
13201																							
13121	3	0	0	0	Irreg	0	80	Prod + Riv Sd	70	10	M	1961	S Gas	93/7	38	--	58,400	2,316,410	51,852	3,046,877	--	--	
8065	1	0	0	0	Irreg	620	375	Prod	--	--	T	--	S Gas	2/3	39	--	136,880	--	2,742	--	2,385	--	
18327	1	0	0	0	Irreg	625	350	Prod	--	--	T	--	S Gas	1/1	37	--	127,750	--	4,274	--	2,564	--	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
17645	No	Hall Gurney	Samson Resources Co.*	(D) Reinhardt	Reinhardt	24-14S-15W	80	40	Arb	3250	--	1	0	3	2	Yes
1552	No	Hall Gurney	Shields Oil Producers, Inc.	(W) G.C.Ehrlich	Ehrlich	32-14S-13W	180	--	KC	2800	30	4	0	0	0	Yes
6847	No	Hall Gurney	Shields Oil Producers, Inc.	(D) Gustason Estate	Gustason Estate, Kastrup	14-15S-12W	160	80	Tor Lm	2840	15	2	0	0	0	Yes
7750	No	Hall Gurney	Shields Oil Producers, Inc.	(W) Miller Waterflood	Miller "A"	31-14S-13W	160	0	KC	2800	30	6	0	0	0	Yes
9408	No	Hall Gurney	Shields Oil Producers, Inc.	(W) Rein Area Waterflood	Letsch, Rogg "E" Giese, Rogg "B"	27-14S-13W 28-14S-13W	480	80	KC	2800	25	17	0	0	2	Yes
7619	No	Hall Gurney	Southern States Oil Co.	(P) Boxberger	Boxberger	26-14S-14W	160	--	LKC+Top	2928	79	4	1	0	0	Yes
4490	No	Hall Gurney	Tri-W Oil Co.*	(D) Witt C	Witt C	3-14S-14W	320	0	KC	3000	30	2	1	0	0	Yes
3059 6527 7567 14872	No	Hall Gurney	Terra Resources, Inc.	(P) C.E.P. - LKC	Clyde, Ehrlich Phinney, Phinney "S"	19-14S-13W 30-14S-13W	300	0	LKC	2950	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	3020	15	7	1	0	0	Yes
10571 10671 12707	No	Hall Gurney	Terra Resources, Inc.	(P) Krug	Albert Krug, Harry Krug	9-14S-14W	100	10	LKC	3000	45	4	1	0	0	Yes
4517 5073	--	Hall Gurney	Texaco Inc.	(W) G.Boxberger A&B	G.Boxberger "A", G.Boxberger "B"	22-14S-14W	240	--	Lans	3100	--	7	0	0	0	No
17442	--	Hall Gurney	Texaco Inc.	(P) E.P.Gurney	E.P.Gurney	23-14S-14W	160	--	Tark	2340	--	5	1	0	0	Yes
10433 10434 11915	--	Hall Gurney	Texaco Inc.	(-) Borelli & Vejl	E.A.Borelli F.Vejl	32-14S-12W 5-15S-12W	480	--	Lans	2900	10	5	8	0	0	No*
10725 10284	--	Hall Gurney	Texaco Inc.	(W) Goodheart-Ruby	W.S.Goodheart E.Z.Ruby	25-14S-13W 36-14S-13W	240	--	Lans	2900	23	9	4	0	0	Yes
4219 4220 4504 5445 10948	--	Hall Gurney	Texaco Inc.	(W) --	S.Boxberger, L.Boxberger, H.Boxberger	10-14S-14W	480	--	Lans + Reag	3050	--	14	10	0	0	Yes
3771	--	Hall Gurney	Texaco Inc.	(-) C.W.Shaffer	C.W.Shaffer	18-14S-13W	--	--	Tark	--	--	1	0	0	0	No*
5858	--	Hall Gurney	Texaco Inc.	(P) Keil & Schnoor	N.Schnoor D.Keil	31-14S-13W 36-14S-14W	320	--	LKC	2875	122	5	3	0	0	Yes
14969	No	Kraft Prusa	Isern Petroleum Co.	(P) Durr	Durr AB	31-15S-12W	160	0	Quartz Sd	3374	20	3	2	0	0	Yes
11849	--	Nettie	Phillips Petroleum Co.	(W) Nettie Unit	Nettie Unit	33,34-9S-17W 3,4-10S-17W	560	0	Top + Tor + LKC + Arb	3225 - 3525	60 5	27	3	0	0	Yes
8871	No	Nuss	Duke Drilling Co.	(D) Nuss	Nuss	32-15S-14W	0	--	Lans	3120	25	2	0	0	-	Yes
18326	Yes	Parker	Thornton E.Anderson	(W) Parker	Parker Unit	7,8-15S-12W 12,13-15S-13W	400	0	Lans	3020	8	5	0	0	0	Yes
18014	No	Parker NE	Murfin Drilling Co.	(W) Hilgenberg WF	Hilgenberg, Kaufman Herber, McKnight	7-15S-12W 8-15S-12W	560	0	LKC	3050	162	7	0	0	0	Yes
CR-6774	No	Parker NE	Murfin Drilling Co.	(W) Herber WF	Hilgenberg, Kaufman Herber, McKnight	7-15S-12W 8-15S-12W	560	0	LKC	3050	162	7	0	0	0	Yes
11438	--	Reich	Krueger & Associates	(P) Reich, Keeney & Meckel Unit	Reich, Keeney Meckel A, Meckel B	28-12S-15W 29-12S-15W	85	0	KC Lm	2975	3-6	15	0	0	0	Yes
16992	No	Roosevelt	Shields Oil Producers, Inc.	(D) Morgenstern	Morgenstern	23-15S-15W	40	--	LKC	3300	10	1	0	0	0	Yes
15953	No	Russell	Okmar Oil Co.	(W) Holland-Killian	Holland B, Killian	28-13S-14W	160	0	LKC	3020	5	2	0	0	0	Yes
15949	No	S & S	Glenn W.Peel Estate*	(D) Shaffer	Shaffer	1-13S-15W	160	0	LKC	2804-2821	45	5	0	0	0	Yes
11977	--	Stricker	American Petrofina Co. of Texas*	(W) Stricker	Stricker, Stricker B, Stricker C	16-15S-14W	200	0	LKC	3041	--	3	0	0	0	Yes
16047	Yes	Trapp	Icer Addis*	(W) Trapp Unit Waterflood	Trapp Unit	25,26,35-15S-13W	720	--	LKC	3064	150	9	2	0	1	Yes
5472 13257	--	Trapp	Cities Service Co.	(W) Eichman "A" W.F.	Eichman "A", Tittel "A" Krug "G", Krug "F"	12-15S-14W 13-15S-14W	91	75	LKC	3090	12	4	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17645	1	0	0	0	Irreg	0	526	Prod	--	--	T	1975	Wat	2/98	30	--	191,937	690,914	1,978	150,420	0	0	*Was S & S Pipe & Supply.
1552	1	0	0	0	Irreg	1000	363	Prod + Dak + Chey	220	20	M	1971	S Gas	--	37	--	132,586	868,248	26,230	126,140	23,000	101,500	
6847	1	0	0	0	Irreg	0	100	Prod + Arb	3300	100	U	1957	S Gas	--	37	--	72,000	950,500	3,061	53,351	2,000	52,100	
7750	3	0	0	0	Irreg	900	122	Prod + Dak + Chey	220	20	M	1964	S Gas	--	37	--	267,256	2,833,207	28,395	240,951	25,000	193,500	
9408	8	0	0	1	Irreg	800	228	Prod + Dak + Chey	2800	25	T	1963	S Gas	--	39.3	--	666,956	13,580,744	42,121	1,046,969	35,000	745,000	
7619	2	0	0	0	Irreg	450	102	Prod + Dak	1520	--	M	1950	Grav	--	36	--	74,186	3,618,462	2,048	165,749	2,048	165,749	
4490	1	1	0	0	Irreg	0	100	Prod	--	--	U	--	S Gas	--	37	--	36,500	--	2,525	--	--	--	*Was Sohio Petroleum.
3059 6527 7567 14872	5	0	0	0	Irreg	1238	233	Prod + Dak	134	30	T	1959	S Gas	39/61	36.9	--	414,470	5,491,619	39,391	1,498,162	39,391	919,624	
5396	3	1	0	0	Irreg	1367	215	Prod	--	--	T	1957	S Gas	53/47	35.9	--	233,661	5,760,828	11,980	759,692	10,328	461,937	
10571 10671 12707	2	0	0	0	Irreg	1088	708	Prod	--	--	T	1963	S Gas	15/85	35.3	--	515,552	7,179,950	5,426	199,583	3,417	117,504	
4517 5073	1	0	0	0	Irreg	0	7	Prod	--	--	U	1953	S Gas	2418/8804	37	--	2,582	5,082,216	18,900	549,720	4,076	533,366	
17442	2	0	0	0	Irreg	645	265	Prod	--	--	U	1974	S Gas	44/200	--	--	191,855	550,753	9,781	33,782	62	924	
10433 10434 11915	0	0	0	0	--	0	0	--	--	--	U	1963	S Gas	1261/2640	36.5	--	0	4,059,827	9,517	400,308	9,517	310,590	*No inj. since 8/1/71. Wat. to Vejl #1 WD.
10725 10284	5	0	0	0	Irreg	515	110	Prod	--	--	U	1963	S Gas	1944/3621	36	--	200,530	8,118,377	19,081	574,847	9,684	439,080	
4219 4220 4504 5445 10948	3	1	0	0	Peri	500	367	Prod	--	--	U	1954	S Gas	73/118	--	--	401,382	9,708,075	20,747	1,972,212	15,376	713,876	
3771	0	0	0	0	--	0	0	--	--	--	-	1959	--	--	--	--	0	0	1,155	19,619	0	0	*No inj. since 1975.
5858	2	0	0	0	Irreg	Vac	--	Prod	--	--	U	1958	Wat	--	--	--	Dump	--	5,413	117,025	5,413	37,595	
14969	1	--	-	-	--	0	541	Prod	--	--	T	1969	S Gas	10/1	35	--	197,540	2,740,822	2,689	156,810	0	--	
11849	8	0	0	0	Irreg	105	365	Prod	--	--	U	1965	Wat + S Gas	1/4.3	35	10	1,064,876	13,087,755	66,535	2,777,943	59,421	1,040,070	
8871	1	0	0	0	Irreg	200	300	Prod + Dak	305	--	U	1961	S Gas	--	35	--	109,500	2,082,600	1,877	124,789	--	--	
18326	2	0	0	0	Peri	0	150	Prod + Tark + Cottonwood + Foraker	2352 2044 2172	41	T	1976	S Gas	3/1	40	--	46,000	64,000	14,728	500,951	3,600	5,400	
18014	3	0	0	0	Irreg	150	252	Prod	--	--	T	1976	S Gas	1/1	37	--	91,861	170,007	5,490	15,460	2,896	7,961	
CR-6774	3	0	0	0	Irreg	600	167	Prod	--	--	T	1977	S Gas	1/7	38	--	40,918	40,918	4,087	4,087	2,623	2,623	
11438	3	0	0	0	Line	Vac	180	Prod	--	--	T	1962	S Gas + Grav	4/1	35-39	--	193,177	2,509,873	17,212	675,781	8,606	267,827	
16992	1	0	0	0	Irreg	0	100	Prod	--	--	T	1973	S Gas	--	38	--	36,500	158,800	3,060	15,050	1,500	6,500	
15953	1	0	0	0	Irreg	0	127	Prod + Arb	3600	5	U	1971	S Gas	36/154	35	--	46,149	650,185	6,805	903,858	3,607	30,677	
15949	1	0	0	0	Irreg	Grav	19	Prod	--	--	U	1971	Wat	14/65	37.5	--	34,675	197,712	2,222	24,279	2,222	24,279	*Was Glenn W.Peel Oil Operator.
11977	1	0	0	0	Irreg	0-Vac	295	Prod	--	--	U	1965	S Gas	1/1	40	--	107,721	1,040,499	2,475	65,261	2,475	65,261	*Was the El Dorado Refining Co.
16047	4	0	0	0	Irreg	750	1051	Prod	--	--	U	1971	S Gas	--	37	--	383,655	1,560,936†	12,762	60,313†	8,500	34,167†	*Was Willie E.Schultz. †Since 1974.
5472 13257	2	0	0	0	Irreg	685	230	Prod	--	--	T	1957	S Gas	60/85	38	--	167,965	6,840,053	8,393	1,604,125	8,393	578,205	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Cont.)																
7631	--	Trapp Northeast	Cities Service Co.	(W) Rogg "D"	Rogg "D"	9-15S-13W	196	36	LKC	3090	28	3	1	0	0	Yes
7606	--	Trapp	Continental Oil	(W) Trapp Lans.	J.W.Meharg	17-15S-13W	160	0	Lans	2950	21	6	1	-	-	Yes
7589 7590 7604	Yes	Trapp	Energy Reserves Group,Inc.*	(W) Northeast Trapp	Letsch "A", Letsch "B", Heffernan Roesner	4-15S-13W 9-15S-13W	520	0	LKC	3010	55	13	2	0	0	Yes
7553	No	Trapp	Exxon Corp.	(W) N.Trapp Waterflood Unit	D.Josephine J.Detrich J.Letsch, L.Sellens	7-15S-13W 8-15S-13W 17-15S-13W	460	--	KC	2986	28	14	--	-	-	Yes
13776	No	Trapp	Gas Producing Enterprises	(D) Maag	Maag	7-15S-13W	±50	±20	LKC	3000	8	2	1	0	0	Yes
13777	No	Trapp	Gas Producing Enterprises	(D) Krug	Krug	7-15S-13W	±40	±20	LKC	3000	8	6	0	0	0	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	2900	50	12	1	0	3	Yes
7566	No	Trapp	Hillenburg Oil Co.*	(P) Berrick	Berrick	6-15S-13W	40	20	LKC	2990	20	3	0	0	0	Yes
14141	No	Trapp	Kewanee Oil Co.	(W) Piester A & B	Berrick Berrick, Piester A, Piester B	23-15S-13W 24-15S-13W	80	0	KC	3028	18	3	0	0	0	Yes
15070	No	Trapp	Kewanee Oil Co.	(W) Berrick	Berrick	23,24-15S-13W	0	40	Tark	2301	45	0	1	0	0	Yes
CR-77712	No	Trapp	Larry Moore Ranch,Inc.	(W) Hill	Hill	20-15S-13W	60	50	Lans	3096	17	2	1	0	0	No*
14364	Yes	Trapp	Murfin Drilling Co.	(W) Ber-Sel-Es Unit	Ber-Sel-Es Unit	22,27-15S-13W	80	35	LKC	3060	36	7	0	0	0	Yes
5183	No	Trapp	NCRA	(W) Flegler "B" Tarkio	Flegler "B"	2,11-15S-14W	10	60	Tark	2298	20	1	0	0	0	Yes
6038	No	Trapp	NCRA	(W) Flegler "C"	Flegler "C"	11-15S-14W	60	40	Lans	3057	7	6	0	0	0	Yes
9131	No	Trapp	NCRA	(W) Flegler "B" Lansing	Flegler "B"	11-15S-14W	30	30	Lans	2966	26	3	0	0	0	Yes
7568	No	Trapp	Phillips Petroleum Co.	(W) Roesner	Roesner	9-15S-13W	50	0	LKC	3100	50	1	0	0	0	Yes
CR-8771	No	Trapp	E.H.Riggs	(P) Ber-Sel-Es	T.W.Sellens A & B	22-15S-13W	160	--	LKC	3000	300	3	0	1	0	Yes
10920	--	Trapp	Ruthven,Inc.	(D) Ben Rein	Ben Rein	8-15S-13W	80	0	LKC	2950	150	2	0	0	0	Yes
11410	--	Trapp	Shell Oil Co.	(W) Mary Kejr A,B,C	Mary Kejr C Mary Kejr A, Mary Kejr B	11-15S-13W 14-15S-13W	400	0	Tor + LKC	2917	115	4	0	0	0	Yes
12252	--	Trapp	Shell Oil Co.	(W) N.A.Hoffman A &B J.Ehrlich A	N.A.Hoffman A N.A.Hoffman B J.Ehrlich A	7-16S-13W 12-16S-14W 18-16S-13W	360	0	Top + LKC	2962	100	11	1	0	2	No*
13496	--	Trapp	Shell Oil Co.	(D) L.Sellens B & C	L.A.Sellens B, L.A.Sellens C	22-15S-13W	160	0	LKC	3035	84	5	0	0	0	Yes
7570	No	Trapp Northeast	Shields Oil Producers,Inc.	(W) Northeast Trapp	Rogg "A"	9-15S-13W	160	80	KC	2800	25	3	0	0	0	Yes
5952	No	Trapp	R.H.Siegfried,Inc.	(W) Ross	Ross	11-15S-13W	20	20	Lans	3000	12	3	0	1*	0	Yes
7565	No	Trapp	Sohio Petroleum Co.	(W) Anschutz	Anschutz	10-15S-13W	100	--	LKC	3050	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	3000	25	18	0	0	0	Yes
13550	--	Trapp	Terra Resources,Inc.	(-) Meharg	Meharg	18-15S-13W	160	10	LKC	3000	15	4	--	-	-	No*
7370	Yes	Trapp Northeast	Roy Vonfeldt *	(W) --	George Sellens	20-15S-13W	60	--	KC	--	--	4	0	0	1	Yes
15539 16282	No	Wilson Creek	L.G.Stephenson & Co.,Inc.*	(P) Stopple/Sebesta	Stopple, Sebesta	24-14S-11W	320	0	Lans	2820	20	11	0	0	0	Yes
17428	No	Wilson Creek	L.G.Stephenson & Co.,Inc.	(P) Princ	Princ, Small J.Kratky	23-14S-11W 24-14S-11W	240	0	Lans	2821	7	7	2	0	0	Yes
17785 17954	No	Wilson Creek	L.G.Stephenson & Co.,Inc.	(P) Sebesta A/Small A	Sebesta A, Small A	24-14S-11W	240	0	Tark	2100	4	0	1	0	1	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
7631	4	0	0	0	Irreg	768	414	Prod + Dak	400	--	U	1960	S Gas	22/ 10	37	--	656,254	7,428,086	26,353	1,459,237	26,353	457,973	
7606	7	13	-	-	Irreg	775	218	Dak + Chey	550	72	U	1961	S Gas	--	38.5	--	557,228	8,143,595	21,023	903,436	21,023	831,225	
7589 7590 7604	9	2	0	0	Irreg	833	288	Prod + Dak	600	180	U	1960	S Gas	1/ 1.5	38.8	--	946,071	11,572,449	51,323	3,582,028	51,323	1,407,105	*Was Pan American.
7553	10	--	-	-	5-Spot	700	300	Dak	240	87	T	1961	S Gas	--	39	6	1,071,941	16,067,387	52,530	3,492,868	52,530	2,207,326	
13776	1	0	0	0	Irreg	1100	73	Prod	--	--	U	1967	S Gas	12/ 5.3	37	--	26,648	479,256	3,687	553,846	--	--	
13777	2	0	0	0	Irreg	1150	125	Prod	--	--	U	1967	S Gas	21/ 37	37	--	43,800	482,810	7,459	977,538	--	--	
7765	9	0	0	4	Irreg	1089	291	Prod + Dak	337	32	T	1961	S Gas	1896/ 1026	37	--	955,871	11,975,322	33,211	2,590,577	33,211	1,207,228	*Merger: was Skelly Oil Co., 2/1/77.
7566	1	0	0	0	Irreg	Vac	800	Prod	--	--	T	1960	Wat	2/98	36	--	292,000	--	3,956	--	3,956	--	*Was Terra Resources, Inc.
14141	2	0	0	0	Irreg	550	141	Prod	--	--	U	1968	S Gas	27/ 32	38	--	102,770	1,528,285	4,046	513,674	4,046	42,436	
15070	1	0	0	0	Irreg	550	308	Prod	3028	18	U	1969	S Gas	5/23	38	--	112,339	759,720	0	36,084	0	0	
CR-77712	0	1	0	0	Irreg	0	0	Prod + Tark	2424	8	U	1978	S Gas	5/15	37	--	0	0	0	0	0	0	*Hasn't begun yet.
14364	3	0	0	0	Irreg	600	245	Prod + Dak	250	154	M	1969	S Gas	4422/ 5578	38-39	--	268,073	2,247,816*	21,209	212,396*	21,209	184,508*	*Corrected.
5183	1	0	0	0	Irreg	850	196	Prod	--	--	U	1956	S Gas	1/.29	38.3*	--	71,472	2,763,413	1,439	351,987	1,439	188,014	*@60.
6038	2	0	0	0	Irreg	505	344	Prod + Arb	3322	4	T	1958	S Gas	1/ 3.7	27.7*	--	250,673	5,333,897	8,987	320,698	8,987	242,103	*@60.
9131	1	0	0	0	Irreg	200	511	Prod + Arb	3177	3	U	1962	S Gas	1/ 2.5	38.3*	--	186,692	4,669,582	4,404	238,022	4,404	152,671	*@60.
7568	1	0	0	0	Irreg	52	1447	Prod*	--	--	U	1960	S Gas	1/ 0.5	39	6	527,987	4,082,317	3,269	313,718	3,269	133,542	*Plus produced water from other leases.
CR-8771	1	0	0	0	Peri	0	50	Prod	--	--	T	1968	S Gas	3/7	40	--	18,000	160,000	5,864	226,568	--	32,000	
10920	1	0	0	0	Irreg	0	80	Prod	--	--	T	--	S Gas	1/1	38	--	29,200	--	6,461	--	4,845	--	
11410	1	1	0	0	--	--	--	Prod	--	--	U	--	S Gas	--	37	--	46,744	1,310,777	3,399	618,213	--	--	
12252	0	2	0	0	--	--	--	Prod	--	--	U	--	S Gas	--	36	--	0	388,000	15,720	5,575,337	--	--	*All injection wells are temporarily abandoned.
13496	1	0	0	0	--	--	--	Prod	--	--	U	--	S Gas	--	33	--	67,631	343,530	18,479	323,056	--	--	
7570	4	0	0	0	Irreg	800	300	Prod	--	--	T	1960	S Gas	--	37.2	--	328,806	4,774,472	21,964	404,586	15,000	345,100	
5952	2	0	0	0	Irreg	0-Vac	505	Prod + Arb	3286	8	T	1958	--	4/1	41.3	--	184,325	2,661,964	7,233	268,834	7,233	268,834	*Arbuckle producer.
7565	3	1	0	0	Irreg	958	274	Prod + Dak	450	55	T	1960	S Gas	1/ 1.5	42	--	274,189	3,608,815	38,158	394,469	38,158	316,213	
7607	12	1	0	0	5-Spot	642	277	Prod	--	--	T	1961	S Gas	56/ 44	36.5	--	1,153,620	15,945,749	74,489	7,069,146	74,489	2,534,802	
13550	0	--	-	1	Irreg	0	0	Prod	--	--	-	1967	--	8/42	38.3	--	0	247,637	11,707	896,975	11,707	51,000	*Water injection in off-set leases.
7370	2	0	0	0	5-Spot	0	185	Prod + Arb	--	--	T	1965	Grav	--	35	--	140,500	--	5,200	--	--	--	*Was Terra Resources.
15539 16282	2	0	0	0	Peri	1150	345	Prod	--	--	U	1972	S Gas	83/ 17	37.4	--	125,838	633,368	27,804	440,413	0	0	*Was Ash.
17428	1	0	0	0	Peri	Vac	320	Prod	--	--	U	1974	S Gas	83/ 17	37.3	--	116,937	453,507	34,744	584,492	0	0	
17785 17954	2	0	0	0	Peri	550	79	Prod	--	--	U	1973	S Gas	92/8	37.5	--	28,956	223,842	46	20,950	0	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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
RUSSELL COUNTY (Concl.)																
18315	No	Wilson Creek	L.G.Stephenson & Co.,Inc.*	(P) Borell B-2	Borell C, A-1, A-2 Borell B, B-2 , H.Kratky E.Soukup	19-14S-10W 20-14S-10W 29-14S-10W	600	0	Lans	2820	20	19	--	0	-	Yes
		RUSSELL COUNTY TOTALS (Reported)					27787	3166				876	116	7	13	
SALINE COUNTY																
CR-9771	No	Bachofer	George R.Hess and Larry Moore Ranch,Inc.	(P) Melander Unit	Melander, Darold Nelson	14-15S-2W	160	0	Miss	2840	16	2	0	0	0	Yes
14385	--	Smolan	Gear Petroleum Co.	(W) Smolan Field Waterflood Project	Frost, Gustafson Larson B Bengston, Lofgren	25-15S-4W 30-15S-3W 36-15S-4W	800	--	Maq	3400	6	13	3	0	0	Yes
17809	No	Hunter North	Melland Drilling Co.,Inc.	(D) North Hunter	Swisher	5,8-16S-1W	160	160	Miss	2662	3-5	5	0	0	0	Yes
10664	No	Lindsborg	Ray Perera	(D) Robinson-Johnson-Martinson	Robinson, Johnson, Martinson	32-15S-3W	160	--	Maq	3400	5+	3	--	0	0	No*
18390	Yes	Mortimer	Teichgraeber Oil Operations	(P) Mortimer	Mortimer	4-16S-1W	160	0	Miss	2600	0	3	0	0	0	Yes
11513	No	Pihl	Tomlinson Oil Co.	(D) Pihl	Krauss A	24-15S-2W	400	240	Miss	2750	10	3	1	0	0	Yes
6631	No	Smolan	Ray Perera	(-) Ostenberg	Ostenberg	30-15S-3W	120	0	Maq Dolo	3413	5	3	1	0	-	Yes
		SALINE COUNTY TOTALS (Reported)					1960	400				32	5	0	0	
SCOTT COUNTY																
CR-6778	No	Hugoton North	Maurice L.Brown Co.	(P) Smith	Smith #8	26-19S-33W	640	0	Morr	4642	20	6	0	0	0	Yes
4383	Yes	Shallow Water	Maurice L.Brown Co.	(P) Mark "B"	Mark "B"	14-20S-33W	120	0	Miss	4595	80	1	3	0	0	Yes
		SCOTT COUNTY TOTALS (Reported)					760	0				7	3	0	0	
SEDGWICK COUNTY																
16044	--	Buzzi	American Petrofina Co. of Texas*	(P) Hemme	Hemme	31-25S-1E	100	0	Hunt	3445	5	3	1	0	0	Yes
17209	No	Cheney	A.Scott Ritchie	(P) Casad	Casad	7-27S-4W	120	0	Mise + Viola	3976	44	1	0	0	0	Yes
15022	No	Clearwater	Alta Loma Oil Co.*	(P) Senter	Senter	23-29S-2W	20	20	LKC	2940	10	1	0	0	0	Yes
17666	Yes	Gillian	Continental Oil	(W) Gillian Simp.Sd. Unit	Gillian Simp.Sd.Unit	33-26S-1W	920	0	Simp	3735	15	10	3	-	-	Yes
8324	Yes	Gladys	Kewanee Oil Co.	(W) Gladys Unit	Gladys Unit, Tracts 1-61	25,29,30,31,32, 36-28S-1E	1060	550	Miss	3200	10-78	56	10	0	0	Yes
8325	Yes	Gladys	Kewanee Oil Co.	(W) E.Gladys Unit	Blood, Parton & Tucker	29-28S-1E	160	90	Miss	3200	10-40	6	1	0	0	Yes
15691	No	Goodrich	Jerry Bouse*	(P) Rowley	Rowley	17-25S-1E	160	--	KC	2690	30	1	0	0	0	Yes
13037	Yes	Goodrich	Cities Service Co.	(W) Goodrich Unit	Goodrich Unit - Smith "A"	16-25S-1E	87	--	KC Lm	2730	11	8	0	0	0	Yes
16157	No	Kuske West	TGT Petroleum Corp.	(P) Korber Input	Korber A, Lewis	14-25S-1E	240	0	Burg	3014	38	3	1	0	0	Yes
15105	--	O.S.A.	Continental Oil	(W) O.S.A.	O.S.A.	10,11,14,15,22-29S-1W	1520	0	Simp	2884	8	16	9	-	1	Yes
4183	--	Robbins	Stelbar Oil Corp.,Inc.	(W) Robbins	Brookings, Lohkamp Nolan	16-28S-1E 21-28S-1E	280	--	Miss	3140	30	5	0	0	0	Yes
4626																
16303	--	Ulmer	Crowe Drilling Co.,Inc.	(D) Greenup	Miller	33-25S-2E	160	--	Burg	2902	8	2	0	0	0	Yes
12272	No	Valley Center	Bankoff Oil Co.	(W) Bright Inj.	Sam Bright	1-26S-1W	40	120	Lans	2555	--	2	0	0	0	Yes
11419	No	Valley Center	Samson Resources Co.*	(W) Valley Center WF	Shawver Reed, Corr Wright	7-26S-1E 1-26S-1W 12-26S-1W	220	0	KC	2500	--	5	0	0	0	Yes
		SEDGWICK COUNTY TOTALS (Reported)					5087	780				119	25	0	1	

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	Injection Pattern	Well-head press. psi	Water inj. bbl./well/day	Injected-water data: Source	Deptb, 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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
18315	4	0	0	0	Peri	175	873	Prod	--	--	U	1969	S Gas	83/17	37.4	--	318,678	1,431,506	53,719	1,110,961	0	0	*Was Ash.
	355	49	0	11													38,971,695	545,986,833	3,158,438	118,595,594	1,530,338	40,361,111	
CR-9771	1	1	0	0	Irreg	0	350	Prod	--	--	T	1977	S Gas	7/93	30	--	42,000	42,000	4,200	65,700	1,050	1,050	
14385	5	2	0	0	Irreg	Vac	2653	Prod + McPher	250	--	U	1962	--	--	--	35	968,345	--	8,787	--	8,787	--	
17809	1	--	0	0	Irreg	Vac	475	Prod	--	--	U	1975	Wat	25/475	34	--	130,000	310,000	6,142	16,908 *	--	--	*Corrected from 1975.
10664	1	0	0	0	Irreg	0	110	Prod	--	--	T	1964	S Gas	--	35	--	70,000	2,115,000	3,867	39,400	1,200	--	*As continuous as recycling permits.
18390	1	0	0	0	Irreg	0	300	Prod	--	--	U	1976	Wat	1/9	36	--	54,750	100,650	2,829	6,346	--	--	
11513	1	0	0	0	Peri	Vac	200	Prod	--	--	U	1965	Wat + S Gas	--	35.5	--	73,000	2,358,227	5,988	189,794	5,988	111,704	
6631	3	1	0	0	Irreg	--	60	Prod	--	--	T	1962	Prod Brine	--	34	--	72,000	2,004,000	5,442	--	--	--	
	13	4	0	0													1,410,095	6,929,877	37,255	318,148	17,025	112,754	
CR-6778	1	0	0	0	Irreg	0	400	Prod	--	--	T	1977	Wat	--	26	--	36,000	36,000	31,499	535,916	--	--	
4383	1	0	0	0	Irreg	0	206	Prod	--	--	T	1968	Wat	--	26	--	75,190	963,970	1,564	2,065,237	782	19,675	
	2	0	0	0													111,190	999,970	33,063	2,601,153	782	19,675	
16044	1	0	0	0	Irreg	400	681	Prod	--	--	U	1971	Wat	1/40	41	--	248,712	2,024,933	1,957	250,992	0	0	*Was the El Dorado Refining Co.
17209	1	0	0	0	Irreg	0	100	Prod	--	--	U	1973	S Gas	1/1	35	--	36,000	126,000	1,241	44,232	596	1,796	
15022	1	0	0	0	Irreg	0	4.9	Prod	--	--	U	1969	S Gas	11/100	37	--	1,800	10,450	3,184	72,491	2,000	8,869	*Was King Oil Co.
17666	2	0	-	-	Irreg	100	483	Prod	--	--	U	1974	S Gas	--	--	--	352,919	1,232,310	62,621	329,700	60,533	209,897	
8324	29	14	0	2	Peri	1550	288	Gr Well	20	50	F	1961	S Gas	1658/1687	42	--	3,052,658	106,900,857	83,346	8,262,380*	83,346	6,735,441*	*Since 1961.
8325	6	0	0	0	Peri	1525	389	Gr Well	20	50	F	1961	S Gas	153/24	42	--	850,846	16,788,220	13,264	1,137,342*	13,264	1,013,631*	*Since 1961.
15691	1	0	0	0	Line	350	40	Prod	--	--	U	1970	Wat	1/8	35	--	13,676	92,006	1,052	10,803	0	--	*Was Albert A.Bouse.
13037	6	0	0	0	Peri	865	215	Prod + Miss	3000	5	U	1966	S Gas	18/9	33	--	450,196	3,620,456	11,787	716,155	11,787	285,001	
16157	1	0	0	0	Irreg	175	564	Prod	--	--	U	1971	S Gas	1/50	39	--	205,860	1,330,432	2,204	60,734	0	--	
15105	7	2	-	1	Irreg	975	391	Stal Sd	2450	100	U	1970	Wat	--	45.5	--	998,771	5,925,948	56,098	979,113	56,098	921,575	
4183	3	0	0	0	Irreg	600	400	Prod	--	--	T	1954	S Gas	--	43	--	438,000	6,400,000	19,348	1,390,589	19,348	--	
4626																							
16303	2	0	0	0	Peri	Vac	40	Prod	--	--	-	1971	--	--	--	--	--	--	--	--	--	--	
12272	2	0	0	0	Irreg	165	180	Prod	--	--	U	1965	Grav	1/15	36.6	--	65,700	1,012,433	3,460	56,764	3,000	--	
11419	1	1	0	0	Irreg	0	579	Prod	--	--	U	1966	S Gas	--	33	--	211,338	2,976,355	5,261	3,871,411	3,880	60,905	*Was Kathol Petroleum, Inc.
	63	17	0	3													6,926,476	148,440,400	264,823	17,182,706	253,852	9,237,115	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
SEWARD COUNTY																
16786	Yes	Evalyn-Condit	Anadarko Production Co.	(W) Condit Unit	--	7,18,19-34S-32W 12,13,24-34S-33W	1031	--	Miss Ches Sd	6236	13.3	4	0	0	0	Yes
15801	--	Massoni	Leben Oil Corp.	(-) Stewart	Stewart	25-32S-31W	160	--	LKC	5370	184	--	--	-	-	--
SEWARD COUNTY TOTALS (Reported)							1191	--				4	0	0	0	
SEWARD-STEVENS COUNTIES																
13902	Yes	Cutter	Mobil Oil Corp.	(W) Cutter Unit Area (Morrow) Coop Waterflood Project	George B.Strong Wm.I.Cutter George B.Strong	6,7-31S-34W 1-31S-35W 12-31S-35W	880	--	Up Morr	5200	15	4	1	0	0	Yes
SHERIDAN COUNTY																
8906	--	Adell	Continental Oil	(W) Adell LKC Unit	Adell LKC Unit	1,2,3,11,12-6S-27W	584	0	LKC	3500	23	12	23	-	-	Yes
9881	--	Adell	Petroleum Management,Inc.	(W) Adell LKC Unit	Adell	7-18-6S-26W 12,13-6S-27W	190	0	LKC	3530	12	2	3	0	0	Yes
10188	--	Hortonville	Kaiser-Francis Oil Co.*	(D) Hardesty	Hardesty	20-6S-26W	80	40	Lans	3744	94	1	0	0	0	Yes
16164	Yes	Hoxie	John O.Farmer,Inc.	(P) Hoxie Unit	Decker Pratt "B" Mosier, Mosier "B"	6-9S-28W 1-9S-29W 36-8S-29W	400	--	Tor	3856	5	3	0	0	0	Yes
15224	--	Hoxie West	Koch Exploration Co.	(W) Pratt	Pratt	35-8S-29W	40	--	Shaw	3816	14	2	0	0	0	Yes
18370	Yes	Hoxie West	Koch Exploration Co.	(W) W.Hoxie	Mickey, Currier Pratt	34-8S-29W 35-8S-29W	--	--	LKC	3915	--	3	0	0	0	Yes
15349	No	Jerome	Okmar Oil Co.	(W) Jerome	Jerome	35-8S-27W	100	0	LKC	3930	5	4	0	0	0	Yes
18290	No	Ochs	L.G.Stephenson & Co.,Inc.	(P) Ochs	Ochs	24-9S-28W	320	0	Lans	3906	8	1	0	0	0	Yes
6322	No	Studley	K.R.M.Petroleum Corp.*	(D) Pratt	Pratt	22,23-8S-26W	640	0	LKC	3740	20	2	0	0	0	Yes
SHERIDAN COUNTY TOTALS (Reported)							2354	40				30	26	0	0	
STAFFORD COUNTY																
15826	No	Bayer	Phillips Petroleum Co.	(P) Lincoln "A"	Lincoln "A"	29-21S-14W	10	0	Simp	3750	14	1	0	0	0	Yes
15211	Yes	Brenn	Sterling Drilling Co.	(P) Brenn Unit	--	19-23S-13W	320	--	LKC	3654	8	2	0	0	0	Yes
12237	No	Centerview	Ladd Petroleum Corp.	(P) E & O Toland	E.Toland, O.Toland	28-24S-13W	120	0	LKC	3590	20	3	0	0	0	Yes
11941	No	Centerview	White Hawk Oil Co.*	(D) Van Lieu Unit	Van Lieu	28-24S-13W	60	0	LKC	3580	12	2	0	0	0	Yes
9481	No	Chase-Silica	Parrish Oil Co.	(D) Spacil	Spacil	4-21S-12W	30	50	Arb	3321	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	3950	8	6	0	0	0	Yes
15378	No	Dell East	White Hawk Oil Co.*	(P) Reed Unit	Reed-White Hawk, Reed-Cities Service	8-21S-13W	160	0	LKC	3450	10	4	1	0	1	Yes
16314	No	Fanshier	Icer Addis	(W) Fanshier	Fanshier	9-21S-13W	160	--	LKC	3318	5	3	0	0	0	Yes
16704	No	Fanshier	Icer Addis	(W) Harms	Harms	16-21S-13W	120	--	LKC	3319	5	2	0	0	0	Yes
16034	No	Gartung	Robert E.Davis	(P) Gartung	Gartung	4-22S-14W	160	0	Viola + Arb	3822	25	3	0	0	0	Yes
12284	No	Gates	Atlantic Richfield Co.	(W) Gates Unit	Gates	27-21S-13W	80	30	LKC	3550	130	6	0	0	0	Yes
15785	Yes	Gates	Nadel and Gussman	(W) Fischer Unit	Fischer	25,36-21S-13W	420	0	LKC	3300	20	23	8	0	0	Yes
13744	No	Gates	Okmar Oil Co.	(W) Fischer-Weizbrod	Fischer Estate Weizbrod Bunselmeyer	36-21S-13W 1-22S-13W 2-22S-13W	400	0	LKC	3300	5	4	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
16786	2	0	0	0	Irreg	963	626	Prod + Ogal	202	138	M	1973	S Gas	86/50	41.9	2.2	456,725	4,062,603	139,853	368,049	139,853	273,350	
15801	1	--	-	-	Irreg	0	100	Prod	--	--	T	1970	S Gas	11/100	36	--	36,500	264,500	2,587	29,669	--	--	
	3	0	0	0													493,225	4,327,103	142,440	397,718	139,853	273,350	
13902	3	1	0	0	Irreg	200	1711	Prod + Ogal	250	250	M	1968	S Gas	417/50	40	0.66	1,873,000	11,341,834	58,988	3,014,047*	58,988	2,372,988*	*Since 11/1/67.
8906	7	32	-	-	Peri	250	452	Ced H	1875	50	U	1972	S Gas	--	39	--	1,155,662	26,262,344	74,382	2,081,734	74,382	1,854,993	
9881	1	4	0	0	Irreg	225	93	Prod + Ced H	1900	--	T	1963	S Gas	1/1	38	--	31,781	4,962,765	2,814	318,469	2,814	279,947	
10188	--	--	-	-	--	0	25	Prod	--	--	U	1963	--	1/26	34.5	--	9,125	115,517	715	113,857	--	--	*Was NCRA.
16164	--	--	-	-	Line	0-150	225	Prod	--	--	U	1971	Grav	--	39	--	200,496	1,569,994	9,442	123,608	7,820	--	
15224	1	0	0	0	Irreg	--	304	Prod	--	--	U	1969	Gas Exp	2/1	27.9	--	111,007	744,217	25,562	118,070	25,562	56,479	
18370	1	0	0	0	Irreg	--	370	Prod	--	--	U	1976	--	1/1	27.9	--	135,281	171,934	2,890	362,182	2,890	4,262	
15349	1	0	0	0	Peri	700	317	Prod	--	--	U	1970	S Gas	30/142	39	--	98,349	465,195	11,003	163,256	10,453	56,850	
18290	1	0	0	0	Peri	0	45	Prod	--	--	U	1976	Wat	22/78	28.5	--	16,425	26,325	1,215	15,588	0	0	
6322	1	0	0	0	Irreg	Vac	40	Prod	--	--	U	1958	S Gas	1/9	39	--	25,000	2,049,000	2,160	757,065	2,160	61,800	*Was Crown Oil Co.
	13	36	0	0													1,783,126	36,367,291	130,183	4,053,829	126,081	2,314,331	
15826	1	0	0	0	Irreg	0	9	Prod	--	--	U	1970	Wat + S Gas	1/0.2	32	--	3,383	17,570	3,244	278,955	0	0	
15211	1	0	0	0	Irreg	1900	250	Prod + Sh Gr	50	17	M	1969	S Gas	--	31	--	91,250	726,750	5,922	83,688	5,922	83,688	
12237	1	1	0	0	Irreg	Vac	98	Prod + Gr Wat	30	--	M	1966	S Gas	17/20	26	25	127,340	--	3,833	395,714	3,833	86,902	
11941	1	0	0	0	Irreg	0	80	Prod	--	--	U	1965	Wat	--	25	--	29,200	214,210	2,486	28,199	2,486	--	*Was Natural Gas & Oil.
9481	1	0	0	0	Irreg	0	233	Prod	--	--	U	1962	Wat	1/9	39	--	85,155	1,201,342	4,453	380,241	1,874	37,518	
13792	2	0	0	0	Irreg	2550	293	Prod + Ter Sd	60	25	M	1966	S Gas	16/0	33	6	213,635	3,276,310*	8,198	345,120*	8,198	340,343*	*Corrected.
15378	2	0	0	0	Irreg	650	402	Prod	--	--	U	1970	Wat	--	37	--	146,826	1,470,027	10,015	129,568	10,015	--	*Was Natural Gas & Oil.
16314	1	0	0	0	Irreg	0-50	160	Prod + Fr Wat	--	--	M	1972	Gas Exp	2/3	32	--	58,400	375,757	5,376	181,833	1,000	36,781	
16704	1	0	0	0	Irreg	50	129	Prod + Fr Wat	--	--	M	1972	Gas Exp	7/13	33	--	47,043	264,246	4,099	157,473	600	7,760	
16034	1	0	0	0	3-Spot	0	450	Prod	--	--	T	1971	Wat	8/30	28	--	164,250	938,750	6,455	--	6,455	--	
12284	1	--	0	-	Irreg	Vac	264	Prod	3660	--	U	1966	S Gas	38/916	38	3.5	96,436	2,372,990	10,932	147,306	10,932	147,306	
15785	3	0	0	0	Peri	0	297	Prod + Sh Fr	60	20	F + T	1970	S Gas	1/1	34.5	--	324,500	2,103,706	30,146	--	15,073	46,703	
13744	2	0	0	0	Peri	0	338	Prod + Arb	3670	5	U	1967	S Gas	28/58	34	--	104,865	634,355	8,200	497,780	4,510	23,572	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
STAFFORD COUNTY (Cont.)																
16109	No	Gates	Phillips Petroleum Co.	(W) Stafford	Stafford	33-21S-13W	25	0	LKC	3371	24	5	0	0	0	Yes
14551	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	3837	15	5	0	0	0	No*
15604	No	Greenridge	R.H.Siegfried, Inc.*	(W) Cadman Unit	Kachelman & Shepherd Birdsall Cadman	19-23S-14W 29-23S-14W 30-23S-14W	340	20	LKC	3600	10	5	0	0	0	Yes
17842	No	Grunder	Tomlinson Oil Co.	(D) Grunder	Wilson	11-25S-15W	60	0	Miss	4222	26	2	0	0	0	Yes
10320	--	Hickman	Kaiser Francis	(-) Gates B & Pile	Gates B, Pile	27-21S-14W	240	40	Lans	3412	200	8	1	0	0	Yes
17790	No	Hickman	Chapman Exploration, Inc.*	(W) Krampe	Krampe	33-21S-14W	80	0	LKC	3556 3588 3614	14	1	0	0	0	Yes
17848	No	Hickman West	Tenneco Oil	(W) Krampe	Norbert Krampe, Elinor Krampe	33-21S-14W	120	--	LKC	3550	16	2	0	0	0	Yes
16179	No	Hufford	Energy Reserves Group	(W) Chapman	Chapman	32-21S-13W	160	0	LKC	3500	20	3	0	0	0	Yes
16263	--	Jordan	Cities Service Co.	(W) Jordan	Neeland "A", Neeland "B" Jordan, Stimatze	15-25S-14W 16-25S-14W	108	0	LKC	3630	35	5	0	0	0	Yes
1976	No	Kenilworth	Phillips Petroleum Co.	(-) Ochel SWD #3	Ochel	15-22S-13W	30	10	Arb	3820	--	2	0	0	0	Yes
1419	No	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	3836	73	5	0	0	0	Yes
14970	--	Kipp Northeast	Cities Service Co.	(W) Kipp Northeast	Tanner Kipp "A" Kipp "B"	14-25S-14W 23-25S-14W 24-25S-14W	40	0	LKC	3650	21	2	0	0	0	Yes
14623	No	Knoche South	Palomino Petroleum*	(D) Jordan "B"	Jordan "B"	8-24S-12W	80	0	Viola + LKC	3871	--	1	0	0	0	Yes
15408	No	Koelsch West	Nadel and Gussman	(W) Koelsch	Koelsch	23-24S-14W	50	0	LKC	3700	8	2	0	0	0	Yes
17285	No	Kowalsky Southwest	Okmar Oil Co.	(W) Schloctermeier	Schloctermeier Kasselman	7-21S-11W 8-21S-11W	160	0	Simp + Arb	3418	29	5	0	0	0	Yes
11122	Yes	Leesburg	Continental Oil	(W) Leesburg North	Leesburg North	12-25S-13W	386	0	Lans + Simp	3710 4070	83 13	6	1	-	-	Yes
14032	No	McCandless	Atlantic Richfield Co.	(-) McCandless	McCandless	30-25S-13W	--	--	LKC	3701	280	5	0	0	0	--
17223	No	McKittrick	Aspen Drilling Co.	(W) Wolf "A"	Wolf "A"	28-21S-11W	320	0	Simp	3350	18	4	0	0	0	Yes
15562	No	Max	Phillips Petroleum Co.*	(D) Siefkes "A"	Siefkes "A"	34-21S-12W	40	0	LKC	3264 3494	--	2	0	0	0	Yes
8551	No	Merle	Southern States Oil Co.	(P) Williams	Kuske Williams	31-23S-13W 32-23S-13W	320	--	KC	3699	10	2	2	0	0	Yes
15347	Yes	Moody	Nadel and Gussman	(W) Moody	Moody	7,8-25S-14W	150	160	Miss Ch	4200	20	5	0	0	0	Yes
13909	No	Mountain View	Petroleum, Inc.	(W) Walls "A" Waterflood Project	Walls "A"	29-22S-13W	160	0	LKC	3450	7	2	0	0	0	Yes
18245	No	Mueller	White Hawk Oil Co.*	(P) Batman Unit	Batman Unit	13-21S-13W	80	0	LKC	3280	10	2	0	0	0	Yes
6117	No	Mueller	Joe Holman	(W) Welch	Welch "A"	18-21S-12W	50	10	Arb	3570	14	2	0	0	0	Yes
6062	--	Mueller	Kaiser Francis	(D) Batman B	Batman B	12-21S-13W	90	40	Arb	3570	--	3	0	0	0	Yes
13180	Yes	Omlor	Bill Witcraft*	(W) Omlor-Bushnell	Omlor	10-24S-12W	120	--	KC	3556	6	2	--	-	-	Yes
15248	No	Oscar North	Palomino Petroleum*	(W) Williams	Williams	12-22S-14W	80	0	LKC	3553	5	3	0	0	0	Yes
5948	No	Oscar South	Petroleum, Inc.	(*) Oscar South	Smith "J"	26-22S-14W	80	0	LKC	3456	10	1	0	0	0	Yes
6336	Yes	Oscar West	Cities Service Co.	(W) Oscar West Unit	Oscar West Unit	15,16,21,22-22S-14W	334	112	LKC	3600	7	9	6	0	0	Yes
6910	No	Pleasant Grove	John S.Martin*	(D) Spangenberg	Spangenberg	26-22S-12W	40	--	KC	3550	10	3	0	0	0	Yes
13372	Yes	Pundsack	Cities Service Co.	(W) Pundsack Unit	Pundsack Unit Schartz "B" Pundsack Unit	19-21S-13W 20-21S-13W 29,30-21S-13W	107	38	LKC	3270	27	6	5	0	1	Yes
16232	No	Radium Townsite	Chapman Exploration, Inc.	(W) Bauer-Strobel	Bauer Strobel	32-21S-14W 33-21S-14W	320	0	LKC	3569	7	5	0	0	0	Yes
18179	No	Rattlesnake East	Petroleum, Inc.	(P) Henderson	Henderson #2	7-24S-13W	160	120	LKC	3643	30	1	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
16109	1	0	0	0	Irreg	0	259	Prod	--	--	U	1971	S Gas	1/4.4	30	--	94,515	565,870	9,445	357,213	5,485	49,983	
14551	2	0	0	0	Line	767	835	Quat	100	50	F	1968	S Gas	52/35	30.1	15	353,975	3,899,387	22,513	786,798	22,513	294,123	*Shut down 5 mths. due to injection problems.
15604	3	0	0	0	Peri	200	318	Alluv	90	20	M	1970	--	7/3	32	--	111,600	1,167,250	5,212	81,951	5,212	81,951	*Was Oklahoma Fracturing Services, Inc.
17842	1	0	0	0	Irreg	350	50	Prod	--	--	U	1975	S Gas	3/50	34	--	18,250	31,850	802	56,585	--	--	
10320	2	0	1	0	Irreg	Vac	600	Prod	--	--	T + S	1963	Gas Exp	43/57	29	--	238,972	1,300,682	29,251	1,232,249	6,000	38,300	
17790	1	0	0	0	Irreg	Vac	74	Prod + Fr	50	50	M	1975	S Gas	3/1	22	--	27,204	63,626	1,200	98,683	0	0	*Coop with Tenneco.
17848	2	0	0	0	Peri	0	41	Prod + Fr Wat Sd	50	50	M	1975	S Gas	16/35	20	--	30,157	49,050	4,892	274,665	0	0	
16179	1	0	0	0	Irreg	0	797	Prod	--	--	U	1971	S Gas	1/11.9	26.2	--	290,819	1,260,724	9,224	616,104	9,224	64,269	
16263	5	1	0	0	Peri	97	353	Prod + Wat Sd	80	--	M	1956	S Gas	150/210	33	--	583,234	7,266,404	21,373	1,589,800	21,373	513,119	
1976	1	0	0	0	Irreg	0	972	Prod + Arb Wat from another lease.	3820	--	U	1948	Wat	--	30	--	354,866	12,555,564	3,103	227,625	0	0	
1419	1	0	0	0	Peri	Vac	145	Prod	--	--	U	1946	S Gas	--	35	--	52,925	1,256,770	7,832	--	7,832	--	*Was Skelly Oil Co.
14970	2	0	0	0	Irreg	655	312	Prod + Wat Sd	80	--	M	1969	S Gas	16/25	32	--	211,760	2,039,700	5,187	428,143	5,187	76,569	
14623	1	0	0	0	Irreg	0	16	Prod	--	--	U	1968	S Gas	6/70	34	--	5,840	58,055	715	97,204	0	--	*Was Terra Resources.
15408	1	0	0	0	Irreg	500	165	Prod + Sh Fr	75	35	M	1970	S Gas	1/1	31	--	60,350	283,190	1,832	--	1,832	18,914	
17285	2	0	0	0	Peri	1000	153	Prod	--	--	U	1974	S Gas	1/7	33	--	47,468	125,629	5,669	277,421	283	1,078	
11122	8	0	-	-	Peri	1375	229	Fr Wat Sd	91	23	F	1964	S Gas	--	33.5	--	668,110	9,242,196	19,432	875,346	19,432	753,916	
14032	0	0	0	0	Irreg	--	--	Prod	--	--	-	--	--	--	--	--	0	0	7,899	637,311	0	0	
17223	1	0	0	0	Irreg	750	15	Prod	--	--	U	1973	S Gas	1/1.5	48	3.5	21,900	87,124	15,264	354,304	9,433	23,329	
15562	1	0	0	0	Peri	0	25	Prod	--	--	U	1970	S Gas	1/1	38	--	9,187	63,282	11,766	195,450	0	0	*Was Thomas H.Allan.
8551	1	0	0	0	Irreg	--	82	Prod	--	--	T	1965	Grav	--	30	--	29,930	1,194,708	1,446	--	1,446	--	
15347	1	0	0	0	Peri	0	500	Prod	--	--	T	1970	S Gas+ Wat	1/12	35	--	182,500	1,571,900	9,554	--	0	11,400	
13909	1	1	0	0	Line	929	165	Prod + Quat	100	50	M	1967	S Gas	63/19	30.6	14	60,360	467,590	9,023	389,365	9,023	149,125	
18245	1	0	0	0	Irreg	400	130	Prod	--	--	U	1976	Wat	6/5	35	--	47,450	63,620	3,457	6,159	768	1,160	*Was Natural Gas & Oil.
6117	2	1	0	0	Irreg	100	176	Prod	3570	14	T	1958	S Gas	1/10	36.3	--	47,450	1,205,450	4,206	103,280	4,206	103,280	
6062	1	0	0	0	Irreg	Vac	70	Prod	--	--	T+S	1958	Gas Exp	4/7	37	--	26,000	337,070	15,200	--	500	14,300	
13180	1	--	-	-	Irreg	100	96	Prod	--	--	U	1967	Wat	4/96	34	--	35,040	150,050†	4,096	17,943†	--	--	*Was Sun Oil Co. †Since 1973.
15248	1	0	0	0	Irreg	0	363	Prod + Sh	80	--	F	1969	S Gas	4/1	30	--	132,495	991,754	5,308	495,307	2,343	23,669	*Was Shell Oil Co.
5948	1	0	0	0	Line	Vac	0.5	Prod	--	--	T	1957	S Gas	881/536	32.4	11	175	41,338	1,715	131,474	1,715	52,293	*Disposal.
6336	9	0	0	0	Peri	737	265	Prod + Fr Wat Sd	60	--	M	1958	S Gas	45/11	33	--	876,129	14,405,061	29,660	2,540,700	29,660	1,722,189	
6910	1	0	-	1	4-Spot	Vac	240	Prod	--	--	T	--	S Gas	--	32.6	--	86,000	--	2,614	--	2,614	--	*Was Shelly-Miller Drilling Co.
13372	7	0	0	0	Peri	478	149	Prod + Sh Sd	35	53	-	1967	S Gas	44/67	30	--	556,590	5,769,415	9,638	1,103,055	9,638	225,661	
16232	3	0	0	0	Peri	Vac	89	Prod + Arb	--	--	T	1973	S Gas	3/1	36	--	97,307	480,239	28,451	1,104,412	28,451	95,782	
18179	1	0	0	0	Line	Vac	--	Prod	--	--	T	1976	S Gas	1/4	32.5	--	9,920	17,220	1,744	82,490	0	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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
STAFFORD COUNTY (Concl.)																
18379	No	Rattlesnake East	Petroleum,Inc.	(P) Rixon "A"	Rixon #1	7-24S-13W	160	120	LKC	3646	30	1	0	0	0	Yes
8232	No	Rattlesnake Southeast	White Hawk Oil Co.*	(D) McConnaughhay Unit	Harrison	13-24S-24W	60	0	LKC	3700	10	1	0	0	0	Yes
13751	No	Richardson	C & S Well Service	(P) Aiken	C Aiken	20-22S-11W	40	--	KC	3500	200	1	--	0	-	Yes
12286	No	St.John	Atlantic Richfield Co.	(W) McNaughten "B"	McNaughten "B"	27-24S-13W	160	--	LKC	3711	300	2	0	0	0	Yes
12920	--	Sand Hill	Bergman Oil Co.	(W) Mellies	Mellies	31-21S-11W 36-21S-12W	40	--	Simp Sd	3504	4	1	0	0	0	Yes
17119	No	Sand Hill	Chapman Exploration,Inc.	(W) Duggan	Duggan	30-21S-11W	160	0	LKC	3236 3329	3 3	1	0	0	0	Yes
15780	No	Saundra	Southern States Oil Co.	(P) Christiansen	Christiansen	15-21S-12W	160	--	KC	3361	25	4	1	0	0	Yes
CR-47710	No	Saundra	Southern States Oil Co.	(W) Rose	Rose, M.Hammeke	22-21S-12W	320	--	LKC	3266	6	6	0	0	0	Yes
13406	No	Seever NW	Thornton E.Anderson*	(D) Bowker	Bowker	36-24S-14W	60	0	Miss	4030	20	2	0	0	0	Yes
13617	No	Seever NW	Ladd Petroleum Corp.	(-) Sanders	Sanders	1-25S-14W	160	0	LKC	3664	0	3	0	0	0	Yes
14994	Yes	Seever NW	Petroleum,Inc.	(W) Seever NW LKC Unit	Bowker "I", Bowker "J", Long "C", Seevers, Goodman (Wallingford) Goodman"B", Turner "E", Neill, Goodman (Pet.Inc.) Bowker "L", Bowker "B"	6-25S-13W 1-25S-14W 12-25S-14W	860	0	LKC	3760	15	12	4	0	0	Yes
8774	--	Shaeffer Rothgarn	Kaiser Francis	(P) Willcut B	Willcut A & B	4-21S-13W	160	0	Lans	3270	200	1	0	0	0	Yes
11894	Yes	Shaeffer Rothgarn	Petroleum,Inc.	(W) Shaeffer Unit	Tucker, Sharp, Fanshier "A"	4-21S-13W	120	0	Congl	3500	7	2	4	0	0	Yes
14211	--	Shaeffer Rothgarn	Texaco Inc.	(W) C.D.Koopman	C.D.Koopman	4-21S-13W	160	--	Congl	3540	10.6	2	0	0	0	Yes
15937	No	Silver Bell	Woodman-Iannitti Oil Co.*	(W) Silver Bell Pilot Flood	Soeken-Besthorn	9-22S-13W	160	40	LKC	3530	4	3	0	0	0	Yes
11775	No	Smallwood	White Hawk Oil Co.*	(D) Wetig Unit	Wetig	2-22S-14W	80	0	LKC	3412	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	3550	6	2	3	1	0	Yes
13889	--	Snider	F.G.Holl	(D) Schafer	Schafer	11-21S-11W	100	--	Ch Congl	3350	25	2	1	0	0	Yes
12323	No	Strobel	Thornton E.Anderson	(P) Strobel	Strobel	8-22S-14W	160	160	KC	3658	6	1	0	0	0	Yes
18099	No	Zenith Peace Creek	A.Scott Ritchie	(R) Richardson	Richardson	22-24S-11W	240	0	Viola	3818	42	2	0	0	0	Yes
		STAFFORD COUNTY TOTALS (Reported)					10750	1190				230	37	1	2	
SUMNER COUNTY																
11093	Yes	Anson Southeast	Phillips Petroleum Co.*	(P) Anson East Unit	Anson East Unit	6,7,18-31S-1W	220	60	Miss	3750	10	8	0	0	0	Yes
13989	Yes	Anson Southeast	Phillips Petroleum Co.*	(P) Anson West Unit	Anson West Unit	6,7-31S-1W 1,12-31S-2W	340	560	Miss	3750	10	7	0	0	0	Yes
12774	No	Ashton Northeast	Lario Oil & Gas Co.	(D) Williamson	Lario Williamson	13,14-34S-1E	320	0	Miss Ch	3484	--	4	0	0	0	Yes
13900	--	Bates	Phillips Petroleum Co.*	(P) Bates Unit	Bates Unit	31-30S-1W 36-30S-2W	520	120	Miss	3750	10	11	0	0	0	Yes
15716	--	Caster	Reserve Oil,Inc.	(P) Caster Unit	Dunbar #1, Melick Caster, Long #1 Caster "A"	33-33S-2E 35-33S-2E 2-34S-2E	160	20	Lay 'A'	2680	10	13	--	-	-	Yes
18419	--	Churchill	N.R.Nelson	(D) Sumner	--	25-31S-2E	80	--	Hoover	1596	6	1	--	0	0	No*
12381	--	Conway Springs	Texaco Inc.	(P) Conway Springs	M.Lies E.H.Zerner, R.Stoehr, M.Games, J.Orr, R.C.Frantz	5-31S-3W 8-31S-3W	880	--	Simp	4352	15	3	8	0	0	Yes
14630	--	Fall Creek	Texaco Inc.	(W) Fall Creek U.	S.Hibbisiefken S.Hibbisiefken, I.E.Showalter N.J.Peters E.A.Hudson	3-35S-3W 4-35S-3W 9-35S-3W 10-35S-3W	380	--	KC	3700	6.5	5	5	0	0	Yes
17006	--	Guelph	Herndon Drilling Co.	(P) --	Gurley	6-35S-1E	140	--	Simp	3908	19	7	1	0	0	Yes
18062	Yes	Holman	Donald C.Slawson	(W) Holman Unit	Holman Unit	26,35-33S-2E	580	0	Bartl	3275	18	9	0	0	0	Yes

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
18379	1	0	0	0	Line	Vac	30	Prod	--	--	T	1976	S Gas	--	32.5	--	9,855	14,355	1,234	113,760	0	0	
8232	1	0	0	0	Irreg	0	10	Prod	--	--	U	1961	Wat	--	28	--	3,650	42,935	1,710	34,551	1,710	--	*Was Natural Gas & Oil.
13751	1	--	0	-	Line	200	300	Prod	--	--	T	1960	Gas Exp	5/1	38	--	107,000	2,075,800	2,416	51,081	--	--	
12286	2	0	0	0	Irreg	545	560	Tertiary	63	23	M	1968	S Gas	30/58	32.2	--	355,570	2,524,145	20,888	440,748	20,888	440,748	
12920	1	--	-	-	Irreg	0	10	Prod	--	--	T	1966	S Gas	1/0	42	--	350	37,665	1,956	38,330	0	13,342	
17119	1	0	0	0	Irreg	Vac	71	Prod + Arb	--	--	T	1973	S Gas	1/3	36	--	26,084	126,977	5,764	212,358	5,764	7,014	
15780	1	0	0	0	Irreg	--	81	Prod	--	--	T	1971	Grav	--	33	--	29,565	309,559	4,320	37,358	4,320	37,358	
CR-47710	1	0	0	0	Irreg	0	145	Prod	--	--	T	1977	Grav	--	36	--	35,533	35,533	8,859	81,347	8,859	--	
13406	1	0	0	0	Irreg	0	60	Prod	--	--	U	1967	S Gas	16/2	34	--	21,000	305,000	1,164	144,787	0	3,600	*Was Dunne-Gardner.
13617	2	1	0	0	Irreg	Vac	209	Prod	--	--	U	1967	S Gas	50/19	29	--	170,130	1,372,869	6,750	363,876	6,750	57,163	
14994	2	5	0	0	Peri	486	455	Quat Sd	100	50	F	1969	S Gas	137/136	32	12	332,190	4,803,798	18,192	1,427,412	18,192	350,276	
8774	1	0	0	0	Irreg	485	250	Prod	--	--	T+S	1961	Gas Exp	3/2	38	--	3,650	984,565	3,285	222,171	0	0	
11894	1	1	0	0	Line	650	306	Prod + Quat	73	50	M	1965	S Gas	258/2	43.8	3	111,861	447,800	3,942	368,680	3,942	144,976	
14211	2	0	0	0	Irreg	190	369	Prod + Ark Riv Gr	100	--	M	1969	Liq Exp+S Gas	680/5	44.5	--	269,257	2,108,762	7,924	119,774	7,924	93,583	
15937	1	0	0	0	4-Spot	450	280	Prod	--	--	T	1967	S Gas	3/2	31	--	102,200	1,344,850	2,600	25,000	2,600	--	*Was Petroleum Inc.
11775	1	0	0	0	Irreg	0	331	Prod	--	--	U	1965	Wat	--	31	--	120,815	566,665	19,668	143,422	16,444	98,409	*Was Natural Gas & Oil.
11857	3	0	0	0	Peri	825	1077	Prod + Fr	70	--	M	1957	S Gas	4.7/1	35	--	393,416	4,689,616	3,857	--	3,857	188,998	*Was Sun Oil.
13889	1	0	0	0	Peri	0	25	Prod	--	--	U	1967	S Gas	1/1	48.5	--	9,125	111,375	5,865	108,230	--	--	
12323	1	0	0	0	Irreg	0	150	Prod	--	--	U	1965	S Gas	1/1	35	--	51,000	413,000	2,457	73,221	1,100	1,300	
18099	2	0	0	0	Irreg	0	650	Prod	--	--	U	1975	S Gas	8/92	39	--	474,500	939,500	3,718	377,209	3,718	68,718	
	112	11	1	1													9,487,512	104,862,550	538,651	21,170,229	381,136	6,630,468	
11093	2	0	0	0	Peri	250	490	Wellington	50	20	F	1964	S Gas	--	41	--	357,965	4,182,820	41,304	1,729,978	34,555	843,894	*Was Beardmore Oil Co.
13989	3	2	0	0	Peri	120	273	Prod + Well	50	20	M	1968	S Gas	--	41	--	299,165	3,746,984	34,066	1,176,620	20,751	262,106	*Was Beardmore Oil Co.
12774	1	0	0	0	Irreg	Grav	--	Prod + Lay + Arb	2863	3764	U	1966	S Gas	37/149	40	--	--	--	5,661	98,822	1,777	6,822	
13900	2	0	0	0	Peri	300	1120	Prod + Stal	2700	60	U	1967	Gas Exp	--	41	--	817,653	6,558,299	57,787	984,951	38,810	258,249	*Was Beardmore Oil Co.
15716	2	--	-	-	--	170	270	Prod	--	--	U	1970	Gas Exp	7/3	41	1.5	199,000	985,000	26,000	447,700	--	--	
18419	1	--	-	-	Line	0	2	Prod	--	--	-	1976	--	--	--	--	0	--	--	700	--	--	*Changed prod. well from Stalnaker to Hoover.
12381	2	0	0	0	Peri	Vac	310	Prod	--	--	U	1967	Wat	29572/16450	44	1.13	226,074	4,886,704	8,677	1,188,463	0	0	
14630	1	2	0	0	--	220	180	Prod + Stal	3225	90	M	1969	--	559/2572	36	3.6	65,684	2,145,709	4,283	148,161	4,283	121,447	
17006	1	0	0	0	Irreg	200	1930	Prod	--	--	U	1973	Wat	1/12	45	--	704,600	2,796,550	29,464	2,574,577	--	--	
18062	4	0	0	0	Irreg	0	287	Prod + Stal	2250	90	T	1976	--	1/2.5	39	2.5	418,845	675,647	18,812	541,290	2,323	8,622	

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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
SUMNER COUNTY (Concl.)																
10738	No	Interchange	Lario Oil & Gas Co.	(P) Ashton-Lynch Unit	Lario-Lynch Lario-Ashton	18-32S-1E 19-32S-1E	480	0	Simp	4050	--	3	0	0	0	Yes
15035	No	Latta	Okmar Oil Co.	(W) Latta Coop	Latta A Latta B	8-30S-2W 9-30S-2W	300	0	LKC	3045	5	5	0	0	0	Yes
17986	No	Latta Northwest	Dunne-Gardner Petroleum, Inc.	(D) Daley	Daley	5-30S-2W	80	--	Lans	3170	3	2	0	0	0	Yes
CR-8774	--	Latta Northwest	Texaco Inc.	(P) Latta N.W.	M.Lowry	5-30S-2W	160	--	KC	3180	10	4	0	0	0	Yes
15195	--	Love	Continental Oil*	(P) Love	Love, Orie, Ruth	13-32S-4W	--	--	Simp	4378	12	1	0	-	-	Yes
14498	Yes	Murphy	Terra Resources, Inc.	(W) Vernon N.Unit	Kemp Callender, Callender "B" Waggoner McClasky	8-35S-2E 9-35S-2E 16-35S-2E 17-35S-2E	288	0	Miss Dolo	3392	10.9	6	0	0	0	Yes
9106	--	O'Hara	Stelbar Oil Corp., Inc.	(W) O'Hara	O'Hara	18-32S-1W	160	--	KC	3250	10	4	2	0	0	Yes
4601	No	Padgett	R.P.Guyot*	(D) Thiessen	H.H.Thiessen	22-34S-2E	70	--	Miss	3462-3491	29	2	1	0	0	--
9209 14030	--	Padgett	Stelbar Oil Corp., Inc.	(W) Norrish-Shawver	Fee Spence, Norrish Fee A	26-34S-2E 27-34S-2E 34-34S-2E	560	--	Miss Ch	3450	30	12	0	1	0	Yes
10688	--	Padgett	Stelbar Oil Corp., Inc.	(W) Post	Post	34-34S-2E	80	--	Miss Ch	3450	30	2	0	0	0	Yes
16148	No	Portland	A.L.Abercrombie, Inc.	(-) Hunt	Hunt	16-34S-1E	8	160	Lay	3026	31	3	1	0	0	Yes
18663	No	Rome	Anadarko Production Co.	(P) Rusk "A"	Rusk "B" Rusk "A"	7-33S-1E 18-33S-1E	960	--	Simp Sd	4170	19	5	0	0	0	Yes
17898	No	Rusk	Lario Oil & Gas Co.	(P) Rusk	Rusk "B"	8-32S-1E	240	0	Simp	4027	--	1	0	0	0	Yes
12773	No	Rutter Southwest	Lario Oil & Gas Co.	(P+D) King	Lario-King	29-33S-2E	160	0	Simp	3525	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	3800	13	4	0	0	0	Yes
18259	No	Slate Creek	Oil Property Management, Inc.	(P) Brann Martin	Brann Martin	9-33S-2E	160	0	KC	2680	12	1	0	0	0	Yes
16485	No	Slick Carson	J.A.Allison	(W) Conrod	Conrod	24-32S-2E	80	40	Bartl	3124	13	1	0	0	0	No*
11012	Yes	Trekell	Phillips Petroleum Co.*	(P) Anson South U.	Anson South Unit	18,19-31S-1W	40	40	Miss	3750	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	3500	20	2	0	0	0	Yes
3396	Yes	Wellington	Terra Resources, Inc.	(W) Wellington	Boam, Manahan Curtis, Kamas, Markley Hennigh, Ludwig, Riddell, Miller, Gaskill, Neel Frankum, Frankum "A", Murphy Peasel, Barlow, Erker, Barlow "B", Barlow "A" Rothrock, Rothrock "A", Deturk, Deturk "A" Nelson, Carr, Moore, White, McKee Stone McDowell Cole Caples	20-31S-1W 28-31S-1W 29-31S-1W 32-31S-1W 33-31S-1W 4-32S-1W 5-32S-1W 6-32S-1W 7-32S-1W 8-32S-1W 9-32S-1W	2240	0	Miss Dolo	3650	20	56	10	0	0	Yes
SUMNER COUNTY TOTALS (Reported)							10206	1080				185	28	1	0	
TREGO COUNTY																
16437	No	Garner West	Benjamin Tepper	(P) Brown	Brown	24-11S-25W	120	--	Lans	3711	22	2	0	0	0	Yes
17618	No	Graff	John O.Farmer, Inc.	(P) Wannamaker-Holtsinger	Wannamaker "A" & "B" Holtsinger "B"	34-14S-21W 35-14S-21W	200	--	Penn Sd	3830	6	5	2	0	-	Yes
13935	No	Graff	Earl M.Knighton*	(W) Holtzinger	Holtzinger	35-14S-21W	80	0	Cher	3795	16	2	1	0	0	Yes
17377	No	Holland	Donald C.Slawson	(W) Holland B	Holland B	23-13S-22W	320	0	LKC	3650	5	2	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
10738	1	0	0	0	Irreg	0-100	577	Prod	--	--	U	1964	Wat	3524/630	43	--	210,461	776,991	48,853	848,707	16,800	36,328	
15035	2	0	0	0	Irreg	0	553	Prod	--	--	U	1969	S Gas	30/320	37	--	171,568	1,092,712	11,394	557.162	--	--	
17986	1	0	0	0	Irreg	0	50	Prod	--	--	U	1975	S Gas + Wat	9/11	36	--	17,000	39,000	1,920	160,820	0	0	
CR-8774	1	0	0	0	Irreg	Vac	428	Prod	--	--	U	1977	S Gas	55/420	--	--	26,108	26,108	3,048	3,048	--	--	
15195	1	0	-	-	Irreg	0	50	Prod	--	--	U	1973†	S Gas	--	--	--	15,003	267,003	0	--	--	--	*Was Oasis PetroleumInc. †Date of purchase.
14498	5	0	0	0	Peri	Vac	310	Prod + Stal	2293	138	T	1961	S Gas	26/1	41.2	--	558,880	7,434,729	17,565	683,682	17,565	313,133	
9106	2	1	0	0	Peri	150	98	Prod	--	--	T	1961	S Gas	--	35	--	71,540	1,620,924	6,122	261,931	6,122	--	
4601	1	--	0	0	Line	Vac	--	Prod Wat from 3 leases#	--	--	U	--	S Gas + Wat	--	40.2†	--	36,585	--	19,006	--	--	--	*Was Rock Hill Petroleum. †@60.#Oil Well Service Co.
9209 14030	2	0	0	0	Line	225	525	Prod	--	--	U	1960	Wat + S Gas	--	40	--	383,250	1,487,500	27,001	183,277	27,001	--	
10688	1	0	0	0	Irreg	500	450	Prod + Stal	2350	150	U	1965	Wat	--	40	--	164,250	958,086	8,478	66,384	6,358	--	
16148	1	0	0	0	Irreg	0	210	Prod	--	--	U	1971	S Gas	--	39	--	76,286	622,027	2,520	619,628	--	--	
18663	1	0	0	0	Irreg	80	72	Prod	--	--	U	1977	Wat	304/39	40.2	--	13,794	13,794	116,155	176,894	0	0	
17898	1	0	0	0	Irreg	Grav	197	Prod	--	--	U	1975	Wat	17/162	38	--	72,084	163,672	3,943	365,478	0	0	
12773	2	0	0	0	Peri	100	434	Arb	3544	--	U	1964	S Gas	31/0	38	--	158,443	461,667	5,611	141,843	2,230	21,977	
11612	3	0	0	0	Irreg	460	330	Prod + Fr Wat Sd	26	--	M	1963	S Gas + Wat	1/0	40	--	285,730	2,499,092	7,979	840,193	7,979	263,979	*Was Sam P.Wallingford, Inc.
18259	1	0	0	0	Irreg	0	33	Prod	--	--	T	1976	Gas Exp	16/84	36.5	--	12,045	24,765	2,626	5,383	--	--	
16485	1	0	0	0	Irreg	Vac	20@200	Fr Surf Beds	10	100	F	1972	S Gas	1/0	42	--	4,000	134,000	2,186	99,770	2,186	21,092	*Intermittent, as well varies.
11012	1	1	0	0	Peri	400	682	Prod	--	--	U	1964	S Gas	--	41	--	248,973	3,614,320	5,640	346,927	5,640	106,161	*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	275,963	6,603	169,096	--	--	
3396	35	4	0	0	Irreg	246	429	Prod + Stal Sd	2650	100	T + U	1953	S Gas	98/1	41.9	--	5,466,654	123,787,934	143,114	9,555,894	143,114	8,941,154	
	83	10	0	0													11,127,265	171,278,000	665,818	23,977,379	337,494	11,204,964	
16437	1	0	0	0	Irreg	Vac	500	Prod	--	--	U	1972	Wat + S Gas	3/1	24	--	182,500	847,500	4,767	90,913	--	--	
17618	2	--	-	-	Irreg	900	550	Prod	--	--	U	1974	Grav	--	40	--	195,039	620,445	28,014	116,932	20,000	65,000	
13935	1	1	0	0	Peri	1200	200	Prod + Fr	16	--	M	1967	Wat	1/.9	39.4	--	66,750	--	7,409	--	3,250	--	*Was Sun Oil Co.
17377	1	0	0	0	Irreg	0	96	Prod	--	--	U	1974	S Gas	106/68	31	--	35,092	107,657	6,128	80,907	2,576	2,576	

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
TREGO COUNTY (Concl.)																
13976	No	Kutina West	Shields Oil Producers,Inc.	(W) Dickman-Phillip Waterflood	Dickman	24-15S-22W	80	0	Cher Sd	4200	20	1	0	0	0	Yes
8278	No	Newcomer	A.L.Abercrombie,Inc.	(D) Rasek "A"	Rasek "A"	12-12S-23W	60	--	LKC	3700	35	2	0	0	0	Yes
10092	--	Newcomer	Petroleum Management,Inc.	(W) Newcomer Coop-Hixson LKC	Hixson LKC Unit Newcomer A, Newcomer B, Morgan C	2,11-12S-23W 12-12S-23W	1280	0	LKC	3660	12	6	4	0	0	Yes
16356	--	Newcomer	Texaco Inc.	(W) Newcomer Unit	Sarah Losee, F.Rinker	1-12S-23W	480	--	LKC	3650	3.3	4	1	0	0	Yes
17636	--	Nicholson	Cities Service Co.	(W) Nicholson Field LKC Waterflood	Huck "A"	25-11S-21W	80	0	LKC	3580	12	2	0	0	0	Yes
14633	No	Ogallah	Gas Producing Enterprises*	(D) Schoenthaler	Schoenthaler	26-12S-22W	40	0	LKC	3580	10	3	0	0	0	Yes
6779 14666 14667 14948	--	Ogallah	Texaco Inc.	(P) Ogallah Unit	Christian Church, Powers, Kellogg-Wynn J.F.Steckline, E.A.Scott, C.Scott, A.Schoenthaler, V.G.Powers G.Bittel Monroe Anderson "C" P.Hendrickson, U.S.Government Kellogg-Wynn, C.Scott, Benson, E.M.Monroe	25-12S-22W 26-12S-22W 27-12S-22W 31-12S-22W 34-12S-22W 35-12S-22W 36-12S-22W	1690	--	Arb	3950	24	34	31	0	0	No*
17401	--	Ridgeway	Texaco Inc.	(P) E.King	Schoenthaler E.King	26-12S-21W 27-12S-21W	320	--	Lans + Arb	3712 3893	--	4	0	0	0	Yes
CR-10771	No	Tidball East	Rupe Oil Co,Inc.	(P) Davis	Davis	7-11S-24W	80	--	Lans	3830	7	1	--	1	-	Yes
17094	--	Trico	Cities Service Co.	(W) Spaulding "B" Waterflood	Spaulding "B"	1-11S-21W	160	0	LKC	3366	8	3	1	0	0	Yes
6045	No	WaKeeney	Okmar Oil Co.*	(W) Kraus-Lemke	Kraus, Lemke	15-11S-23W	120	0	LKC	3500	5	2	0	0	0	Yes
14181	No	WaKeeney	Okmar Oil Co.	(W) Mong	Carpenter Mong	13-11S-24W 24-11S-24W	240	0	LKC	3539	5	2	0	0	0	Yes
14887	--	Walz	Continental Oil	(W) Walz LKC	J.J.O'Connor, J.J.O'Connor "A"	13-11S-21W	100	0	Lans	3400	17	5	0	-	-	Yes
TREGO COUNTY TOTALS (Reported)							5450	0				80	40	1	0	
WABAUNSEE COUNTY																
13504	Yes	Ashburn	Mack Oil Co.*	(P) Ashburn Droll Unit	Ashburn, Droll	29-14S-10E	40	--	Viola	3250	15	2	0	0	0	Yes
WILSON COUNTY																
12711	No	Altoona	Davis Oil	(W) Umbarger	Umbarger	36-28S-16E	40	0	Squir	660	16	9	0	0	0	Yes
12954	No	Altoona	Davis & Bel Construction Co.	(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	20	Bartl	780	12	3	4	0	2	Yes
8983	--	Altoona	Jones & Campbell,Inc.*	(W) Short	Short, Travis Gates	31-28S-17E 1-29S-16E 6-29S-17E	160	--	Squir	790	20	9	13	-	-	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	--	--	--	---	--	--	--	-	-	--
8283	No	Fredonia	R.R.Abderhalden*	(W) Van Camp	Hamilton, Mikesell, Van Camp	27,28,34,35-29S-15E	150	0	Bartl	1160	40	25	1	0	0	Yes
18342	No	Fredonia	Wyckoff & Runyon*	(D) Baker	Baker	2-30S-15E	158	--	Bartl	1000	12	2	--	1	-	Yes
13022	No	Humboldt-Chanute	Foster Oil & Gas Co.,Inc.*	(P) Stover-Anderson	Stover, Anderson Anderson	3-28S-17E 4-28S-17E	20	--	Bartl	942	20	6	4	0	0	No†
11983	--	Mattix	C & B Oil Well Service*†	(D) --	Mattix	1-28S-15E	80	0	Bartl	1074	15	3	--	-	-	Yes
10231	No	Neodesha	A.W.Bailey	(-) Barnes	Barnes	21-30S-16E	12	--	Neodesha	750	12	2	--	0	-	No*

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
13976	1	0	0	0	Irreg	1800	242	Prod + Ced H	1100	250	T	1968	Grav	--	38	--	88,420	760,720	2,348	130,035	1,500	125,900	
8278	1	1	0	0	Irreg	0	261	Prod	--	--	U	1960	S Gas	5/29	39	--	95,265	990,854	3,546	206,508	2,500	103,439	
10092	2	3	0	0	Irreg	325	243	Prod	--	--	U	1960	--	--	36	--	74,728	4,082,814	12,869	595,515	12,869	439,528	
16356	4	0	0	0	Irreg	540	250	Prod + Ced H	1380	220	M	1972	S Gas	58/12512	38.4	3.2	363,540	2,329,467	19,393	109,769	14,569	59,602	
17636	1	0	0	-	Irreg	340	239	Prod + Dak	815	43	M	1974	S Gas	1/3	--	--	77,358	200,687	3,610	167,488	3,610	11,173	
14633	1	0	0	0	Irreg	35	155	Prod + Arb + LKC	--	--	U	1969	S Gas	52/17	39	--	33,735	566,558	4,393	475,685	--	--	*Was Ferrier.
6779 14666 14667 14948	0	0	0	0	--	0	0	None	--	--	-	--	--	2860/880	37	2.6	0	0	107,397	2,879,974	0	0	*No inj. active water drive.
17401	1	0	0	0	Irreg	Vac	516	Prod	--	--	U	1974	Wat +* S Gas†	22/750	--	--	188,340	541,332	7,256	24,194	--	--	*Arbuckle. †Kansas City
CR-10771	--	--	-	-	Peri	10"Vac	95	Prod	--	--	U	1977	Wat	3.07/1	37	--	10,455	10,455	13,395	13,395	--	--	
17094	1	0	0	0	Irreg	800	295	Prod	--	--	U	1974	S Gas	16/21	--	--	103,755	329,111	12,852	581,067	12,852	51,564	
6045	1	0	0	0	Irreg	150	295	Prod	--	--	U	1958	S Gas	--	40	--	91,524	--	1,744	623,314	1,744	--	*Was S & G.
14181	1	0	0	0	Irreg	350	318	Prod	--	--	U	--	S Gas	15/5	36	--	98,660	1,917,944	8,381	66,616	1,676	5,883	
14887	2	0	-	-	Line	200	488	Prod	--	--	U	1969	S Gas	--	33.6	--	356,590	2,907,453	14,386	154,500	10,726	68,303	
	21	5	0	0													2,070,757	16,212,997	257,888	6,316,812	87,872	932,968	
13504	1	0	0	0	Peri	0	757	Prod	--	--	U	1967	Wat	2/98	20	--	229,371	2,191,256	3,175	241,728	3,175	24,117†	*Was Wm.Gruenerwald. †Mack Oil Co. only.
12711	6	0	2	0	5-Spot	550	25	Prod + Bartl	800	20	T	1972	S Gas	9/1	29	--	54,000	212,000	2,055	11,715	1,100	5,650	
12954	1	0	0	0	Irreg	500	3	Prod	--	--	T	1966	S Gas	9/1	26	--	1,000	115,000	682	19,077	100	4,700	
7516	2	--	0	-	Irreg	400	20	Prod + Oswego	640	8	U	1964	S Gas	95/5	36	--	12,000	242,400	240	24,609	240	14,609	*Was Crest Oil Co.
8983	7	--	-	-	Irreg	600	300	Prod + Oswego	353	75	U	--	S Gas	--	29	--	109,500	--	2,457	--	2,457	--	*Was Overland Energy.
10473	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Stripper production.
11290	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Stripper production.
8283	11	4	0	0	Irreg	500	100	Prod + Oswego	350	50	T	1961	S Gas	--	25	--	401,500	8,381,655	11,927	286,395	11,927	286,395	*Was Sun Oil Co.
18342	1	--	-	-	Irreg	0	2	Prod	--	--	U	1976	Gas Exp	2/1	33	--	730	--	790	--	0	--	*Was Van Camp & Cauble.
13022	3	1	0	0	5-Spot	200	10	Prod	--	--	U	--	Grav	--	23	--	--	1,500	--	647	--	647	*Sold to James Cheever, 11/21/77. †Weather & mech. probs., operated 210 days in '77.
11983	1	--	-	-	Irreg	--	75	Prod	--	--	U	1965	Grav	1/10	29	--	27,375	--	3,990	--	--	--	*Was Miller Oil Co. †Sold to Moco Oil Co., 6/1/78.
10231	0	4	0	-	5-Spot	0	0	Sh Grav	40	5	-	1964	--	98/2	38	4	--	240,000	131	--	--	4,240	*Temp. inactive, no water.

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 (1977): Active	Oil producing wells (1977): Inactive	Oil producing wells (1977): Drilled	Oil producing wells (1977): Abd.	Has inj. been continuous?
WILSON COUNTY (Concl.)																
9937	Yes	Neodesha	A.W.Bailey	(W) Unit #1	Bowman, Holmberg, Mann, Irvine-Wilson, Greer, Fee #2 Fee #2, Irvine-Wilson, Clegg C.W.Long, J.W.Sutherland, R.M.Jones, Theo.Johnson, Skiles-Rankin, Fee #2, Keys Heirs, Wolfe(East) Ellis, Mong-Kimball, Mong-Skiles, City Sewage, Hutchins, Wolfe(West), Skiles-Rankin, Borceaux, Skiles-Sweeney, Beele 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	0	Neodesha	800	15	70	0	0	0	Yes
10232	No	Neodesha	A.W.Bailey	(W) Kimball-Dunn	Kimball-Dunn, H.H.Kimball, Willhelm	19-30S-16E	90	--	Neodesha	825	15	3	0	0	0	No*
CR-10777	--	Neodesha	Davis Oil Co.	(P) Holmberg	Holmberg	20-30S-16E	25	0	Bartl	800	20	2	0	0	0	Yes
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
12289	No	Neodesha	RMEX Oil Co.,Inc.*	(-) Thompson	Thompson	12-30S-15E	120	0	Bartl	967	13	8	4	2	0	No†
		WILSON COUNTY TOTALS (Reported)					1745	150				166	30	7	2	
WOODSON COUNTY																
18388	No	Batesville	J.M.Bullock & Geo.E.Wagner	(W) Berry	Berry	9,10,15,16-25S-14E	320	0	Squir	1300	8-10	0	0	0	0	No*
6103	No	Big Sandy	Mack C.Colt,Inc.	(W) Big Sandy	Allen Cobble, Pendley Schafer, Scott, Louk, West Lauber, Lauber, Duncan	14-26S-14E 22-26S-14E 23-26S-14E	30	0	Bartl	1200 1300	20-50	41	0	2	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	(W) 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	--	Squir	800	10	98	0	0	0	Yes
12579	--	Neosho Falls-Leroy	Raymond Bell Oil Co.*	(P) George	Russel George	30-23S-17E	80	--	Squir	890	12	7	2	1	1	Yes
CR-5771	--	Neosho Falls-Leroy	Chriestenson Oil Co.*	(P) Mentzer	--	34-23S-17E	160	--	Miss	1190	10	5	4	0	0	Yes
13220	--	Neosho Falls-Leroy	Leedy-Beaman	(P) Leedy-Entz	Street Leedy, Entz	24-23S-16E 25-23S-16E	40	0	Squir	924	12	17	0	2	0	Yes
15500	--	Owl Creek	N & B Enterprises	(W) Owl Creek	Florence Toedman	8-25S-16E	240	--	Squir	950	6-14	16	0	0	0	--
15417	No	Owl Creek	Tec Drilling Co.,Inc.	(W) Owl Creek	Fred Coffield Kenneth Stockebrand Tom Smith Marie Yohon	16-25S-16E 17-25S-16E 20-25S-16E 21-25S-16E	190	0	Squir (U) Squir (L)	864 911	17 12	23	0	1	0	Yes
3345 8990	No	Perry-Halligan	Layton Oil Co.	(*) Rose Flood	--	16,17,18,19,20,21, 29,31-26S-17E	--	--	Squir	---	--	--	--	-	-	--
727 10634 10584	No	Quincy	Bird & Hanley*	(W) Batesville	Nordmeyer, Akins Klick Mills, Eades J.W.Tipton, Enloe, Lee A.W.Tipton	19-25S-14E 20-25S-14E 24-25S-13E 28-25S-14E 29-25S-14E	1880	250	Bartl	1425	40	32	21	1	3	Yes
11604	No	Silver City	Loren Steinforth & Royce Saubers*	(W) Silver City W Unit B	Adams Hill A, Hill B	20-26S-15E 29-26S-15E	55	0	Bartl	1400	20	3	0	0	0	Yes
12198	No	Silver City	Loren Steinforth & Royce Saubers*	(W) Silver City W Unit A	Lauber, Lauber A, Lauber B	19-26S-15E	100	0	Bartl	1400	20	7	0	0	0	Yes

Project no.	Injection Wells: Active	Injection Wells: Inactive	Injection Wells: Drilled 1977	Injection Wells: Abd., 1977	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: 1977	Water Injection: Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec.: 1977	Total Oil recovered from project Pri. & Sec.: Cum. 12-31-1977	Oil recovered by enhanced methods: 1977	Oil recovered by enhanced methods: Cum. 12-31-1977	Remarks
9937	69	0	0	0	5-Spot	700	18	Prod + Fall Riv	--	--	M	1961	S Gas	97/3	38	4	423,215	11,591,142	10,803	483,712	10,803	483,712	
10232	0	7	0	-	5-Spot	0	0	Sh Grav	30	5	-	1963	--	--	38	4	0	564,425	654	32,107	654	24,901	*Temp.inactive - no water.
CR-10777	1	0	0	0	Irreg	0	10	Prod	--	--	T	1977	S Gas	4/1	38	--	3,500	3,500	638	638	300	300	
7521	5	1	0	0	Irreg	300	20	Prod + Salt Sd	900	50	U	1962	S Gas	1/1	38	--	15,000	806,525	600	92,367	600	42,276	
18060	1	--	-	-	Irreg	100	20	Prod	--	--	U	1976	S Gas	9/1	36	--	6,000	13,000	2,466	14,546	1,000	2,000	
18097	1	--	0	-	7-Spot	300	20	Prod	--	--	U	1976	S Gas	9/1	35	--	7,000	8,080	120	10,800	120	620	*Was Edward Matuk.
12289	3	0	0	0	Line	--	--	Prod + Oswego	700	20	U	1973	Grav	3/2	38	5	0	96,000	465	3,764	0	2,800	*Was Geo.J.Hempen. †Lease shut in.
	112	17	2	0													1,060,820	22,275,227	38,018	980,377	29,301	872,850	
18388	1	1	0	1	Irreg	120	30-40	Prod + Bartl	1500	20	U	1977	Gas Exp	99/1	21-25	--	800	0	0	--	0	--	*Started & quit in less than 90 days.
6103	8	0	0	0	5-Spot	0	29	Prod + Cher	1100	30-50	T	1957	Grav	3/1	21	--	83,496	1,857,897	17,912	--	17,912	563,459	
14889	1	0	0	0	5-Spot	500	21	Prod + KC Lm	500	--	T	1969	S Gas	5/95	21	243	7,675	109,954	2,069	20,867	2,069	20,867	
15067	--	--	-	-	5-Spot	600	--	Prod	--	--	U	1970	Grav	1/0	24	0	--	--	2,518	--	--	--	
9075	36	0	-	-	Irreg	600	20	Prod + KC Lm	400	50	U	--	Wat	--	27	--	260,000	4,124,322	12,977	296,591	--	--	
12579	1	0	0	0	Irreg	0	1.5	Prod + Squir	890	12	U	1966	--	1/10	26	--	1,500	0	1,560	--	500	--	*Was Charles Reser.
CR-5771	1	0	0	0	Irreg	60	20	Prod	--	--	U	1977	Wat	5.3/20	35.4	--	---	4,500	--	1,952	--	--	*Was Mentzer.
13220	1	0	0	0	Irreg	30	10	Prod + KC Lm	105	400	U	1967	Grav	9/1	26	--	2,000	28,900	5,490	32,305	--	--	
15500	4	0	0	0	Irreg	175	18	KC	375	175	U	1976	Grav	9/1	23	--	12,240	--	6,277	--	4,035	--	
15417	6	0	0	-	5-Spot	245	31	Prod + KC Lm	420	46	T†	1975	S Gas	100/1	24	80	67,890	143,349	20,515	200,363	12,239	22,583 16,908#	*After treated. †Rust inhibitor and inducer, plus citric acid. #Inert gas.
3345 8990	--	--	-	-	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	*Stripper production.
727 10634 10584	11	23	0	2	Irreg	700	52	Prod	--	--	T	1942	Gas Exp	1/0	40	5	433,994	31,515,677	38,854	5,183,363	--	5,183,362	*Was Bird,Hanley & Sheedy.
11604	3	0	0	0	Line	200	25	Prod	--	--	U	1967	Wat	1/2	28	21	7,500	204,950	1,013	26,045	1,013	26,045	*Was Pauley Petroleum.
12198	4	0	0	0	Line	200	15	Prod	--	--	U	1965	Wat	2/1	28	21	6,500	682,569	1,116	28,363	1,116	28,363	*Was Pauley 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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
WOODSON COUNTY (Concl.)																
17126	No	Vernon	L.C.Bodemann,Jr.*	(W) John F.Wingrave	John F.Wingrave	16,17-24S-16E	480	0	Squir	1015	20	7	6	0	0	Yes
CR-97710	No	Vernon	L.C.Bodemann,Jr.*	(W) Virginia Alexander	Virginia Alexander	18-24S-16E	80	0	Squir	1110	20	10	0	0	0	No†
CR-10773	No	Vernon	O.W.Hesting	(W) Hesting	R.C.Roberts	4-24S-16E	160	0	Squir	1072	22	7	1	3	0	No*
10663	--	Vernon	Kanalta Resources,Ltd.	(W) Sturlong	Keske-Long-Sturdivan	34-23S-16E	320	20	Squir	1100	14	17	3	-	-	Yes
10670																
18572	Yes	Vernon	Kanalta Resources,Ltd.	(W) Weston-Rausch-Gordon	Weston, Rausch, Gordon	13-24S-15E	480	--	Squir	1090	14	15	5	-	-	Yes
CR-3773	No	Vernon	Kerecall	(W) Kerecall	Lueking	15-24S-16E	320	--	Squir	950	10	22	0	8	0	No
12385	--	Vernon	Long-Tye-Oil Co.	(W) Glades Fuller	Robison Glades, Fuller, Sturdivan	29-23S-16E 33-23S-16E	540	--	Squir	1039	15	31	0	2	0	Yes
6887	--	Vernon	James E.Russell Pet.,Inc.	(W) Aljo Flood	Butler, Piley, Alexander Alexander	35-23S-16E 2-24S-16E	116	0	Squir	1000	21.6	38	9	0	0	Yes
12706	No	Vernon	James E.Russell Pet.,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	1000	20	20	3	1	0	Yes
14285	No	Vernon	TAP Oil Co.	(W) Vernon Project	Carl Keske, A.A.Newby	5-24S-16E	40	0	Squir	1180	35	4	0	0	0	Yes
416	--	Virgil	French Oil Co.	(P) Dewey	Dewey	32-23S-14E	100	0	Miss Lm	1600	6	7	0	0	0	Yes
1056	--	Virgil	French Oil Co.	(P) Maclaskey	Maclaskey	31-23S-14E	40	0	Miss Lm	1700	4	4	0	0	0	Yes
3902	--	Virgil	French Oil Co.	(P) W.P.Headley	Headley	29,32-23S-14E	90	0	Miss Lm	1700	6	11	0	0	0	Yes
5646	--	Virgil	French Oil Co.	(P) South Peek	Peek	20-23S-14E	100	0	Miss Lm	1700	6	8	0	0	0	Yes
5662	--	Virgil	French Oil Co.	(P) Headley	Headley	29-23S-14E	70	0	Miss Lm	1700	6	6	0	0	0	Yes
6222	--	Virgil	French Oil Co.	(P) Quartet	Quartet	21-23S-14E	40	0	Miss Lm	1700	6	2	1	0	0	Yes
7898	--	Virgil	French Oil Co.	(P) Arnold	Arnold	35-23S-14E	40	0	Miss Lm	1700	5	4	0	0	0	Yes
8459	--	Virgil	French Oil Co.	(P) Floyd Jones	Floyd Jones	24-23S-13E	50	0	Miss Lm	1700	3	5	0	0	0	Yes
12149	--	Virgil	French Oil Co.	(P) Rhea	Rhea	24-24S-13E	120	0	Miss Lm	1650	6	6	0	0	0	Yes
12189	--	Virgil	French Oil Co.	(P) Knox	Knox	24-24S-13E	40	0	Miss Lm	1600	4	4	0	0	0	Yes
1055	--	Virgil	French & Winterscheid,Inc.	(P) Estes	Estes	7-24S-14E	40	20	Miss Lm	1700	6	5	0	0	0	Yes
3892	--	Virgil	French & Winterscheid,Inc.	(-) Winterscheid	Winterscheid	6-24S-14E	60	20	Miss Lm	1700	5	6	1	0	0	Yes
3893	--	Virgil	French & Winterscheid,Inc.	(P) Smith Jobe	Smith, Jobe	7-24S-14E	40	20	Miss Lm	1700	6	5	0	0	0	Yes
5645	--	Virgil	French & Winterscheid,Inc.	(P) Emma (Old) Otto	E.Otto	21-23S-14E	20	0	Miss Lm	1700	4	2	0	0	0	Yes
6021	--	Virgil	French & Winterscheid,Inc.	(P) Kimble	Kimble	18-24S-14E	60	10	Doug	1700	6	3	0	0	0	Yes
6088	--	Virgil	French & Winterscheid,Inc.	(P) W.Jones	W.Jones	30-23S-14E	70	10	Miss Lm	1700	6	4	0	0	0	Yes
7103	No	Winterscheid	Atlantic Richfield Co.	(W) Winterscheid WFP	W.P.Headley "A","B", "C", J.W.Maclaskey"A" W.P.Headley "A","B","C", J.W.Maclaskey "A", Henry G.Collins	29-23S-14E 30-23S-14E	560	--	Miss Ch	1700	20	27	1	0	12	Yes
17607	No	Winterscheid	Barnett Oil,Inc.	(D) Bahr	Bahr	23-23S-13E	160	--	Viola + Arb	2200	10	6	--	-	-	Yes
16395	--	Winterscheid	French Oil Co.	(P) E.Otto (B) (Throgmorton)	Otto B, Throgmorton	21-23S-14E	--	--	Miss Lm	1685	5	9	0	0	0	Yes
16396	--	Winterscheid	French & Winterscheid,Inc.	(P) Eby (Figge)	Figge	28-23S-14E	640	0	Miss Lm	1685	7	16	0	0	0	Yes
1054	No	Winterscheid	Kewanee Oil Co.	(W) Maclaskey	Maclaskey	29-23S-14E	140	20	Miss	1670	20	12	1	0	0	Yes
12212																
13047	--	Winterscheid	Kraft Oil Co.	(W) Weide	Weide	31-23S-15E	100	--	Miss Lm	1550	14	3	2	0	0	Yes
13070	--	Winterscheid	Kraft Oil Co.	(W) Weide	Weide	6-24S-15E	50	0	Miss Lm	1550	20	3	1	0	0	Yes
11700	--	Winterscheid	Kraft Oil Co.	(W) Rich A & Owens	Rich A & Owens	24-23S-14E	50	0	Miss Lm	1600	20	4	0	0	1	Yes
14365	--	Winterscheid	Kraft Oil Co.	(W) Figge	Figge	34-23S-14E	80	--	Miss Lm	1650	20	5	0	0	0	Yes
6143	--	Winterscheid	Tesoro Petroleum Corp.	(W) Emery Project	Ehrhardt, Ryser Ryser, Westlake, Figge	33-23S-14E 34-23S-14E	500	--	Miss Lm	1680	20	23	3	0	1	Yes
14365																
10251	--	Winterscheid	Union Oil Co. of California	(W) W.P.Headley	W.P.Headley	32,33-23S-14E	520	--	Miss Dolo	1700	20	17	3	0	0	Yes
4218	--	Winterscheid	Wells Oil Co.,Inc.	(D) --	H.D.Stevenson	5-24S-14E	53	--	Miss	1695	6	5	3	0	0	Yes
1474	No	Yates Center	Bird & Hanley*	(W) Yates Center	Aetna, Aetna "A" Degree of Honor	27-25S-15E 28-25S-15E	320	0	Miss	1500	5	6	1	0	1	Yes
11592	--	Yates Center	Tesoro Petroleum Corp.	(W) Yates Center	Lauber, Degler Harder	21-25S-15E 22-25S-15E	280	--	Miss Lm	1480	15	12	2	0	0	Yes
		WOODSON COUNTY TOTALS (Reported)					12167	370				659	74	21	19	

Project no.	Injection Wells: Active	Inactive	Drilled 1977	Abd., 1977	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 1977	Water Injection Cum. 12-31-1977	Total Oil recovered from project Pri. & Sec. 1977	Total Oil recovered from project Pri. & Sec. Cum. 12-31-1977	Oil recovered by enhanced methods 1977	Oil recovered by enhanced methods Cum. 12-31-1977	Remarks
17126	1	0	0	0	Irreg	225	16	Prod	--	--	U	1973	S Gas	2/1	26	--	5,984	83,928	2,473	69,179	2,473	11,321	*Was J.F.Williams & Paul J.Gibbs.
CR-97710	2	0	0	0	5-Spot	194	21	Prod	--	--	U	1977	S Gas	3/2	26	--	1,107	1,107	2,067	78,240	0	0	*Was Trico Oil Co. †Pump stolen.
CR-10773	1	0	1	0	Irreg	0	0	Squir	1072	22	U	1977	Grav	9/1	26	--	--	100	--	1,020	0	--	*Injection equipment not completed.
10663	8	7	-	-	Irreg	300	30	Prod + KC	420	150	T	1965	Wat	1/2	23	--	--	--	6,439	--	6,439	--	
10670																							
18572	4	--	-	-	5-Spot	125	40	Prod + KC	490	190	U	1976	Grav	20/1	23	--	--	--	6,212	--	6,212	--	
CR-3773	1	0	0	0	5-Spot	200	5	Prod	--	--	T	1976	Grav	9/1	25	--	18,253	2,575	14,400	25,400	--	--	
12385	6	--	-	-	Irreg	Grav *	245	Prod + KC Lm	565	35	U	1966	Grav	9/1	24	--	125,000	--	12,079	--	3,500	--	* + 2 pumps with 100 lb. pressure.
6887	24	27	0	0	5-Spot	610	24	KC Lm	550	40	T	1963	S Gas	--	26	70	209,182	4,352,670	14,274	715,404	14,274	588,043	
12706	2	4	0	0	Irreg	220	32	KC Lm	500	40	T	1966	S Gas	--	26	70	23,357	481,073	6,643	120,500	6,643	74,743	
14285	4	0	0	0	5-Spot	300	20	Prod + KC Lm	420	20	T	1969	Grav	9/1	22	--	20,100	230,100	3,370	--	--	--	
416	1	0	0	0	Irreg	75	100	Prod	--	--	T	1956	Wat	55/45	37	--	24,000	340,000	12,556	--	3,139	80,599	
1056	1	0	0	0	Irreg	Vac	100	--	--	--	T	1960	Wat	45/55	36	--	10,000	160,000	2,251	--	562	18,529	
3902	--	--	-	-	Irreg	75	200	Prod	--	--	T	1955	--	1/1	37	--	35,000	1,150,000	11,098	--	3,884	75,074	
5646	1	0	0	0	Irreg	75	125	Prod	--	--	T	1956	Wat	51/49	37	--	30,000	1,020,000	8,704	--	2,611	104,567	
5662	1	0	0	0	Irreg	80	200	Prod	--	--	T	1955	Wat	1/1	37	--	12,000	380,000	5,973	--	2,389	48,498	
6222	1	0	0	0	Irreg	75	50	Prod	--	--	T	1955	Wat	3/2	36	--	4,000	40,000	3,558	--	1,423	30,410	
7898	1	0	0	0	Irreg	60	50	Prod	--	--	T	1960	Wat	45/55	36	--	15,000	400,000	1,424	--	427	17,926	
8459	1	0	0	0	Irreg	100	180	Prod	--	--	T	--	Wat	1/1	36	--	38,000	1,180,000	2,409	--	481	19,057	
12149	1	0	0	0	Irreg	100	125	Prod	--	--	T	1963	Wat	55/45	33	--	18,000	260,000	2,325	--	348	25,632	
12189	1	0	0	0	Irreg	70	75	Prod	--	--	T	1965	Wat	48/52	33	--	8,000	90,000	2,969	--	742	22,929	
1055	1	0	0	0	Irreg	125	150	Prod	--	--	T	1950	Wat	45/55	36	--	58,000	682,000	2,308	--	1,154	72,684	
3892	1	0	0	0	Irreg	50	100	Prod	--	--	T	1950	Wat	52/48	36	--	25,000	850,000	2,839	--	1,419	60,780	
3893	1	0	0	0	Irreg	90	110	Prod	--	--	T	--	Wat	49/51	36	--	28,500	935,000	1,619	--	1,214	69,318	
5645	1	0	0	0	Irreg	25	50	Prod	--	--	T	--	Wat	1/1	36	--	14,000	375,000	459	---	459	19,779	
6021	1	0	0	-	Irreg	150	200	Prod	--	--	T	--	Wat	45/55	35	--	20,000	160,000	1,714	--	857	7,974	
6088	1	0	0	0	Irreg	80	100	Prod	--	--	T	--	Wat	2/3	37	--	32,500	1,055,000	1,742	--	871	49,632	
7103	13	3	0	4	5-Spot	460	259	Prod + Doug	700	30	U	1960	S Gas+ Wat	82/ 380	39	3.1	1,087,003	18,883,019	15,434	874,229	790,240	--	
17607	1	0	0	0	Irreg	Vac	400	Prod	--	--	U	1975	S Gas	2/20	34	--	147,000	303,400	17,770	347,007	3,000	6,000	
16395	1	0	0	0	Irreg	0	20	Prod	--	--	T	1960	Wat	2/3	36	--	2,000	12,000	2,130	--	1,065	9,576	
16396	--	--	-	-	Irreg	50	15	Prod	--	--	-	--	--	3/2	36	--	5,000	30,000	14,268	--	5,707	30,478	
1054	3	1	0	0	Irreg	425	308	Prod	--	--	U	1944	S Gas	8/5	39	--	337,579	3,361,630	16,174	936,705	16,174	240,701	
12212																							
13047	1	2	0	0	Peri	250	300	Prod	--	--	T+S	1965	Wat	1/4	39	--	110,000	537,050	2,190	7,665	730	3,150	
13070	1	0	0	0	Peri	100	55	Prod	--	--	U	1967	Wat	1/4	36	--	20,440	97,090	1,095	5,375	365	1,425	
11700	1	0	0	0	--	150	60	Prod	--	--	U	1965	Wat	3/17	38	--	21,900	91,200	1,095	3,285	400	1,200	
14365	1	1	0	0	Peri	250	500	Prod	--	--	T	1968	Wat	1/3	38	--	182,500	1,715,500	4,015	13,140	730	2,920	
6143	10	3	0	0	Peri	1000	562	Prod + Arb	1850	311	U	1961	S Gas	1/1	35	--	2,051,016	20,467,726	16,515	417,751	--	--	
14365																							
10251	6	4 *	0	0	5-Spot	900	243	Prod + Arb	2011	439	T	1963	Grav	17/63	38.5	--	532,844	10,349,493	15,752	373,115	15,752	373,115	*One SWD.
4218	1	--	0	-	Irreg	0	100	Prod	--	--	U	1954	Gas Exp	*8/60	35	35	36,000	--	1,440	--	--	--	*+Grav.
1474	3	0	0	1	Irreg	450	320	Prod	--	--	T	1946	Gas Exp	50/1	32	--	350,167	2,689,669	10,038	339,687	--	--	*Was Bird, Hanley & Sheedy.
11592	8	4	0	0	Irreg	800	603	Prod + Arb	2030	500	T	1968	S Gas	1/4	38	--	1,759,656	15,675,396	12,784	773,860	--	--	
	195	80	1	8													8,301,683	127,113,844	370,497	10,891,411	934,568	7,927,647	

County / Project no.	Is proj. utilized?	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 (1977) Active	Oil producing wells (1977) Inactive	Oil producing wells (1977) Drilled	Oil producing wells (1977) Abd.	Has inj. been continuous?
REPORTS OF ABANDONED OR INACTIVE PROJECTS																
BARTON COUNTY																
14488	No	Kraft-Prusa	Okmar Oil Co.	(W) Smith	Smith	36-16S-11W										
BUTLER COUNTY																
11937	No	Elbing	Phillips Petroleum Co.	(W) J.C.Scully	Scully	17-23S-4E										
COWLEY COUNTY																
13624	--	Fra-Mar	Bettis,Boyle & Stovall	(W) Feaster	Feaster	22-30S-4E	Inactive									
5535	No	Eastman	Dunne Equities,Inc.	(-) Eastman	Eastman	6-31S-6E	Converted to gas and disposal wells.									
ELLIS COUNTY																
14016	No	Solomon	Okmar Oil Co.	(W) Albert-Fred	Albert, Fred	10,15-11S-19W										
14553	No	Schoenchen	Okmar Oil Co.	(W) Wolf	Wolf	16-15S-18W	Inactive									
15955	--	Ruder	Kenneth D.Brown & Thomas E.Brown	(-) --	Ruder C	8-15S-18W	Inactive									
GREENWOOD COUNTY																
12156	--	Thrall Aagard	Glacier Petroleum Co.	(-) Osmundson	--	23-24S-9E										
NESS COUNTY																
16010	Yes	Dumler	Pickrell Drilling Co.	(W) Dumler Unit	Dumler Unit	2,11-17S-26W										
PRATT COUNTY																
15321	--	Haskins	Leben Oil Corp.	(-) Berry-Haskins	Berry-Haskins	32-26S-14W	Inactive									
RICE COUNTY																
13199	--	Welch Bornholdt	Braden Oil Co.	(-) Braden Farm	J.W.Braden	1-20S-6W										
ROOKS COUNTY																
19055	--	--	Okmar Oil Co.	(-) Flegg	Flegg	--	Inactive									
RUSSELL COUNTY																
11631	--	Gorham	Okmar Oil Co.	(-) Rexroat Coop	--	30-14S-14W										
SCOTT COUNTY																
CR-10772	--	Brookover	Okmar Oil Co.	(-) Boyer	--	20-17S-31W	Inactive									
STAFFORD COUNTY																
11123	Yes	Leesburg	Continental Oil	(W) Leesburg South	Leesburg South	13-25S-13W										

TABLE 2. -- COUNTY SUMMARY OF ENHANCED RECOVERY PROJECTS IN KANSAS -- 1977.

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	273,492	242,550	4,151,507	7,214	573	336	39	29	29
ALLEN-BOURBON	704	0	0	0	14	0	1	0	1
ALLEN-NEOSHO	8,769	8,335	316,023	1,045	70	22	0	0	2
ANDERSON	198,840	171,853	3,034,683	3,417	777	603	23	8	19
BARBER	237,692	186,184	4,595,651	5,352	78	39	4	0	16
BARTON	519,301	335,765	8,297,070	12,587	273	111	0	1	83
BARTON-RICE	26,297	26,297	450,040	370	8	8	0	0	1
BARTON-RUSSELL	39,734	20,022	851,793	400	16	7	0	0	1
BARTON-STAFFORD	14,971	2,906	188,640	170	8	3	0	0	2
BOURBON	46,019	39,240	979,471	790	79	55	7	0	5
BUTLER	957,391	655,604	53,501,734	17,349	660	302	9	3	95
BUTLER-COWLEY	11,712	1,668	67,525	1,170	14	4	0	0	2
BUTLER-MARION	1,400	100	19,200	81	3	2	0	0	1
CHASE	15,163	963	92,728	80	5	2	0	0	2
CHASE-GREENWOOD	10,339	3,500	143,000	250	13	2	0	0	1
CHASE-LYON	9,000	3,000	50,000	80	11	2	0	--	1
CHAUTAUQUA	339,974	146,971	2,482,462	20,351	610	138	33	7	54
CHAUTAUQUA-COWLEY	13,053	--	73,000	480	4	2	0	0	1
CHEYENNE	33,978	--	35,368	2,480	5	1	1	0	1
CLARK	11,744	11,744	178,701	1,280	5	1	0	0	1
COFFEY	45,738	13,350	481,227	1,240	82	16	0	2	14
COFFEY-WOODSON	7,651	7,651	51,000	80	20	7	2	0	1
COMANCHE	5,286	5,286	43,800	480	2	2	0	0	1
COWLEY	634,043	245,982	7,953,130	18,070	358	123	10	0	63
CRAWFORD	20,464	5,569	346,747	1,077	141	115	10	4	6
DECATUR	245,156	216,845	3,143,179	5,547	65	31	0	0	12
DICKINSON	5,755	0	36,500	320	9	1	0	0	1
DOUGLAS	4,075	3,917	36,700	126	17	7	2	0	2
DOUGLAS-FRANKLIN	14,851	14,851	416,136	177	36	28	3	3	1
EDWARDS	1,915	1,915	4,875	160	1	1	0	0	1
ELK	57,208	22,428	2,200,602	1,034	71	42	5	0	8
ELLIS	629,147	357,826	11,047,737	9,185	275	85	2	0	64
ELLIS-ROOKS	58,644	58,644	1,736,038	352	21	10	0	0	1
ELLSWORTH	144,445	19,975	823,934	1,766	57	12	1	0	8
CHASE	15,163	963	92,728	80	5	2	0	0	2
CHASE-GREENWOOD	10,339	3,500	143,000	250	13	2	0	0	1
CHASE-LYON	9,000	3,000	50,000	80	11	2	0	--	1
CHAUTAUQUA	339,974	146,971	2,482,462	20,351	610	138	33	7	54
CHAUTAUQUA-COWLEY	13,053	--	73,000	480	4	2	0	0	1
CHEYENNE	33,978	--	35,368	2,480	5	1	1	0	1
CLARK	11,744	11,744	178,701	1,280	5	1	0	0	1
COFFEY	45,738	13,350	481,227	1,240	82	16	0	2	14
COWLEY	634,043	245,982	7,953,130	18,070	358	123	10	0	63
CRAWFORD	20,464	5,569	346,747	1,077	141	115	10	4	6
DECATUR	245,156	216,845	3,143,179	5,547	65	31	0	0	12
DICKINSON	5,755	0	36,500	320	9	1	0	0	1
DOUGLAS	4,075	3,917	36,700	126	17	7	2	0	2
DOUGLAS-FRANKLIN	14,851	14,851	416,136	177	36	28	3	3	1
ELK	57,208	22,428	2,200,602	1,034	71	42	5	0	8
ELLIS	629,147	357,826	11,047,737	9,185	275	85	2	0	64
ELLIS-ROOKS	58,644	58,644	1,736,038	352	21	10	0	0	1
ELLSWORTH	144,445	19,975	823,934	1,766	57	12	1	0	8
FINNEY	139,817	25,575	715,258	2,080	30	3	0	0	3
FINNEY-HASKELL	442,303	0	971,323	6,520	63	7	0	0	1
FRANKLIN	53,812	137,711	414,855	3,515	217	88	37	7	15
GOVE	57,837	34,209	197,339	1,790	16	9	1	1	8
GRAHAM	775,189	550,663	10,497,561	18,797	277	108	2	1	48
GRAHAM-SHERIDAN	24,130	24,130	130,068	130	4	1	0	0	1
GRAHAM-TREGO	7,653	7,653	429,359	290	7	3	0	0	1
GREENWOOD	531,992	233,801	10,289,551	19,412	600	196	27	0	97
HARPER	14,937	--	66,150	320	8	4	0	0	1
HARVEY	116,077	95,557	6,248,635	3,712	105	32	0	0	4
HARVEY-MCPHERSON	30,060	--	0	1,550	12	0	0	0	2
HASKELL	4,963	0	58,374	640	3	1	0	0	1
HODGEMAN	179,451	41,748	2,772,103	3,120	48	15	0	0	12
JOHNSON	15,141	4,000	67,500	900	37	8	6	0	3
KEARNY	31,389	0	8,856	960	3	1	1	0	1
KINGMAN	258,322	81,680	2,679,128	3,660	40	20	0	0	8
KINGMAN-PRATT	18,089	18,089	1,000,255	800	12	7	0	0	1
KINGMAN-SEDGWICK	10,746	0	0	0	10	0	0	0	1
KIOWA	23,554	--	40,000	6,440	12	1	0	0	2
LABETTE	4,845	8,921	105,200	185	27	7	1	0	5
LABETTE-MONTGOMERY	--	--	--	240	12	9	2	--	1
LANE	55,270	1,203	134,084	120	9	2	0	0	2
LINN	21,384	8,464	1,146,300	3,934	320	231	12	3	10
LINN-MIAMI	2,015	--	21,672	40	16	10	5	0	1
LYON	1,000	0	130,950	510	13	3	0	0	3
MCPHERSON	343,322	185,175	13,591,160	12,210	245	89	18	1	52
MARION	13,245	1,566	539,825	760	16	3	0	0	4
MEADE	64,999	64,999	735,358	3,240	9	9	0	0	1
MIAMI	48,701	5,209	1,032,797	1,799	185	86	16	1	12
MONTGOMERY	165,865	113,601	1,936,719	4,720	482	241	58	42	38
MORRIS	3,989	0	408,345	280	3	2	1	0	2
MORTON	1,417,521	1,417,521	12,823,579	17,900	78	40	3	0	7
NEOSHO	88,667	32,882	2,210,523	5,451	646	246	4	0	21
NESS	223,550	47,311	1,974,288	2,340	53	14	6	0	16
NORTON	7,847	754	34,771	280	5	1	0	0	2
PAWNEE	92,238	40,430	1,184,229	1,987	25	15	0	0	11
PHILLIPS	578,497	518,831	5,346,684	10,925	176	93	1	0	22
PRATT	157,975	124,551	5,131,577	5,304	67	32	1	0	15
RAWLINS	266,457	223,233	3,869,167	6,340	75	36	3	0	9
RENO	245,603	114,264	8,762,659	3,170	72	27	0	0	15
RENO-RICE	4,869	4,251	116,540	400	7	2	0	0	1
RENO-STAFFORD	23,669	23,669	2,518,607	500	4	5	0	0	1
RICE	520,100	247,883	8,254,213	14,181	290	93	2	0	50
ROOKS	708,668	512,183	17,206,992	14,535	331	138	5	1	62
RUSH	5,201	1,733	36,500	480	5	2	0	0	1
RUSSELL	3,158,438	1,530,338	38,971,695	27,787	876	355	7	0	152
SALINE	37,255	17,025	1,410,095	1,960	32	13	0	0	7
SCOTT	33,063	782	111,190	760	7	2	0	0	2
SEDGWICK	264,823	253,852	6,926,476	5,087	119	63	0	0	14
SEWARD	142,440	139,853	493,225	1,191	4	3	0	0	2
SEWARD-STEVENS	58,988	58,988	1,873,000	880	4	3	0	0	1
SHERIDAN	130,183	126,081	1,783,126	2,354	30	13	0	0	9
STAFFORD	538,651	381,136	9,487,512	10,750	230	112	1	1	66
SUMNER	665,818	337,494	11,127,265	10,206	185	83	1	0	30
TREGO	257,888	87,872	2,070,757	5,450	80	21	1	0	17
WABAUNSEE	3,175	3,175	229,371	40	2	1	0	0	1
WILSON	38,018	29,301	1,060,820	1,745	166	112	7	2	18
WOODSON	370,497	934,568	8,301,683	12,167	659	195	21	1	54
TOTALS	18,149,228†	11,686,634†	317,580,830	381,504	11,453	5,037	402	118	1,448

*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.