

GEOLOGIC LOGS FOR SELECTED DEEP WELLS IN PARTS OF
OKLAHOMA, TEXAS, AND NEW MEXICO

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CONVERSION FACTORS

The inch-pound units of measurement given in this report may be converted to the International System (SI) of units by using the following conversion factors:

<u>Inch-pound unit</u>	<u>Multiply by</u>	<u>SI unit</u>
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer

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ABSTRACT

A computerized data base of geologic logs for selected deep wells in parts of Oklahoma, Texas, and New Mexico was prepared by the U.S. Geological Survey as part of the Central Midwest Regional Aquifer-System Analysis. At least one well per county in the study area was selected, and the geologic logs for the wells were entered into the data base. Summaries of the geologic logs are presented in this report. Geophysical logs were used for interpretation of the geologic logs, and a list of these geophysical logs also is presented. These geophysical logs are available for inspection at the U.S. Geological Survey office in Oklahoma City, Oklahoma.

INTRODUCTION

The U.S. Geological Survey began a Regional Aquifer-System Analysis (RASA) program in 1978 after a congressional mandate required development of quantitative appraisals of the major aquifer systems of the United States. Twenty-eight aquifer systems which supply most of the usable ground water in the United States have been identified for this program. The Central Midwest Region Aquifer-System Analysis (CMRASA) project studies one of the these aquifer systems.

The overall purpose of the RASA program is to compile hydrologic information, to develop an understanding of the aquifer systems, and to develop predictive capabilities that will contribute to the effective management of the Nation's ground-water resources. The specific objectives of the program are to: (1) Assemble available geologic, hydrologic, and water-quality information, and collect additional data that may be required for definition of the aquifer system; (2) synthesize the information to support research that will contribute to a more comprehensive understanding of the flow dynamics; (3) develop, test, and establish the validity of models that simulate the hydrologic systems; (4) analyze and interpret the hydrology of the aquifer systems, and describe the hydraulic implications of alternative management practices; and (5) report the results of these studies, including the hydrologic data, the simulation models, and the final conclusions.

The CMRASA is a study of the regional ground-water flow system in formations of Paleozoic and Mesozoic age in the central United States (table 1). The study area extends from the foothills of the Rocky Mountains in Colorado and New Mexico to the valley of the Mississippi River in eastern Missouri, and from southern South Dakota to northern Texas (fig. 1). As part of a multistate group participating in the CMRASA, personnel of the U.S. Geological Survey in Oklahoma are responsible for studying those parts of Oklahoma, Texas, and New Mexico that are within the CMRASA study area (fig. 1).

Purpose and Scope

The purpose of this report is to present geologic logs for selected deep wells in Oklahoma, Texas, and New Mexico that were used in the CMRASA project. No interpretive materials, such as geologic maps or cross sections, are presented in this report. The report also lists the geophysical logs that were used to interpret the geologic logs.

A large number of geologic logs are available for the parts of Oklahoma, Texas, and New Mexico within the study area. During the early phases of the project, a subset of geologic logs available for the study area was selected and established as a geologic-log data base. Establishing a standardized data base decreased the quantity of data, and insured that CMRASA personnel in different States used the same data base for all work. The geologic logs from at least one well per county were selected and the logs from these wells were entered into the data base. All geologic maps and cross sections that were produced as part of the CMRASA are based on data from these logs. Supplemental data in addition to the data-base logs also were used to develop the geologic maps and cross sections produced by the project.

The geologic logs are stored in a data base that is part of the Survey's National Water Data Storage and Retrieval (WATSTORE) system. The WATSTORE system is a computer data file that can be accessed by any individual or organization that is part of the Survey's National Water Data Exchange (NAWDEX) program. The stratigraphic nomenclature in WATSTORE is from many sources and may not necessarily follow the current usage of the U.S. Geological Survey.

Table 1.--Chronostratigraphic units in the stratigraphic section of the Central Midwest Regional Aquifer-System Analysis study area

Erathem	System	Series	Provincial series
Mesozoic	Cretaceous	Upper	Gulfian
			Comanchean
		Lower	Coahuilan
	Jurassic	Upper	
		Middle	
		Lower	
	Triassic	Upper	
		Middle	
		Lower	
Paleozoic	Permian	Upper	Ochoan
			Guadalupian
		Lower	Leonardian
			Wolfcampian
	Pennsylvanian	Upper	Virgilian
			Missourian
		Middle	Desmoinesian
			Atokan
		Lower	Morrowan
	Mississippian	Upper	Chesterian
			Meramecian
		Lower	Osagean
			Kinderhookian
	Devonian		
	Silurian		
	Ordovician	Upper	
		Middle	
		Lower	
	Cambrian	Upper	
Precambrian			

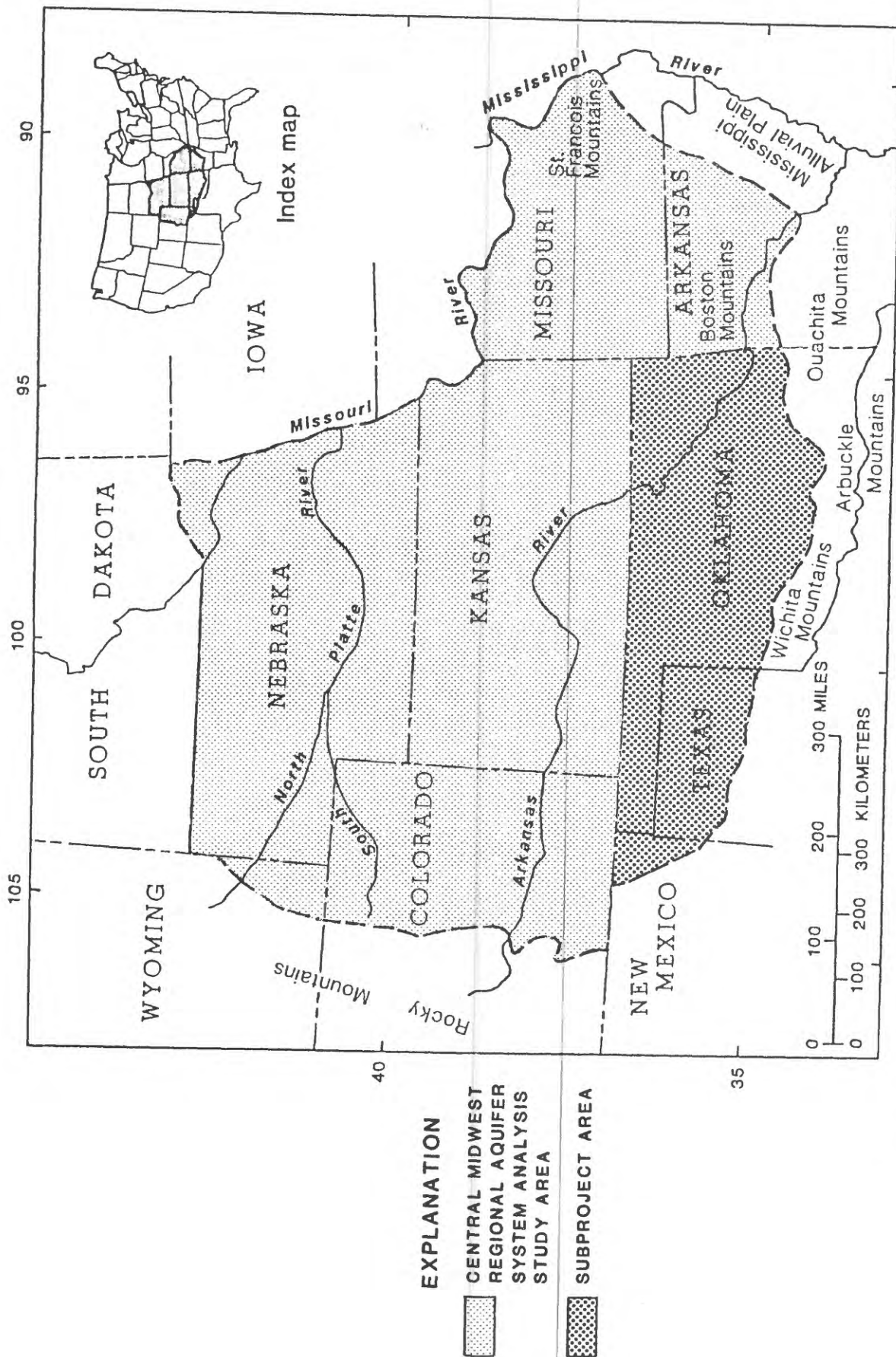
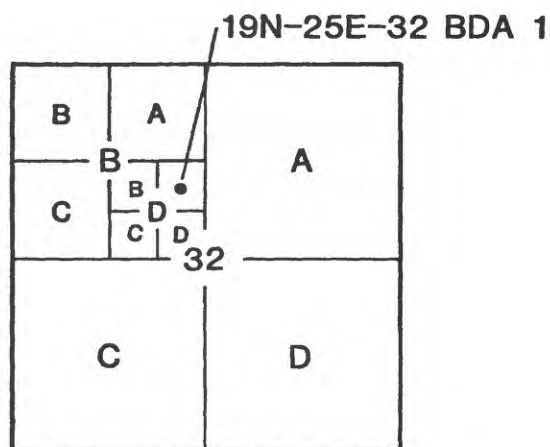


Figure 1.--Location of the Central Midwest Regional Aquifer System Analysis study area and the subproject area.

Explanation of the Site-Numbering System

The location of all data-collection sites is delineated by latitude and longitude to the nearest second. The standard system of describing a location by fractional section, section, township and range is replaced in this report by the system illustrated in the following diagram:



The location of the well indicated by the dot normally would be described as NE1/4 SE1/4 NW1/4, sec. 32, T. 19 N., R. 25 E. The system used in this report indicates quarter-section subdivisions of the section by letters, from largest to smallest. The location of the site is 19N-25E-32 BDA 1, and is referred to as the local number in this report. The final digit (1) is the sequential number of a well within the smallest fractional subdivision.

SELECTION AND SOURCES OF DATA

Wells were selected for inclusion in the geologic-log data base according to the following criteria:

- (1) Completeness of section --Initially, wells that had geologic logs of the most complete stratigraphic section were selected. Ideally, the log showed the entire section between the land surface and the top of the Precambrian basement. However, this could not be achieved for some of the wells, because many geologic logs did not describe the entire depth of the well. Oil and gas companies, who may be interested only in a particular part of the stratigraphic section, produced some of the geologic logs. The logs may not include the upper part of the well, if it had been cased off. In some parts of western Oklahoma, no wells have ever penetrated to the basement. In southwestern Oklahoma, the basement may be buried under more than 40,000 feet of sedimentary rock.
- (2) Quality of data -- The quality of geologic logs varied. The most accurate and complete logs that could be located for wells from each county were selected, but some less accurate and incomplete logs were used if no others were available. In counties where a geologic log that described the entire stratigraphic section was available, only that log was entered into the geologic-log data base. In many counties, the geologic logs from two or three wells were used to describe the complete stratigraphic section. Accurate and complete geologic logs might be available for the deeper parts of the section, but not the upper part. Additional geologic logs were used to describe the upper part of the section.

Geologic logs were compiled from different sources. Some geologic logs were obtained from the WATSTORE files of the U.S. Geological Survey. Additional geologic logs were obtained from commercial geologic-log distribution companies. Some geologic logs were obtained from the files of the Oklahoma City Geological Society. Finally, some of the geologic logs were prepared by the authors of this report, using geophysical logs and knowledge of the stratigraphy of the study area. Generally, geologic logs were prepared from geophysical logs from the same wells. In some instances, geophysical logs from a nearby well were used in the preparation of the geologic log. Occasionally, the well that was selected for preparation of a geologic log did not have geophysical logs, therefore geophysical logs for a well elsewhere in the county were obtained so that at least one geophysical log would be on file for every county. Geophysical logs also were used by the

authors to identify strata in the subsurface and to pick the top and bottom of geologic units.

The locations of each well described in this report is shown in figure 2. All wells from which geologic logs were obtained were given a geologic-unit code corresponding to the geologic unit penetrated by the well (table 2). The geologic-unit codes are the codes that are stored in the WATSTORE file.

The geologic logs are presented in table 3, in the "Supplemental Information" section at the back of the report. The table presents the geologic units penetrated by the wells, the depths to the top and bottom of the geologic unit, and the dominant lithology. A list of geophysical logs for wells that were used to interpret the geologic logs is presented in table 4, in the "Supplemental Information" section at the back of the report. These geophysical logs are available for inspection at the U.S. Geological Survey office in Oklahoma City, Oklahoma.

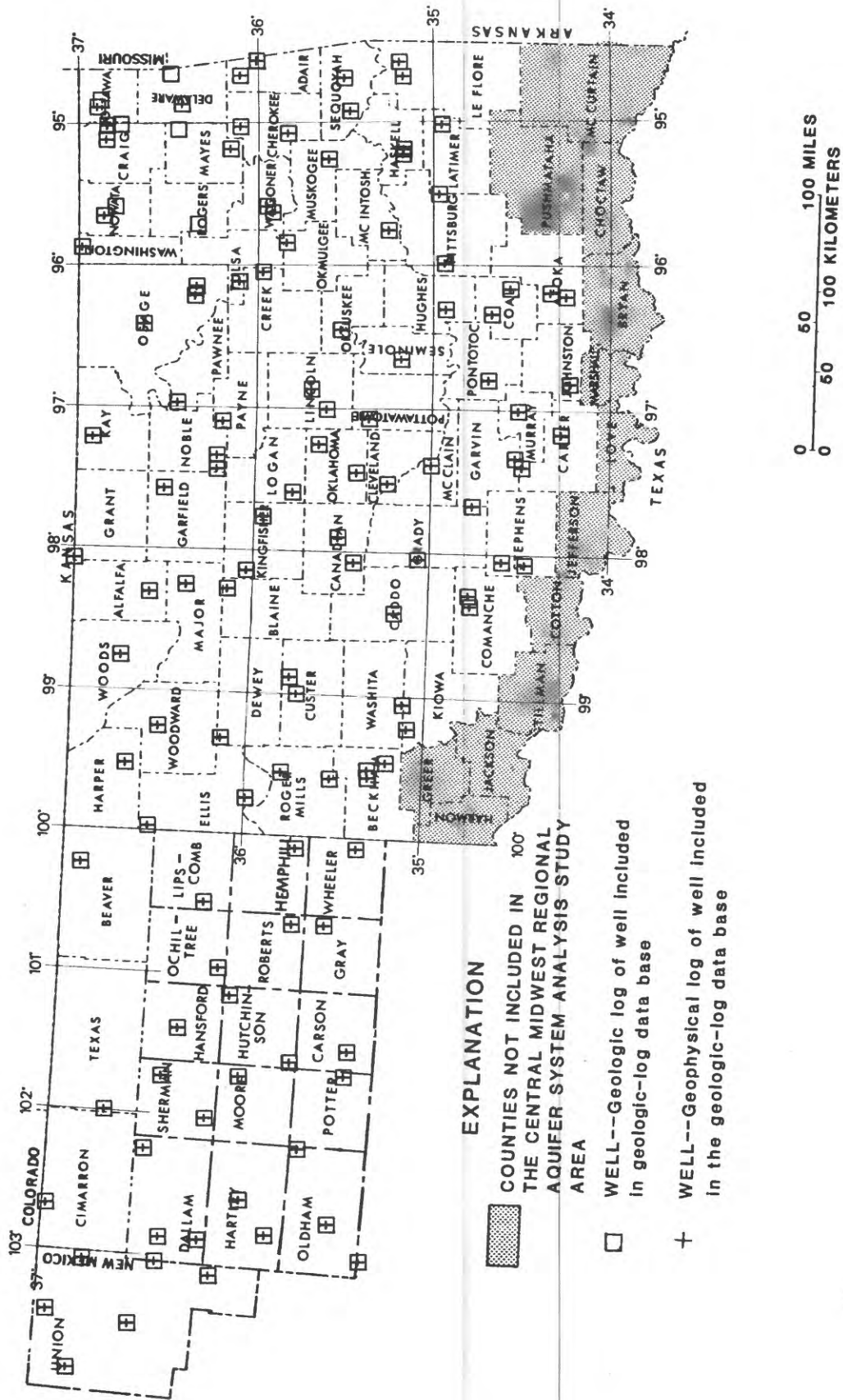


Figure 2.--Location of wells for which geologic logs were included in the geologic-log data base.

Table 2.—Geologic-unit codes, geologic units, and chronostratigraphic units

[—, not applicable. The geologic-unit codes and geologic units have been retrieved from the WATSTORE data file and may not follow the current usage of stratigraphic nomenclature of the U.S. Geological Survey.]

Geologic-unit code	Geologic unit	Erathem	System	Series
110ALVM	Alluvium	Cenozoic	Quaternary	—
112TRCH	High terrace deposits	Cenozoic	Quaternary	Pleistocene
120TRTR	Tertiary System, undifferentiated	Cenozoic	Tertiary	—
121OGLL	Ogallala Formation	Cenozoic	Tertiary	Miocene
211DKOT	Dakota Formation	Mesozoic	Cretaceous	Upper
217CYNN	Cheyenne Sandstone	Mesozoic	Cretaceous	Lower
217K1OW	Kiowa Shale	Mesozoic	Cretaceous	Lower
218ALRS	Antlers Sand	Mesozoic	Cretaceous	Lower
220JRSC	Jurassic System, undifferentiated	Mesozoic	Jurassic	—
221MRSN	Morrison Formation	Mesozoic	Jurassic	Upper
221ENRD	Entrada Sandstone	Mesozoic	Jurassic	Middle
221TDLT	Todilto Limestone	Mesozoic	Jurassic	Middle
230TRSC	Triassic System, undifferentiated	Mesozoic	Triassic	—
231CHNL	Chinle Formation	Mesozoic	Triassic	Upper
231DCKM	Dockum Group	Mesozoic	Triassic	Upper
231SNRS	Santa Rosa Sandstone	Mesozoic	Triassic	Upper
300PLZC	Paleozoic Erathem, undifferentiated	Paleozoic	—	—
310GLRT	Glorieta Sandstone	Paleozoic	Permian	Lower
310NLNS	Nolans Limestone	Paleozoic	Permian	Lower
310PMFV	Permian or Pennsylvanian Systems, undifferentiated	Paleozoic	—	—
310PRMN	Permian System, undifferentiated	Paleozoic	Permian	—
310SGRC	Sangre de Cristo Formation	Paleozoic	Permian	Lower
310W1NG	Wellington Formation	Paleozoic	Permian	Lower
310WTRS	Whitehorse Group	Paleozoic	Permian	Upper
310YESO	Yeso Formation	Paleozoic	Permian	Lower
311DCRK	Day Creek Dolomite	Paleozoic	Permian	Upper
311PRMNU	Upper Permian Series, undifferentiated	Paleozoic	Permian	Upper
313ALBS	Alibates Dolomite	Paleozoic	Permian	Upper
313BLIN	Blaine Gypsum	Paleozoic	Permian	Lower
313DGCK	Dog Creek Shale	Paleozoic	Permian	Lower
313ELRN	El Reno Group	Paleozoic	Permian	Lower
313FLRP	Flowerpot Shale	Paleozoic	Permian	Lower
313GDLF	Guadalupe Series, undifferentiated	Paleozoic	Permian	Upper
313MRLW	Marlow Formation	Paleozoic	Permian	Upper
313RSPG	Rush Springs Formation	Paleozoic	Permian	Upper

Table 2.—Geologic-unit codes, geologic units, and chronostratigraphic units—Continued

Geologic-unit code	Geologic unit	Erathem	System	Series
313SADR	San Andres Limestone	Paleozoic	Permian	Upper
317ADMR	Admire Group	Paleozoic	Permian	Lower
317BRNS	Barneston Limestone	Paleozoic	Permian	Lower
317CMRN	Cimarronian Stage, undifferentiated	Paleozoic	Permian	Lower
317FRRL	Fort Riley Limestone	Paleozoic	Permian	Lower
317HRNG	Herington Limestone	Paleozoic	Permian	Lower
317WFLD	Winfield Limestone	Paleozoic	Permian	Lower
317WRFD	Wrexford Limestone	Paleozoic	Permian	Lower
318CLFK	Clear Fork Group	Paleozoic	Permian	Lower
318GRBR	Garber Sandstone	Paleozoic	Permian	Lower
318HNSS	Hennessey Shale	Paleozoic	Permian	Lower
318LNDR	Leonard Formation	Paleozoic	Permian	Lower
318OSCR	Oscar Sandstone	Paleozoic	Pennsylvanian	Upper
318PSOK	Post Oak Conglomerate	Paleozoic	Permian	Lower
318WCHT	Wichita Group	Paleozoic	Permian	Lower
319ADMR	Admire Group	Paleozoic	Permian	Lower
319COGV	Council Grove Group	Paleozoic	Permian	Lower
319CHSE	Chase Group	Paleozoic	Permian	Lower
319FRCK	Foraker Limestone	Paleozoic	Permian	Lower
319GRNL	Grenola Limestone	Paleozoic	Permian	Lower
319PNTC	Pontotoc Group	Paleozoic	Permian	Lower
319WFMP	Wolfcamp Formation	Paleozoic	Permian	Lower
320PSLV	Pennsylvanian System, undifferentiated	Paleozoic	Pennsylvanian	—
321CNYN	Canyon Group	Paleozoic	Pennsylvanian	Upper
321CSCO	Cisco Group	Paleozoic	Pennsylvanian	Upper
321TRNT	Toronto Member of Oread Limestone	Paleozoic	Pennsylvanian	Upper
322ADA	Ada Formation	Paleozoic	Pennsylvanian	Upper
322DGLS	Douglas Group	Paleozoic	Pennsylvanian	Upper
322DRCK	Deer Creek Limestone	Paleozoic	Pennsylvanian	Upper
322ELGN	Elgin Sandstone	Paleozoic	Pennsylvanian	Upper
322ORED	Oread Limestone	Paleozoic	Pennsylvanian	Upper
322SHWN	Shawnee Group	Paleozoic	Pennsylvanian	Upper
322TOPK	Topeka Limestone	Paleozoic	Pennsylvanian	Upper
322VMO5	Vamoosa Formation	Paleozoic	Pennsylvanian	Upper
322VNSS	Vanoss Formation	Paleozoic	Pennsylvanian	Upper

Table 2.—Geologic-unit codes, geologic units, and chronostratigraphic units—Continued

Geologic-unit code	Geologic unit	Erathem	System	Series
322VRGL	Virgilian Series, undifferentiated	Paleozoic	Pennsylvanian	Upper
322WBNS	Wabunsee Group	Paleozoic	Pennsylvanian	Upper
323BRDL	Barnsdall Formation	Paleozoic	Pennsylvanian	Upper
323CCKB	Checkerboard Limestone	Paleozoic	Pennsylvanian	Upper
323CFVL	Coffeyville Formation	Paleozoic	Pennsylvanian	Upper
323HGSR	Hogshooter Limestone	Paleozoic	Pennsylvanian	Upper
323HXBR	Hoxbar Formation	Paleozoic	Pennsylvanian	Upper
323KSSC	Kansas City Group	Paleozoic	Pennsylvanian	Upper
323LNSG	Lansing Group	Paleozoic	Pennsylvanian	Upper
323MSSR	Missourian Series, undifferentiated	Paleozoic	Pennsylvanian	Upper
323NLBL	Nellie Bly Formation	Paleozoic	Pennsylvanian	Upper
323PLSN	Pleasanton Group	Paleozoic	Pennsylvanian	Upper
323SMNL	Seminole Formation	Paleozoic	Pennsylvanian	Upper
323TLNT	Tallant Formation	Paleozoic	Pennsylvanian	Upper
323WANN	Wann Formation	Paleozoic	Pennsylvanian	Upper
324BLCT	Belle City Limestone	Paleozoic	Pennsylvanian	Upper
324PSLYM	Middle Pennsylvanian Series, undifferentiated	Paleozoic	Pennsylvanian	Middle
324STRN	Strawn Group	Paleozoic	Pennsylvanian	Middle
325ALMN	Altamont Limestone	Paleozoic	Pennsylvanian	Middle
325BGGY	Boggy Shale	Paleozoic	Pennsylvanian	Middle
325BNDR	Bandera Shale	Paleozoic	Pennsylvanian	Middle
325CBNS	Cabaniss Formation	Paleozoic	Pennsylvanian	Middle
325CHRK	Cherokee Group	Paleozoic	Pennsylvanian	Middle
325CLVN	Calvin Sandstone	Paleozoic	Pennsylvanian	Middle
325DEES	Deese Formation	Paleozoic	Pennsylvanian	Middle
325DSMS	Desmoinesian Series, undifferentiated	Paleozoic	Pennsylvanian	Middle
325FRSC	Fort Scott Limestone	Paleozoic	Pennsylvanian	Middle
325HLDV	Holdenville Shale	Paleozoic	Pennsylvanian	Middle
325HRSR	Hartshorne Sandstone	Paleozoic	Pennsylvanian	Middle
325KRBS	Krebs Formation	Paleozoic	Pennsylvanian	Middle
325LBTT	Labette Shale	Paleozoic	Pennsylvanian	Middle
325LNPH	Lenapah Limestone	Paleozoic	Pennsylvanian	Middle
325MACAL	McAlester Shale	Paleozoic	Pennsylvanian	Middle
325MRVN	Marmaton Group	Paleozoic	Pennsylvanian	Middle
325NOWT	Nowata Shale	Paleozoic	Pennsylvanian	Middle

Table 2.—Geologic-unit codes, geologic units, and chronostratigraphic units—Continued

Geologic-unit code	Geologic unit	Erathem	System	Series
325PWNE	Pawnee Limestone	Paleozoic	Pennsylvanian	Middle
325SVNN	Savanna Sandstone	Paleozoic	Pennsylvanian	Middle
325WTMK	Wetumka Shale	Paleozoic	Pennsylvanian	Middle
325WOK	Wewoka Formation	Paleozoic	Pennsylvanian	Middle
326ATCK	Atoka Formation	Paleozoic	Pennsylvanian	Middle
326ATOK	Atokan Series, undifferentiated	Paleozoic	Pennsylvanian	Middle
327UNVL	Union Valley Formation	Paleozoic	Pennsylvanian	Lower
328DCKH	Dornick Hills Formation	Paleozoic	Pennsylvanian	Lower
328MRW	Morrowan Series, undifferentiated	Paleozoic	Pennsylvanian	Lower
328SPRG	Springer Group	Paleozoic	Pennsylvanian	Lower
328WPK	Wapanucka Limestone	Paleozoic	Pennsylvanian	Lower
330BOON	Boone Formation	Paleozoic	Mississippian	Upper
330CTNG	Chattanooga Shale	Paleozoic	Mississippian	—
330MSSP	Mississippian System, undifferentiated	Paleozoic	Mississippian	—
331BOON	Boone Formation	Paleozoic	Mississippian	Upper
331PTKN	Pitkin Limestone	Paleozoic	Mississippian	Upper
332CSTR	Chesterian Series, undifferentiated	Paleozoic	Mississippian	Upper
332FTVL	Fayetteville Shale	Paleozoic	Mississippian	Upper
333DLCK	Delaware Creek Member of Caney Shale	Paleozoic	Mississippian	Upper
333MRMC	Meramecian Series, undifferentiated	Paleozoic	Mississippian	Upper
333SGV	Ste. Genevieve Limestone	Paleozoic	Mississippian	Upper
333SPRG	Spergen Limestone	Paleozoic	Mississippian	Upper
333STLS	St. Louis Limestone	Paleozoic	Mississippian	Upper
333WRSW	Warsaw Limestone	Paleozoic	Mississippian	Upper
337STJO	St. Joe Limestone	Paleozoic	Mississippian	Lower
338FRGL	Fern Glen Limestone	Paleozoic	Mississippian	Lower
338OGKK	Osagean-Kinderhookian Series, undifferentiated	Paleozoic	Mississippian	Lower
338OSGE	Osagean Series, undifferentiated	Paleozoic	Mississippian	Lower
338RSPG	Reeds Spring Limestone	Paleozoic	Mississippian	Lower
338SCMR	Sycamore Limestone	Paleozoic	Mississippian	Lower
338SRCK	Short Creek Oolite	Paleozoic	Mississippian	Lower
339KDRK	Kinderhookian Series, undifferentiated	Paleozoic	Mississippian	Lower
339NRTV	Northview Shale	Paleozoic	Mississippian	Lower
340HNTN	Hunton Group	Paleozoic	Devonian	Lower
340MSNR	Misener Sandstone Member of Chattanooga Shale	Paleozoic	Devonian	Lower

Table 2.—Geologic-unit codes, geologic units, and chronostratigraphic units—Continued

Geologic-unit code	Geologic unit	Erathem	System	Series
341CTNG	Chattanooga Shale	Paleozoic	Devonian	Upper
341WDFD	Woodford Chert	Paleozoic	Devonian	Upper
344HNTN	Hunton Group	Paleozoic	Devonian	Lower
357CANL	Chimney Hill Dolomite	Paleozoic	Silurian	Lower
361FRVL	Fernvale Limestone	Paleozoic	Ordovician	Upper
361SLVN	Sylvan Shale	Paleozoic	Ordovician	Upper
361VLOL	Viola Limestone	Paleozoic	Ordovician	Upper
361VKMK	Viola Limestone	Paleozoic	Ordovician	Upper
364BRGN	Burgen Sandstone	Paleozoic	Ordovician	Middle
364BRMD	Bromide Formation	Paleozoic	Ordovician	Middle
364EVRN	Everton Formation	Paleozoic	Ordovician	Middle
364JONS	Joins Formation	Paleozoic	Ordovician	Middle
364MCLS	McLish Formation	Paleozoic	Ordovician	Middle
364OLCK	Oil Creek Formation	Paleozoic	Ordovician	Middle
364SMPS	Simpson Group	Paleozoic	Ordovician	Middle
364TPCK	Tulip Creek Formation	Paleozoic	Ordovician	Middle
364TYNR	Tyner Formation	Paleozoic	Ordovician	Middle
367ABCK	Arbuckle Group	Paleozoic	Ordovician	Lower
367CRUF	Cotter and Jefferson City Dolomites	Paleozoic	Ordovician	Lower
367CTTR	Cotter Dolomite	Paleozoic	Ordovician	Lower
367ELBG	Ellenberger Group	Paleozoic	Ordovician	Lower
367GNTR	Gunter Sandstone	Paleozoic	Ordovician	Lower
367GSCD	Gasconade Dolomite	Paleozoic	Ordovician	Lower
367GSCDL	Lower Gasconade Dolomite	Paleozoic	Ordovician	Lower
367GSCDU	Upper Gasconade Dolomite	Paleozoic	Ordovician	Lower
367RBOX	Roubidoux Formation	Paleozoic	Ordovician	Lower
368CNDN	Canadian Series, undifferentiated	Paleozoic	Ordovician	Lower
368JFRC	Jefferson City Dolomite	Paleozoic	Ordovician	Lower
368PWLL	Powell Dolomite	Paleozoic	Ordovician	Lower
368SCRK	Swan Creek Member of Cotter Dolomite	Paleozoic	Ordovician	Lower
370CMBR	Cambrian System, undifferentiated	Paleozoic	Cambrian	—
371BNTR	Bonnetterre Formation	Paleozoic	Cambrian	Upper
371DRBD	Derby-Doerun Dolomites	Paleozoic	Cambrian	Upper
371EMCP	Eminence and Potosi Dolomites	Paleozoic	Cambrian	Upper
371EMNC	Eminence Dolomite	Paleozoic	Cambrian	Upper

Table 2.—Geologic-unit codes, geologic units, and chronostratigraphic units—Continued

Geologic-unit code	Geologic unit	Erathem	System	Series
371GRNT	Granite wash	Paleozoic	Cambrian	Upper
371LMTT	Lamotte Sandstone	Paleozoic	Cambrian	Upper
371REGN	Reagan Sandstone	Paleozoic	Cambrian	Upper
400GRNT	Precambrian granite	Precambrian	—	—
400PCMB	Precambrian Erathem, undifferentiated	Precambrian	—	—

SUPPLEMENTAL INFORMATION

The geologic logs that were prepared from wells in the study area and stored in the geologic-log data base are presented in table 3. The wells are grouped by county for Oklahoma, Texas, and New Mexico. General information about each well is presented in a header, which is followed by the geologic log.

The table header contains the following information:

Latitude--latitude of the well in degrees, minutes, and seconds.

Longitude--longitude of the well in degrees, minutes, and seconds.

Owner--owner of the well at the time the log was prepared.

Local number--system for describing the tract of land where the well is located. In Oklahoma and New Mexico, this system is a version of the standard system of public land divisions (see the section "Explanation of the Site-numbering System"); in Texas, the local number is the standard system for describing public land divisions.

Use of site--an abbreviation for the principal use of the site; abbreviations are shown below:

- O - Observation well
- P - Oil or gas well
- T - Test well
- U - Unused well
- W - Withdrawal (water supply) well.

Completion date--date well completed, if known.

Altitude--altitude of land surface at the well.

Depth of well--total depth of the well.

For each well in table 3, the header information is followed by the geologic log. Information from the geologic log includes the following:

Geologic-unit code--corresponds to the geologic unit penetrated by the wells; these codes are stored in the WATSTORE file. The term "geologic unit," for purposes of this report, is a general term for any geologic series, group, formation, or member.

Depth to top--the depth in feet, from the land surface to the top of the geologic unit; if the geologic log for a well did not begin at the land surface, the depth to the top of the uppermost geologic unit identified in the well is the depth to the beginning of the geologic log and is not necessarily the top of the geologic unit.

Depth to bottom--depth in feet to the bottom of the geologic unit; generally left blank for the lowermost geologic unit, indicating that the well did not penetrate the full thickness of the geologic unit.

Lithology--an abbreviation for the dominant lithology of the interval between the top of the geologic unit and the bottom of the geologic unit; a list of abbreviations is shown below:

ANDR	-	anhydrite
ARKS	-	arkose
CGLM	-	conglomerate
CHRT	-	chert
CLSN	-	claystone
COAL	-	coal
DLMT	-	dolomite
DMSH	-	dolomite and shale
EVPR	-	evaporite
GPSM	-	gypsum
GRNT	-	granite
IGNS	-	igneous (undifferentiated)
LMDM	-	limestone and dolomite
LMSD	-	limestone and sandstone
LMSH	-	limestone and shale
LMSN	-	limestone
QRTZ	-	quartzite
RYLT	-	rhyolite
SAND	-	sand
SDGL	-	sand and gravel
SDMN	-	sedimentary (undifferentiated)
SDSL	-	sandstone and shale
SGVC	-	sand, gravel, and clay
SHLE	-	shale
SLSH	-	siltstone and shale
SLSN	-	siltstone
SNDS	-	sandstone.

For a few wells included in table 3, a limited number of the lithology fields are left blank. Where this occurs, the lithology could not be reliably determined for that particular stratigraphic interval.

Some of the geologic logs in table 3 show geologic units which are repeated, indicating that more than one dominant lithology was observed within the same geologic unit. For example, in Alfalfa County, Oklahoma, for a well located at 24N-11W-12 DDA, the Wellington Formation (310WLNG) is listed twice. For the depth interval from 1,190 to 1,535 feet below land surface, the dominant lithology in the Wellington Formation was shale. For the depth interval from 1,535 to 2,308 feet below land surface, the dominant lithology was anhydrite.

A list of geophysical logs for wells that were used as part of the process of preparing and interpreting the geologic logs is presented in table 4. The table lists the type of logs that are available and the interval that was logged. The table is grouped by State and alphabetically by county name. The header information in this table is identical to table 3.

Table 3.--Geologic logs for wells
in the study area

Adair County, Oklahoma

Latitude: 355931 Longitude: 943400
Owner: WESTVILLE OK Local number: 18N-26E-31 DAD 1
Use of site: W Completion date: 08/07/1981
Altitude: 1,123 Depth of well: 1,500

Geologic- unit code	Depth to top	Depth to bottom	Lithology
330MSSP	10	248	LMSN
341CTNG	248	300	SHLE
364SMPS	300	475	LMSN
368PWLL	475	630	LMSN
367ABCK	630	1,185	DLMT
367RBDX	1,185	1,485	DLMT
367GSCD	1,485		DLMT

Adair County, Oklahoma

Latitude: 360507 Longitude: 944022
Owner: ARTIE BROWN Local number: 19N-25E-32 BDA 1
Use of site: Completion date:
Altitude: 1,070 Depth of well: 1,430

Geologic- unit code	Depth to top	Depth to bottom	Lithology
331BOON	0	289	LMSN
341CTNG	289	364	SHLE
364BRGN	364	484	SAND
368CNDN	484	1,395	DLMT
400PCMB	1,395		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Alfalfa County, Oklahoma

Latitude: 363402 Longitude: 981901
Owner: OLSON DRLG Local number: 24N-11W-12 DDA 1
Use of site: T Completion date: 09/05/1942
Altitude: 1,379 Depth of well: 7,300

Geologic- unit code	Depth to top	Depth to bottom	Lithology
31OPRMN	40	1,190	SHLE
31OWLNG	1,190	1,535	SHLE
31OWLNG	1,535	2,308	ANDR
31ONLNS	2,308	2,385	LMSH
317WFLD	2,385	2,472	LMSH
317BRNS	2,472	2,686	LMSH
317WRFD	2,686	2,744	LMSN
319CCGV	2,744	3,172	LMSH
317ADMR	3,172	3,565	LMSH
322WBNS	3,565	4,140	SHLE
322TOPK	4,140	4,206	LMSN
322SHWN	4,206	4,593	SHLE
322VMOS	4,593	4,720	LMSH
322DGLS	4,720	4,884	SHLE
323LNSG	4,884	5,086	SNDS
323KSSC	5,086	5,274	SHLE
323MSSR	5,274	5,285	LMSN
323MSSR	5,285	5,477	SDSL
323HGSR	5,477	5,510	LMSN
323MSSR	5,510	5,665	SHLE
323PLSN	5,665	5,733	SHLE
325MRMN	5,733	5,903	LMSN
325DSMS	5,903	6,145	SHLE
332CSTR	6,145	6,230	SHLE
333MRMC	6,230	6,475	LMSN
338OSGE	6,475	6,854	LMSN
339KDRK	6,854	6,912	LMSH
341WDFD	6,912	6,960	SHLE
340MSNR	6,960	6,965	SNDS
361SLVN	6,965	7,054	SHLE
361VIOL	7,054	7,100	LMSN
364BRMD	7,100		LMSD

Table 3.--Geologic logs for wells in the study
area--Continued

Atoka County, Oklahoma

Latitude: 342016 Longitude: 961130
Owner: LEWIS Local number: 02S-11E-31 CA 1
Use of site: P Completion date: 03/15/1958
Altitude: 599 Depth of well: 11,833

Geologic- unit code	Depth to top	Depth to bottom	Lithology
218ALRS	50	80	SHLE
326ATCK	80	590	SHLE
326ATCK	590	670	SNDS
326ATCK	670	980	SHLE
326ATCK	980	2,440	SHLE
326ATCK	2,440	2,940	SHLE
326ATCK	2,940	3,810	SHLE
326ATCK	3,810	6,630	SHLE
326ATCK	6,630	6,700	SDSL
326ATCK	6,700	7,000	SHLE
326ATCK	7,000	7,665	SHLE
328WPCK	7,665	7,970	LMSH
328WPCK	7,970	8,400	SHLE
328WPCK	8,400	9,010	SHLE
333DLCK	9,010	9,240	LMSN
338OGKK	9,240	9,390	LMSN
341WDFD	9,390	9,660	SHLE
340HNTN	9,660	9,715	LMSN
357CMNL	9,715	9,790	LMSN
361SLVN	9,790	9,925	SHLE
361VIOL	9,925	10,200	LMSN
364SMPS	10,200	10,710	LMDM
364SMPS	10,710	10,820	DLMT
364SMPS	10,820	10,880	SNDS
364SMPS	10,880	10,980	DMSH
364SMPS	10,980	11,210	LMDM
364SMPS	11,210	11,580	SNDS
367ABCK	11,580		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Atoka County, Oklahoma

Latitude: 341450	Longitude: 961304
Owner: CROSSLAND	Local number: 03S-10E-35 DD 1
Use of site: P	Completion date: 10/08/1973
Altitude: 512	Depth of well: 8,125

Geologic- unit code	Depth to top	Depth to bottom	Lithology
218ALRS	0	120	SNDS
326ATCK	120	680	SHLE
326ATCK	680	810	SDSL
326ATCK	810	1,440	SHLE
326ATCK	1,440	1,780	SNDS
326ATCK	1,780	1,990	SHLE
328WPCK	1,990	2,095	LMSH
328WPCK	2,095	3,320	SHLE
333DLCK	3,320	3,500	SHLE
338OGKK	3,500	3,720	LMSN
341WDFD	3,720	3,820	SHLE
367ABCK	3,820	3,850	DLMT
367ABCK	3,850	3,900	SNDS
367ABCK	3,900	5,630	LMDM
367ABCK	5,630	5,670	SNDS
367ABCK	5,670	6,000	DLMT
367ABCK	6,000	7,920	DLMT
371REGN	7,920	7,980	SNDS
400PCMB	7,980		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Beaver County, Oklahoma

Latitude: 365335 Longitude: 1001507
Owner: PURE OIL Local number: 05N-26ECM-16 CDD 1
Use of site: T Completion date: 12/30/1951
Altitude: 2,597 Depth of well: 9,240

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	250	SDGL
310PRMN	250	480	SHLE
313BLIN	480	560	GPSM
313FLRP	560	910	EVPR
310PRMN	910	1,445	SHLE
317CMRN	1,445	1,700	ANDR
318LNRD	1,700	2,035	SHLE
310WLNG	2,035	2,880	ANDR
319WFMP	2,880	4,218	LMSN
322VRGL	4,218	4,992	SHLE
320PSLV	4,992	6,604	LMSN
328MRRW	6,604	6,760	LMSH
328MRRW	6,760	6,810	SNDS
332CSTR	6,810	7,055	LMSN
332CSTR	7,055	7,200	LMSH
330MSSP	7,200	8,210	LMSN
339KDRK	8,210	8,492	DMSH
340HNTN	8,492	8,670	LMSH
361VIOL	8,670	8,910	LMDM
364SMPS	8,910	9,000	SDSL
367ABCK	9,000		DLMT

Beckham County, Oklahoma

Latitude: 351225 Longitude: 992823
Owner: CARTER Local number: 09N-22W-36 DDB 1
Use of site: P Completion date: 05/22/1951
Altitude: 1,799 Depth of well: 3,100

Geologic- unit code	Depth to top	Depth to bottom	Lithology
310PRMN	259	380	SNDS
310PRMN	380	530	GPSM
310PRMN	530	1,180	SHLE
310PRMN	1,180	1,420	SHLE
310PRMN	1,420	2,015	SHLE
310PRMN	2,015	2,095	SHLE
310WLNG	2,095	2,722	SHLE
310PRMN	2,722		ARKS

Table 3.--Geologic logs for wells in the study
area--Continued

Beckham County, Oklahoma

Latitude: 351835	Longitude: 993142
Owner: LONE STAR	Local number: 10N-22W-28 DCA 1
Use of site: P	Completion date: 10/20/1972
Altitude: 1,953	Depth of well: 30,000

Geologic- unit code	Depth to top	Depth to bottom	Lithology
321CSCO	5,160	5,900	SHLE
321CSCO	5,900	7,180	LMSH
321CSCO	7,180	8,060	SHLE
321CSCO	8,060	8,750	ARKS
321CSCO	8,750	9,040	SHLE
323HXBR	9,040	9,320	SDSL
323HXBR	9,320	9,740	SDSL
323HXBR	9,740	10,570	ARKS
323HXBR	10,570	10,920	SDSL
323HXBR	10,920	14,470	ARKS
320PSLV	14,470	14,630	CGLM
320PSLV	14,630	17,700	LMSH
328MRRW	17,700	21,320	SHLE
328MRRW	21,320	23,195	SHLE
332CSTR	23,195	25,630	SHLE
333MRMC	25,630	28,130	LMSH
341WDFD	28,130	28,480	SHLE
341WDFD	28,480	28,610	LMSN
340HNTN	28,610	28,740	LMSN
340HNTN	28,740	29,565	LMSN
357CMNL	29,565	29,770	LMSN
361SLVN	29,770	29,965	SHLE
361VIOL	29,965		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Beckham County, Oklahoma

Latitude: 351816 Longitude: 993453
Owner: CARTER Local number: 10N-23W-36 ABA 1
Use of site: P Completion date: 09/28/1950
Altitude: 1,828 Depth of well: 10,654

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313ELRN	0	1,010	SNDS
313BLIN	1,010	1,430	ANDR
313ELRN	1,430	2,500	SHLE
318WCHT	2,500	3,020	SHLE
310PRMN	3,020	4,270	SHLE
321CSCO	4,270	4,585	DMSH
321CSCO	4,585	4,835	LMSH
321CSCO	4,835	6,685	SHLE
321CSCO	6,685	6,950	LMSN
321CSCO	6,950	7,380	SHLE
321CSCO	7,380	8,280	ARKS
321CSCO	8,280	8,560	LMSH
321CSCO	8,560	9,060	ARKS
323HXBR	9,060	9,665	ARKS
323HXBR	9,665		ARKS

Table 3.--Geologic logs for wells in the study
area--Continued

Blaine County, Oklahoma

Latitude: 360746 Longitude: 981658
Owner: SUPERIOR Local number: 19N-10W-17 AAA 1
Use of site: P Completion date: 01/01/1945
Altitude: 1,200 Depth of well: 11,008

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313FLRP	0	70	SHLE
318HNSS	70	1,310	SHLE
310WLNG	1,310	1,667	SHLE
310WLNG	1,667	2,482	ANDR
310NLNS	2,482	2,546	DMSH
317WFLD	2,546	2,614	LMSN
319CHSE	2,614	2,640	SHLE
317BRNS	2,640	2,790	LMSH
319CHSE	2,790	2,807	SHLE
317WRFD	2,807	2,896	LMSN
319CCGV	2,896	2,982	SHLE
319CCGV	2,982	3,074	LMSH
319CCGV	3,074	3,166	SHLE
319GRNL	3,166	3,220	LMSH
319CCGV	3,220	3,327	SHLE
319CCGV	3,327	3,428	LMSN
319ADMR	3,428	4,028	LMSH
322WBNS	4,028	4,100	LMSN
322WBNS	4,100	4,208	LMSH
322WBNS	4,208	4,417	LMSN
322WBNS	4,417	4,570	SHLE
322TOPK	4,570	4,624	LMSN
322SHWN	4,624	4,752	SHLE
322SHWN	4,752	4,832	LMSN
322SHWN	4,832	5,264	SHLE
322ORED	5,264	5,395	LMSN
322DGLS	5,395	5,620	SHLE
323LNSG	5,620	5,737	SNDS
323KSSC	5,737	6,158	SHLE
323MSSR	6,158	6,267	SNDS
323MSSR	6,267	6,484	SHLE
323HGSR	6,484	6,487	LMSN
323MSSR	6,487	6,713	SHLE
323PLSN	6,713	6,820	SHLE
325MRMN	6,820	7,069	LMSN
325CBNS	7,069	7,360	SHLE
332CSTR	7,360	7,460	LMSH
332CSTR	7,460	7,628	SHLE
332CSTR	7,628	7,791	LMSH

Table 3.--Geologic logs for wells in the study
area--Continued

Blaine County, Oklahoma--Continued

Latitude: 360746	Longitude: 981658
Owner: SUPERIOR	Local number: 19N-10W-17 AAA 1
Use of site: P	Completion date: 01/01/1945
Altitude: 1,200	Depth of well: 11,008

Geologic- unit code	Depth to top	Depth to bottom	Lithology
332CSTR	7,791	7,926	SHLE
333MRMC	7,926	8,525	LMSN
339KDRK	8,525	8,533	SHLE
341WDFD	8,533	8,580	SHLE
340HNTN	8,580	8,616	DLMT
340HNTN	8,616	8,870	LMSH
361SLVN	8,870	8,978	SHLE
361VIOL	8,978	9,040	LMSN
364BRMD	9,040	9,289	LMSH
364BRMD	9,289	9,480	SNDS
364SMPS	9,480	9,721	SDSL
367ABCK	9,721		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Caddo County, Oklahoma

Latitude: 351119 Longitude: 982556
Owner: SUPERIOR Local number: 08N-12W-11 ABB 1
Use of site: P Completion date: 01/01/1947
Altitude: 1,440 Depth of well: 17,823

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313RSPG	0	250	SNDS
313MRLW	250	390	SNDS
313ELRN	390	617	SHLE
313FLRP	617	780	SHLE
310GLRT	780	1,076	SDSL
318HNSS	1,076	2,225	SHLE
318GRBR	2,225	2,850	SHLE
310WLNG	2,850	3,480	SHLE
310WLNG	3,480	3,894	ANDR
319CHSE	3,894	4,000	DMSH
319CHSE	4,000	4,210	SHLE
319CHSE	4,210	4,230	LMSN
319CHSE	4,230	4,254	DMSH
317WRFD	4,254	4,350	LMSH
319CCGV	4,350	4,431	SDSL
319CCGV	4,431	4,616	LMSH
319CCGV	4,616	4,853	SDSL
319ADMR	4,853	5,805	SDSL
322WBNS	5,805	6,880	SDSL
322SHWN	6,880	7,850	SLSH
322SHWN	7,850	8,207	SHLE
322SHWN	8,207	8,390	SNDS
322DGLS	8,390	8,465	SLSN
322DGLS	8,465	8,524	SHLE
323LNSG	8,524	8,794	SNDS
323KSSC	8,794	9,120	SLSH
323KSSC	9,120	9,360	SHLE
323MSSR	9,360	9,568	SHLE
323MSSR	9,568	9,670	SDSL
323MSSR	9,670	9,750	SHLE
323MSSR	9,750	9,850	SNDS
323MSSR	9,850	9,920	SHLE
323HGSR	9,920	9,994	SLSN
323MSSR	9,994	10,420	SDSL
323MSSR	10,420	10,640	SHLE
323PLSN	10,640	10,765	SHLE
325DEES	10,765	11,075	SHLE
325DEES	11,075	11,216	SNDS
325DEES	11,216	11,310	SLSN

Table 3.--Geologic logs for wells in the study
area--Continued

Caddo County, Oklahoma--Continued

Latitude: 351119	Longitude: 982556
Owner: SUPERIOR	Local number: 08N-12W-11 ABB 1
Use of site: P	Completion date: 01/01/1947
Altitude: 1,440	Depth of well: 17,823

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325DEES	11,310	12,055	SHLE
325DEES	12,055	12,468	SLSH
325DEES	12,468	12,687	SHLE
325DEES	12,687	12,792	SLSN
325DEES	12,792	13,087	SHLE
326ATCK	13,087	13,310	SHLE
326ATCK	13,310	13,468	SLSH
326ATCK	13,468	14,360	SHLE
326ATCK	14,360	15,510	SHLE
328MRRW	15,510	15,875	SHLE
328MRRW	15,875	16,020	SLSN
328MRRW	16,020	16,257	SDSL
328SPRG	16,257	16,412	SNDS
328SPRG	16,412	16,606	SHLE
328SPRG	16,606	16,722	SNDS
328SPRG	16,722	16,925	SHLE
328SPRG	16,925	17,065	SNDS
328SPRG	17,065	17,566	SHLE
328SPRG	17,566	17,700	SNDS
328SPRG	17,700		SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Canadian County, Oklahoma

Latitude: 352521 Longitude: 980450
Owner: PETREE Local number: 11N-08W-18 DD 1
Use of site: P Completion date:
Altitude: 1,310 Depth of well: 11,177

Geologic- unit code	Depth to top	Depth to bottom	Lithology
110ALVM	0	30	SGVC
313ELRN	30	670	SDSL
318HNSS	670	1,331	SHLE
318HNSS	1,331	1,555	SDSL
318GRBR	1,555	2,382	SDSL
310WLNG	2,382	2,687	SHLE
310WLNG	2,687	3,290	SHLE
319CHSE	3,290	3,306	LMSN
319CHSE	3,306	3,478	SHLE
317BRNS	3,478	3,614	LMSN
319CHSE	3,614	3,649	SHLE
317WRFD	3,649	3,733	SHLE
319CCGV	3,733	3,863	SHLE
319CCGV	3,863	4,035	SHLE
319CCGV	4,035	4,240	SDSL
319ADMR	4,240	5,190	SDSL
322WBNS	5,190	5,339	SHLE
322WBNS	5,339	5,967	SHLE
322SHWN	5,967	7,498	SDSL
322DGLS	7,498	7,844	SHLE
323LNSG	7,844	8,063	SNDS
323KSSC	8,063	8,507	SDSL
323MSSR	8,507	8,826	SHLE
323HGSR	8,826	8,872	SHLE
323MSSR	8,872	9,008	SDSL
323MSSR	9,008	9,240	SHLE
323PLSN	9,240	9,370	SHLE
325MRMN	9,370	9,820	SHLE
325MRMN	9,820	9,900	LMSN
325MRMN	9,900	10,000	SHLE
325MRMN	10,000	10,076	LMSN
325CBNS	10,076	10,562	SHLE
326ATCK	10,562	10,775	SHLE
332CSTR	10,775		LMSN

Table 3.--Geologic logs for wells in the study area--Continued

Canadian County, Oklahoma

Latitude: 353053 Longitude: 975418
 Owner: HUCHTEMAN Local number: 12N-07W-14 DAB 1
 Use of site: P Completion date:
 Altitude: 1,344 Depth of well: 11,700

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313GDLP	0	30	SHLE
310PRMN	30	1,150	SHLE
310PRMN	1,150	1,530	SDSL
310PRMN	1,530	2,580	SHLE
310PRMN	2,580	2,750	SHLE
310PRMN	2,750	4,450	SHLE
322WBNS	4,450	4,990	SHLE
322VRGL	4,990	6,080	SDSL
323MSSR	6,080	6,590	SHLE
323MSSR	6,590	6,700	LMSN
323MSSR	6,700	7,920	SHLE
325MRMN	7,920	8,314	SHLE
325FRSC	8,314	8,430	LMSN
325CHRK	8,430	8,820	SHLE
332CSTR	8,820	8,906	SHLE
330MSSP	8,906	8,950	DLMT
330MSSP	8,950	9,080	SHLE
330MSSP	9,080	9,120	LMSN
330MSSP	9,120	9,220	SHLE
330MSSP	9,220	9,320	LMSN
341WDFD	9,320	9,429	SHLE
340MSNR	9,429	9,430	SNDS
340HNTN	9,430	9,630	LMDM
357CMNL	9,630	9,725	LMSN
361SLVN	9,725	9,835	SHLE
361FRVL	9,835	9,850	LMSN
361VIOL	9,850	10,150	LMSN
364SMPS	10,150	10,284	LMDM
364BRMD	10,284	10,615	SNDS
364MCLS	10,615	10,905	SNDS
364OLCK	10,905	11,050	SHLE
367ABCK	11,050		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Carter County, Oklahoma

Latitude: 342921 Longitude: 972402
Owner: MEEKS Local number: 01S-02W-10 BBD 1
Use of site: P Completion date: 03/22/1966
Altitude: 938 Depth of well: 3,018

Geologic- unit code	Depth to top	Depth to bottom	Lithology
319PNTC	340	410	CGLM
364OLCK	410	800	SHLE
364OLCK	800	1,000	LMSH
367ABCK	1,000		LMDM

Carter County, Oklahoma

Latitude: 341618 Longitude: 971010
Owner: WHITE EAGLE Local number: 03S-01E-26 BAD 1
Use of site: P Completion date: 10/31/1977
Altitude: 763 Depth of well: 16,950

Geologic- unit code	Depth to top	Depth to bottom	Lithology
361VIOL	4,090	4,900	LMSN
364BRMD	4,900	5,300	LMSH
364TPCK	5,300	5,850	LMSH
364OLCK	5,850	6,520	SHLE
364JONS	6,520	6,840	LMSN
367ABCK	6,840		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Cherokee County, Oklahoma

Latitude: 354856 Longitude: 950444
Owner: PINE Local number: 16N-21E-33 DCA 1
Use of site: T Completion date: 01/01/1962
Altitude: 690 Depth of well: 2,093

Geologic- unit code	Depth to top	Depth to bottom	Lithology
341CTNG	62	113	SHLE
364SMPS	113	379	SNDS
368PWLL	379	660	DLMT
367CTTR	660	1,104	DLMT
368JFRC	1,104	1,298	DLMT
367RBDX	1,298	1,515	DLMT
367GSCDU	1,515	1,592	DLMT
367GSCDL	1,592	1,757	DLMT
367GNTR	1,757	1,820	SNDS
371EMCP	1,820	1,925	DLMT
371BNTR	1,925	2,000	DLMT
371LMTT	2,000	2,078	SNDS
400PCMB	2,078		GRNT

Cherokee County, Oklahoma

Latitude: 360502 Longitude: 950152
Owner: M F OIL CO Local number: 19N-21E-35 AD 1
Use of site: T Completion date: 01/01/1961
Altitude: 800 Depth of well: 1,935

Geologic- unit code	Depth to top	Depth to bottom	Lithology
367CTTR	460	807	DLMT
368JFRC	807	985	DLMT
367RBDX	985	1,180	DLMT
367GSCD	1,180	1,525	DLMT
371EMNC	1,525	1,660	DLMT
371BNTR	1,660	1,730	DLMT
371LMTT	1,730	1,750	SNDS
371GRNT	1,750	1,800	ARKS

Table 3.--Geologic logs for wells in the study
area--Continued

Cimarron County, Oklahoma

Latitude: 365818 Longitude: 1024134
Owner: SUN CO. Local number: 06N-03E-24 CB 1
Use of site: T Completion date: 06/24/1954
Altitude: 4,305 Depth of well: 5,904

Geologic- unit code	Depth to top	Depth to bottom	Lithology
211DKOT	0	96	SNDS
217KIOW	96	142	SHLE
217CYNN	142	220	SNDS
221MRSN	220	492	SHLE
221ENRD	492	520	SNDS
231DCKM	520	875	SDSL
311DCRK	875	1,008	ANDR
311PRMNU	1,008	1,263	SHLE
313BLIN	1,263	1,470	ANDR
310GLRT	1,470	1,570	SNDS
310PRMN	1,570	2,960	SLSH
319WFMP	2,960	3,468	SHLE
320PSLV	3,468	3,890	LMSH
328MRRW	3,890	4,470	SDSL
328MRRW	4,470	4,850	SHLE
333SGVV	4,850	4,910	LMSN
333STLS	4,910	5,060	LMSN
333SPRG	5,060	5,140	DLMT
333WRSW	5,140	5,203	DLMT
338OSGE	5,203	5,240	DLMT
339KDRK	5,240	5,260	DMSH
361VIOL	5,260	5,305	DLMT
364SMPS	5,305	5,332	SNDS
367ABCK	5,332	5,885	DLMT
400PCMB	5,885		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Cleveland County, Oklahoma

Latitude: 351432 Longitude: 973138
Owner: ROSE Local number: 09N-03W-21 BCA 1
Use of site: P Completion date:
Altitude: 1,127 Depth of well: 10,590

Geologic- unit code	Depth to top	Depth to bottom	Lithology
112TRRCH	0	30	SAND
318LNRD	30	1,570	SDSL
319WFMP	1,570	2,860	SDSL
322VRGL	2,860	4,407	SDSL
322VRGL	4,407	4,470	SNDS
322VRGL	4,470	4,850	SDSL
322VRGL	4,850	4,890	LMSN
322VRGL	4,890	5,250	SDSL
322VRGL	5,250	5,305	SDSL
323MSSR	5,305	5,580	LMSH
323MSSR	5,580	5,860	SNDS
323MSSR	5,860	6,005	SDSL
324BLCT	6,005	6,045	LMSN
323MSSR	6,045	6,338	SDSL
323MSSR	6,338	6,515	SDSL
323HGSR	6,515	6,620	LMSH
323MSSR	6,620	6,775	SHLE
323CCKB	6,775	6,795	LMSN
325MRMN	6,795	7,670	SHLE
325MRMN	7,670	7,683	LMSN
325CHRK	7,683	8,240	SDSL
325CHRK	8,240	8,350	LMSH
330MSSP	8,350	8,457	SLSN
341WDFD	8,457	8,608	SHLE
340HNTN	8,608	8,893	LMDM
357CMNL	8,893	8,945	LMSN
361SLVN	8,945	9,072	SHLE
361FRVL	9,072	9,080	LMSN
361VIOL	9,080	9,363	LMSN
364BRMD	9,363	9,464	LMDM
364SMPS	9,464	9,735	SNDS
364MCLS	9,735	9,850	SLSH
364MCLS	9,850	10,068	SDSL
364OLCK	10,068	10,330	LMDM
367ABCK	10,330		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Coal County, Oklahoma

Latitude: 343349	Longitude: 960953
Owner: CRIM	Local number: 01N-11E-17 ABA 1
Use of site: P	Completion date: 07/14/1972
Altitude: 574	Depth of well: 11,632

Geologic- unit code	Depth to top	Depth to bottom	Lithology
328WPCK	7,820	8,935	SHLE
327UNVL	8,935	8,960	SNDS
327UNVL	8,960	9,350	SHLE
333DLCK	9,350	9,690	SHLE
338OGKK	9,690	9,850	LMSN
341WDFD	9,850	9,960	SHLE
340HNTN	9,960	10,040	LMSN
361SLVN	10,040	10,170	SHLE
361VIOL	10,170	10,350	LMSN
364SMPS	10,350	10,620	LMSH
364SMPS	10,620	10,740	SDSL
364SMPS	10,740	10,820	LMDM
364SMPS	10,820	10,870	SNDS
364SMPS	10,870	11,085	LMDM
364OLCK	11,085	11,240	SNDS
367ABCK	11,240	11,330	DLMT
367ABCK	11,330	11,440	LMSN
367ABCK	11,440		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Coal County, Oklahoma

Latitude: 344000 Longitude: 962036
Owner: MORGAN Local number: 02N-09E-03 DC 1
Use of site: P Completion date: 09/13/1968
Altitude: 725 Depth of well: 8,038

Geologic- unit code	Depth to top	Depth to bottom	Lithology
324PSLVM	0	580	SDSL
324PSLVM	580	2,400	SHLE
325HRSR	2,400	2,430	SNDS
326ATCK	2,430	5,560	SHLE
328WPCK	5,560	5,680	LMSN
328WPCK	5,680	5,860	SHLE
327UNVL	5,860	6,090	SNDS
327UNVL	6,090	6,470	SHLE
333DLCK	6,470	6,625	SHLE
341WDFD	6,625	6,710	SHLE
340HNTN	6,710	6,880	LMSN
357CMNL	6,880	6,910	LMSN
361SLVN	6,910	7,010	SHLE
361VIOL	7,010	7,090	LMSN
364BRMD	7,090	7,310	LMDM
364BRMD	7,310	7,425	LMDM
364MCLS	7,425	7,590	DLMT
364MCLS	7,590	7,710	DLMT
364MCLS	7,710	7,800	SNDS
364MCLS	7,800	7,820	DLMT
364OLCK	7,820	7,960	SDSL
364OLCK	7,960		SNDS

Comanche County, Oklahoma

Latitude: 344545 Longitude: 982218
Owner: HUMBLE OIL Local number: 03N-11W-05 AD 1
Use of site: P Completion date: 10/15/1964
Altitude: 1,210 Depth of well: 1,591

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318PSOK	0	685	ARKS
318PSOK	685	1,410	ARKS
370CMBR	1,410		RYLT

Table 3.--Geologic logs for wells in the study
area--Continued

Comanche County, Oklahoma

Latitude: 344626 Longitude: 981746
Owner: Local number: 04N-10W-31 CBA 1
Use of site: P Completion date: 11/11/1968
Altitude: 1,272 Depth of well: 6,603

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318HNSS	50	250	SNDS
318HNSS	250	521	SDSL
318HNSS	521	760	SHLE
318PSOK	760	1,060	CGLM
318PSOK	1,060	1,150	SHLE
34OHNTN	1,150	1,490	LMSN
361SLVN	1,490	1,820	SHLE
361VIOL	1,820	2,420	LMSN
361VKMK	2,420	2,890	LMSN
364SMPS	2,890	3,020	LMSN
364SMPS	3,020	3,100	SHLE
364SMPS	3,100	3,420	SNDS
364TPCK	3,420	3,660	SHLE
364TPCK	3,660	3,760	LMSN
364MCLS	3,760	3,890	SHLE
364MCLS	3,890	4,050	LMSN
364MCLS	4,050	4,220	SHLE
364OLCK	4,220	4,320	LMSN
364OLCK	4,320	4,810	SHLE
364OLCK	4,810	5,225	LMSN
367ABCK	5,225	6,050	DLMT
367ABCK	6,050	6,250	LMSN
364SMPS	6,250	6,500	LMSN
364SMPS	6,500		SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Craig County, Oklahoma

Latitude: 364526	Longitude: 950040
Owner: HELMICK	Local number: 26N-21E-12 BB 1
Use of site: T	Completion date:
Altitude: 755	Depth of well: 1,773

Geologic- unit code	Depth to top	Depth to bottom	Lithology
367ABCK	502	1,095	SDMN
367RBDX	1,095	1,165	DLMT
367GSCDU	1,165	1,210	DLMT
367GSCDL	1,210	1,430	DLMT
367GNTR	1,430	1,450	SNDS
371EMCP	1,450	1,594	DLMT
371BNTR	1,594	1,765	DLMT
400PCMB	1,765		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Craig County, Oklahoma

Latitude: 365016 Longitude: 950705
Owner: NEILL Local number: 27N-20E-12 BDD 2
Use of site: W Completion date: 06/13/1971
Altitude: 900 Depth of well: 1,090

Geologic- unit code	Depth to top	Depth to bottom	Lithology
330BOON	550	638	LMSN
339KDRK	638	650	SHLE
339KDRK	650	660	LMSN
341CTNG	660	680	SHLE
367RBDX	680	790	DLMT
367GSCD	790	950	DLMT
400PCMB	950		GRNT

Craig County, Oklahoma

Latitude: 365000 Longitude: 950101
Owner: RWD-3 Local number: 27N-21E-12 CCB 1
Use of site: W Completion date: 07/07/1980
Altitude: 876 Depth of well: 1,352

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325CHRK	140	230	SNDS
332CSTR	230	260	LMSN
333WRSW	260	410	LMSN
338OSGE	410	500	LMDM
338RSPG	500	620	LMSN
339NRTV	620	627	SHLE
330CTNG	627	670	SHLE
367CTTR	670	840	DLMT
368JFRC	840	1,015	DLMT
367RBDX	1,015	1,210	DLMT
367GSCDU	1,210		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Creek County, Oklahoma

Latitude: 355718	Longitude: 960308
Owner: BERRYHILL	Local number: 17N-12E-17 ACA 1
Use of site: P	Completion date:
Altitude: 710	Depth of well: 3,932

Geologic- unit code	Depth to top	Depth to bottom	Lithology
323CFVL	0	75	SHLE
323SMNL	75	175	SHLE
325MRMN	175	803	SHLE
325CHRK	803	1,447	SDSL
325CHRK	1,447	1,604	SNDS
325CHRK	1,604	1,792	SDSL
326ATCK	1,792	2,020	SDSL
330MSSP	2,020	2,158	SHLE
330MSSP	2,158	2,311	LMSN
341CTNG	2,311	2,318	SHLE
364SMPS	2,318	2,466	SHLE
364SMPS	2,466	2,560	SNDS
367ABCK	2,560	3,851	DLMT
371GRNT	3,851	3,924	SDGL
400PCMB	3,924		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Custer County, Oklahoma

Latitude: 354318	Longitude: 990029	
Owner: ARKLA	Local number: 14N-17W-04 A	1
Use of site: P	Completion date: 05/12/1972	
Altitude: 1,795	Depth of well: 16,700	

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313BLIN	600	700	GPSM
310PRMN	700	1,180	SDSL
310PRMN	1,180	1,800	SHLE
310PRMN	1,800	2,110	SHLE
310PRMN	2,110	2,650	SHLE
310WLNG	2,650	2,780	GPSM
310WLNG	2,780	3,050	SHLE
310WLNG	3,050	3,870	ANDR
319CHSE	3,870	4,230	LMSN
319CHSE	4,230	4,330	SHLE
319CHSE	4,330	4,430	LMSN
319CHSE	4,430	4,550	SHLE
319CCGV	4,550	4,800	LMSN
319CCGV	4,800	4,900	SHLE
319CCGV	4,900	4,970	SNDS
319CCGV	4,970	5,350	SHLE
319CCGV	5,350	5,400	SNDS
319CCGV	5,400	5,740	SHLE
322VRGL	5,740	6,280	SHLE
322VRGL	6,280	6,400	SNDS
322VRGL	6,400	7,380	SHLE
322VRGL	7,380	7,400	SHLE
322VRGL	7,400	7,660	SHLE
321TRNT	7,660	7,760	LMSN
322VRGL	7,760	7,910	SDSL
322VRGL	7,910	8,130	SHLE
322DGLS	8,130	8,280	SNDS
323MSSR	8,280	8,720	SHLE
323LNSG	8,720	8,860	SHLE
323KSSC	8,860	9,020	SDSL
323KSSC	9,020	9,190	SHLE
323HGSR	9,190	9,250	SHLE
323KSSC	9,250	9,370	SDSL
323KSSC	9,370	9,520	SHLE
323CCKB	9,520	9,600	SHLE
323CFVL	9,600	9,750	SDSL
323CFVL	9,750	9,870	LMSH
325DSMS	9,870	10,450	SHLE
325CHRK	10,450	10,610	SDSL

Table 3.--Geologic logs for wells in the study
area--Continued

Custer County, Oklahoma--Continued

Latitude: 354318 Longitude: 990029
Owner: ARKLA Local number: 14N-17W-04 A 1
Use of site: P Completion date: 05/12/1972
Altitude: 1,795 Depth of well: 16,700

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325CHRK	10,610	10,760	SHLE
325CHRK	10,760	10,840	LMSH
325CHRK	10,840	11,125	SHLE
325CHRK	11,125	11,200	LMSN
325CHRK	11,200	11,690	SHLE
328MRRW	11,690	12,280	SHLE
328MRRW	12,280	12,640	LMSN
328MRRW	12,640	12,950	SNDS
328SPRG	12,950	13,390	SHLE
332CSTR	13,390	13,550	LMSH
332CSTR	13,550	13,940	SHLE
332CSTR	13,940	14,100	LMSN
332CSTR	14,100	14,620	SHLE
330MSSP	14,620	15,830	LMSN
341WDFD	15,830	15,950	SHLE
340HNTN	15,950	16,440	DLMT
361SLVN	16,440	16,500	SHLE
361SLVN	16,500	16,570	DLMT
361VIOL	16,570		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Custer County, Oklahoma

Latitude: 354548	Longitude: 985328
Owner: MACNOLIA	Local number: 15N-16W-22 BD 1
Use of site: P	Completion date: 04/07/1959
Altitude: 1,794	Depth of well: 17,000

Geologic- unit code	Depth to top	Depth to bottom	Lithology
326ATCK	10,800	10,858	SHLE
328MRRW	10,858	11,150	SHLE
328MRRW	11,150	11,430	LMSH
328MRRW	11,430	11,570	SNDS
328SPRG	11,570	11,950	SHLE
332CSTR	11,950	12,225	LMSN
332CSTR	12,225	12,695	LMSH
332CSTR	12,695	13,080	SHLE
333MRMC	13,080	13,100	SLSN
333MRMC	13,100	13,490	LMSN
333MRMC	13,490	13,940	LMSN
333MRMC	13,940	14,270	LMSN
341WDFD	14,270	14,380	SHLE
344HNTN	14,380	14,490	DLMT
344HNTN	14,490	14,750	LMSN
357CMNL	14,750	14,822	LMSN
361SLVN	14,822	14,870	SHLE
361SLVN	14,870	14,920	DLMT
361VIOL	14,920	15,170	LMSN
364BRMD	15,170	15,320	LMSN
364BRMD	15,320	15,420	LMDM
364BRMD	15,420	15,650	SNDS
364BRMD	15,650	15,850	SHLE
364BRMD	15,850	15,895	DLMT
364BRMD	15,895	16,070	SHLE
367ABCK	16,070	16,410	DLMT
367ABCK	16,410	16,700	DLMT
367ABCK	16,700		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Delaware County, Oklahoma

Latitude: 362442 Longitude: 945208
Owner: RWD-1 Local number: 22N-23E-05 DCA 1
Use of site: W Completion date: 06/18/1979
Altitude: 1,100 Depth of well: 1,538

Geologic- unit code	Depth to top	Depth to bottom	Lithology
330MSSP	0	185	LMSH
341CTNG	185	265	SHLE
364EVRN	265	300	LMSN
368PWLL	300	380	DLMT
367CTTR	380	675	DLMT
368JFRC	675	955	DLMT
367RBDX	955	1,110	DLMT
367GSCD	1,110	1,420	DLMT
371EMNC	1,420	1,515	DLMT
400PCMB	1,515		ARKS

Delaware County, Oklahoma

Latitude: 362832 Longitude: 943922
Owner: COMMERCIAL Local number: 23N-25E-17 BDB 1
Use of site: T Completion date: 01/01/1953
Altitude: 1,045 Depth of well: 1,023

Geologic- unit code	Depth to top	Depth to bottom	Lithology
338FRGL	0	15	LMSN
341CTNG	15	80	SHLE
367CTTR	80	445	DLMT
368JFRC	445	668	DLMT
367RBDX	668	830	DLMT
367GSCDU	830	892	DLMT
367GSCDL	892	1,018	DLMT
400PCMB	1,018		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Dewey County, Oklahoma

Latitude: 360821	Longitude: 992007
Owner: MAGNOLIA	Local number: 19N-20W-09 AC 1
Use of site: P	Completion date: 09/28/1947
Altitude: 2,225	Depth of well: 12,856

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313ELRN	310	620	GPSM
313FLRP	620	900	GPSM
310PRMN	900	3,490	SHLE
310PRMN	3,490	3,840	DMSH
319WFMP	3,840	4,000	DLMT
319WFMP	4,000	4,390	LMSN
319WFMP	4,390	4,680	LMSH
319FRCK	4,680	4,720	LMSN
319WFMP	4,720	5,230	LMSH
322VRGL	5,230	5,370	LMSH
322VRGL	5,370	5,670	SDSL
322VRGL	5,670	6,060	LMSN
322VRGL	6,060	6,850	SDSL
322VRGL	6,850	6,935	SNDS
322VRGL	6,935	7,350	SHLE
322DGLS	7,350	7,430	SDSL
323MSSR	7,430	8,410	SHLE
325FRSC	8,410	8,805	LMSH
325FRSC	8,805	9,100	LMSH
326ATCK	9,100	9,450	SHLE
328MRRW	9,450	10,090	SHLE
328MRRW	10,090	10,285	SNDS
332CSTR	10,285	11,390	LMSN
332CSTR	11,390	11,660	SDSL
333MRMC	11,660	12,285	LMSN
333MRMC	12,285	12,650	LMSN
333MRMC	12,650	12,925	LMSH
341WDFD	12,925	12,955	SHLE
34OHNTN	12,955	13,273	DLMT
361SLVN	13,273	13,300	SHLE
361SLVN	13,300	13,377	LMDM
361VIOL	13,377	13,732	LMSN
364SMPS	13,732		SNDS

Table 3.--Geologic logs for wells in the study
area--Continued

Ellis County, Oklahoma

Latitude: 355912 Longitude: 994508
Owner: MCCULLOCH Local number: 18N-24W-34 CCA 1
Use of site: T Completion date: 03/12/1971
Altitude: 2,395 Depth of well: 17,500

Geologic- unit code	Depth to top	Depth to bottom	Lithology
322DGLS	7,420	8,030	SHLE
320PSLV	8,030	11,350	SHLE
328MRRW	11,350	11,933	SHLE
328MRRW	11,933	12,850	SDSL
332CSTR	12,850	13,050	LMSN
330MSSP	13,050	14,415	LMSH
330MSSP	14,415	15,940	LMSN
339KDKR	15,940	15,960	SHLE
341WDFD	15,960	16,030	SHLE
341WDFD	15,960	16,030	SHLE
340HNTN	16,030	16,364	LMDM
361SLVN	16,364	16,380	DMSH
361VIOL	16,380	16,910	LMSN
364SMPS	16,910	17,315	SDSL
367ABCK	17,315		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Ellis County, Oklahoma

Latitude: 363140 Longitude: 995830
Owner: GULF OIL Local number: 24N-26W-27 CA 1
Use of site: T Completion date: 05/15/1944
Altitude: 2,382 Depth of well: 9,305

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	120	440	SAND
313BLIN	440	578	GPSM
313FLRP	578	860	EVPR
310PRMN	860	3,100	SHLE
319WFMP	3,100	4,350	LMSN
322WBNS	4,350	4,570	LMSN
322VRGL	4,570	5,300	SHLE
322ELGN	5,300	5,420	SNDS
322SHWN	5,420	5,635	SHLE
322SHWN	5,635	5,680	SNDS
322DGLS	5,680	5,880	LMSH
323HXBR	5,880	6,050	SHLE
323HXBR	6,050	6,100	SNDS
323HXBR	6,100	6,880	SHLE
325DSMS	6,880	7,000	SHLE
325DSMS	7,000	7,260	LMSN
326ATCK	7,260	7,850	SHLE
328MRRW	7,850	8,385	SHLE
330MSSP	8,385	8,900	LMSN
330MSSP	8,900	9,240	LMSH
330MSSP	9,240		SAND

Table 3.--Geologic logs for wells in the study
area--Continued

Garfield County, Oklahoma

Latitude: 362951 Longitude: 973446
Owner: VOLIN Local number: 23N-04W-01 CAA 1
Use of site: P Completion date:
Altitude: 1,050 Depth of well: 7,152

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318GRBR	0	520	SDSL
310WLNG	520	1,110	SHLE
319WFMP	1,110	1,750	LMSH
322WBNS	1,750	2,480	LMSH
322WBNS	2,480	2,500	LMSN
322WBNS	2,500	2,550	LMSH
322SHWN	2,550	2,780	SHLE
322DRCK	2,780	2,830	LMSH
322SHWN	2,830	2,850	SNDS
322SHWN	2,850	3,140	SHLE
322ORED	3,140	3,210	LMSN
322SHWN	3,210	3,220	SHLE
322SHWN	3,220	3,430	SHLE
322DGLS	3,430	3,580	SDSL
322DGLS	3,580	3,680	SNDS
323MSSR	3,680	3,930	SHLE
323MSSR	3,930	4,010	SDSL
323MSSR	4,010	4,230	SHLE
323KSSC	4,230	4,330	SNDS
323MSSR	4,330	4,440	SHLE
323HGSR	4,440	4,450	SHLE
323MSSR	4,450	4,605	SHLE
323CCKB	4,605	4,615	LMSN
325MRMN	4,615	4,730	SHLE
325FRSC	4,730	4,920	LMSH
325CHRK	4,920	5,210	SHLE
330MSSP	5,210	5,650	LMSN
341WDFD	5,650	5,705	SHLE
361VIOL	5,705	5,750	LMSN
364SMPS	5,705	5,810	LMSH
364SMPS	5,810	5,910	SNDS
364SMPS	5,910	6,120	SDSL
364SMPS	6,120	6,140	DLMT
367ABCK	6,140		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Garvin County, Oklahoma

Latitude: 343139	Longitude: 972018
Owner: HUMBLE OIL	Local number: 01N-01W-30 DAB 1
Use of site: P	Completion date: 06/24/1971
Altitude: 857	Depth of well: 13,187

Geologic- unit code	Depth to top	Depth to bottom	Lithology
319PNTC	50	540	SDSL
319PNTC	540	960	LMSH
319PNTC	960	1,170	CGLM
319PNTC	1,170	2,460	CGLM
319PNTC	2,460	3,420	CGLM
367ABCK	3,420	7,300	LMSN
367ABCK	7,300	8,700	LMSN
367ABCK	8,700	9,230	LMSN
367ABCK	9,230	9,450	DLMT
367ABCK	9,450	9,900	LMSN
367ABCK	9,900	10,670	DLMT
367ABCK	10,670	10,970	SHLE
367ABCK	10,970	11,230	LMSN
371REGN	11,230	11,260	SNDS
400PCMB	11,260	11,670	GRNT
310PRMN	11,670	11,820	SNDS
328SPRG	11,820	12,830	SHLE
332CSTR	12,830	13,000	SHLE
338SCMR	13,000		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Grady County, Oklahoma

Latitude: 344547 Longitude: 974029
Owner: PARKER Local number: 03N-05W-01 AC 1
Use of site: P Completion date: 11/01/1966
Altitude: 1,123 Depth of well: 18,413

Geologic- unit code	Depth to top	Depth to bottom	Lithology
323MSSR	6,600	6,910	SHLE
324BLCT	6,910	7,380	LMSN
324BLCT	7,380	7,805	SHLE
323NLBL	7,805	7,950	SHLE
323HGSR	7,950	8,460	SHLE
325DEES	8,460	9,020	SHLE
325DEES	9,020	9,135	SDSL
325DEES	9,135	9,300	SHLE
325DEES	9,300	9,395	SDSL
325DEES	9,395	9,505	SDSL
325DEES	9,505	9,715	SHLE
325DEES	9,715	9,985	SDSL
328DCKH	9,985	10,520	SHLE
328DCKH	10,520	10,665	CGLM
328DCKH	10,665	11,110	SHLE
328DCKH	11,110	11,430	SDSL
328SPRG	11,430	11,610	SHLE
328SPRG	11,610	11,770	SNDS
328SPRG	11,770	12,820	SHLE
328SPRG	12,820	12,920	SHLE
328SPRG	12,920	14,080	SHLE
332CSTR	14,080	14,160	SHLE
333MRMC	14,160	14,270	LMSN
338SCMR	14,270	14,425	LMSN
341WDFD	14,425	14,710	SHLE
340HNTN	14,710	15,000	LMSN
361SLVN	15,000	15,230	SHLE
361VIOL	15,230	15,500	LMSN
361VIOL	15,500	15,770	LMSN
364BRMD	15,770	15,850	LMSN
364BRMD	15,850	16,085	SNDS
364BRMD	16,085	16,220	SDSL
364BRMD	16,220	16,495	SNDS
364BRMD	16,495	16,590	LMSH
364BRMD	16,590	16,680	SNDS
364OLCK	16,680	17,080	SHLE
364OLCK	17,080	17,115	LMSN
364OLCK	17,115	17,190	SNDS

Table 3.--Geologic logs for wells in the study
area--Continued

Grady County, Oklahoma--Continued

Latitude: 344547	Longitude: 974029
Owner: PARKER	Local number: 03N-05W-01 AC 1
Use of site: P	Completion date: 11/01/1966
Altitude: 1,123	Depth of well: 18,413

Geologic- unit code	Depth to top	Depth to bottom	Lithology
364JONS	17,190	17,320	LMSN
367ABCK	17,320	17,770	DLMT
367ABCK	17,770	17,900	LMSN
367ABCK	17,900	18,030	DLMT
367ABCK	18,030	18,310	DLMT
367ABCK	18,310		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Grady County, Oklahoma

Latitude: 350345 Longitude: 980307
Owner: PHILLIPS Local number: 07N-08W-21 CAC 1
Use of site: P Completion date: 10/29/1969
Altitude: 1,161 Depth of well: 10,754

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313ELRN	0	410	SHLE
313ELRN	410	780	SDSL
313ELRN	780	1,350	SHLE
313ELRN	1,350	1,500	SNDS
313ELRN	1,500	2,230	CLSN
313ELRN	2,230	2,540	SHLE
318WCHT	2,540	3,690	SHLE
319WFMP	3,690	3,960	SHLE
319WFMP	3,960	4,680	SHLE
319WFMP	4,680	4,910	SDSL
319WFMP	4,910	5,290	SHLE
319WFMP	5,290	6,170	SDSL
322VRGL	6,170	7,615	SHLE
322VRGL	7,615	7,940	SHLE
322ORED	7,940	7,950	LMSN
322VRGL	7,950	8,700	SHLE
322DGLS	8,700	8,920	SNDS
323MSSR	8,920	9,180	SHLE
323MSSR	9,180	9,470	SNDS
323MSSR	9,470	9,660	SHLE
323MSSR	9,660	9,790	SDSL
323MSSR	9,790	10,088	SHLE
323MSSR	10,088	10,270	SHLE
323HGSR	10,270	10,390	SHLE
323KSSC	10,390		SDSL

Table 3.--Geologic logs for wells in the study
area--Continued

Grant County, Oklahoma

Latitude: 365939	Longitude: 980513
Owner: HENDRIXON	Local number: 29N-08W-17 BDB 1
Use of site: P	Completion date:
Altitude: 1,271	Depth of well: 5,660

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318HNSS	0	100	SLSH
318GRBR	100	900	SHLE
310WLNG	900	1,350	SHLE
310WLNG	1,350	1,480	ANDR
319WFMP	1,480	2,700	LMSH
322WBNS	2,700	2,940	LMSN
322WBNS	2,940	3,100	SHLE
322SHWN	3,100	3,340	LMSN
322SHWN	3,340	3,440	SDSL
322ORED	3,440	3,470	LMSN
322SHWN	3,470	3,600	LMSN
322DGLS	3,600	3,830	SHLE
323MSSR	3,830	4,110	SDSL
323MSSR	4,110	4,170	LMSN
323MSSR	4,170	4,220	SNDS
323MSSR	4,220	4,450	LMSN
325MRMN	4,450	4,590	LMSN
325CHRK	4,590	4,780	SHLE
330MSSP	4,780	5,220	LMSN
341WDFD	5,220	5,272	SHLE
340MSNR	5,272	5,287	SNDS
361VIOL	5,287	5,343	LMSN
364SMPS	5,343	5,582	SNDS
367ABCK	5,582		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Harper County, Oklahoma

Latitude: 364014 Longitude: 993209
Owner: CONTINENTAL Local number: 25N-22W-02 DBD 1
Use of site: T Completion date: 09/10/1949
Altitude: 1,924 Depth of well: 9,440

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313MRLW	0	90	SNDS
313DGCK	90	180	SHLE
313BLIN	180	350	GPSM
310PRMN	350	1,980	SHLE
310PRMN	1,980	2,760	ANDR
319WFMP	2,760	3,840	LMSN
322WBNS	3,840	4,415	LMSN
322SHWN	4,415	5,070	LMSH
322DGLS	5,070	5,215	SDSL
322DGLS	5,215	5,410	SHLE
322DGLS	5,410	5,440	SNDS
323HXBR	5,440	5,790	SHLE
323HXBR	5,790	6,050	LMSH
325DSMS	6,050	6,475	LMSN
326ATCK	6,475	6,660	LMSH
328MRRW	6,660	6,835	SHLE
328MRRW	6,835	6,920	SNDS
332CSTR	6,920	7,590	LMSH
330MSSP	7,590	8,770	LMDM
340MSNR	8,770	8,775	SNDS
340HNTN	8,775	8,930	LMSN
361SLVN	8,930	8,970	LMDM
361VIOL	8,970	9,020	LMSN
364SMPS	9,020	9,300	DLMT
364SMPS	9,300	9,365	SHLE
364SMPS	9,365	9,415	SNDS
367ABCK	9,415		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Haskell County, Oklahoma

Latitude: 350957 Longitude: 951138
Owner: GORDON Local number: 08N-20E-16 DBB 1
Use of site: P Completion date: 02/03/1955
Altitude: 636 Depth of well: 6,077

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325MCAL	15	1,242	SHLE
325HRSR	1,242	1,323	SNDS
326ATCK	1,323	5,540	SHLE
326ATCK	5,540	5,590	SNDS
328WPCK	5,590	5,903	LMSH
327UNVL	5,903	5,921	LMSH
327UNVL	5,921		SNDS

Haskell County, Oklahoma

Latitude: 351010 Longitude: 951345
Owner: ALLRED Local number: 08N-20E-18 ADB 1
Use of site: P Completion date: 08/28/1951
Altitude: 685 Depth of well: 7,483

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325MCAL	800	840	SNDS
325MCAL	840	1,010	SHLE
325MCAL	1,010	1,075	SNDS
325MCAL	1,075	1,505	SHLE
325HRSR	1,505	1,575	SNDS
326ATCK	1,575	5,598	SHLE
326ATCK	5,598	5,628	SNDS
328WPCK	5,628	5,942	LMSH
327UNVL	5,942	5,960	LMSN
327UNVL	5,960	6,160	SNDS
327UNVL	6,160	6,230	SHLE
333DLCK	6,230	6,420	SHLE
338OGKK	6,420	6,578	SHLE
341WDFD	6,578	6,638	SHLE
340HNTN	6,638	6,697	LMSN
361SLVN	6,697	6,737	SHLE
361VIOL	6,737	6,770	LMSN
364BRMD	6,770	6,825	LMSN
364BRMD	6,825	7,226	SNDS
367ABCK	7,226		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Hughes County, Oklahoma

Latitude: 345529 Longitude: 961838
Owner: PIERCE Local number: 05N-09E-12 BAD 1
Use of site: P Completion date:
Altitude: 825 Depth of well: 6,957

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325DEES	0	330	SDSL
325DEES	330	1,100	SHLE
325DEES	1,100	1,450	SDSL
325DEES	1,450	1,670	SHLE
325DEES	1,670	2,830	SDSL
325HRSR	2,830	2,860	SNDS
326ATOK	2,860	3,450	SHLE
326ATOK	3,450	3,860	SDSL
328WPCK	3,860	3,930	LMSN
328MRRW	3,930	4,315	SHLE
328MRRW	4,315	4,460	SDSL
328MRRW	4,460	4,670	SHLE
332CSTR	4,670	4,800	SHLE
332CSTR	4,800	5,040	LMSN
333MRMC	5,040	5,155	LMSN
341WDFD	5,155	5,320	SHLE
340HNTN	5,320	5,340	LMSN
361SLVN	5,340	5,440	SHLE
361FRVL	5,440	5,480	LMSN
361VIOL	5,480	5,510	LMSN
364SMPS	5,510	5,860	DLMT
364SMPS	5,860	6,000	SDSL
364OLCK	6,000	6,385	SNDS
367ABCK	6,385		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Johnston County, Oklahoma

Latitude: 341328	Longitude: 964912
Owner: CHAPMAN	Local number: 04S-06E-07 BDD 1
Use of site: P	Completion date: 04/15/1979
Altitude: 655	Depth of well: 11,747

Geologic- unit code	Depth to top	Depth to bottom	Lithology
328SPRG	70	1,200	SHLE
328SPRG	1,200	2,730	SHLE
333DLCK	2,730	2,960	SHLE
333DLCK	2,960	3,070	LMSH
338SCMR	3,070	3,220	LMSN
338SCMR	3,220	3,300	LMSH
341WDFD	3,300	3,630	SHLE
361SLVN	3,630	3,810	SHLE
361SLVN	3,810	3,920	SHLE
361VIOL	3,920	4,670	LMSN
364SMPS	4,670	5,070	LMSH
364SMPS	5,070	5,160	SNDS
364SMPS	5,160	5,720	LMSH
364MCLS	5,720	5,840	SNDS
364OLCK	5,840	5,990	LMSH
364OLCK	5,990	6,540	SHLE
364OLCK	6,540	6,600	LMSN
364OLCK	6,600	6,800	SNDS
364OLCK	6,800	7,050	LMSN
367ABCK	7,050	7,700	LMDM
367ABCK	7,700	8,530	LMSN
367ABCK	8,530	8,680	LMDM
367ABCK	8,680		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Kay County, Oklahoma

Latitude: 365414 Longitude: 971324
Owner: WELCH Local number: 28N-01E-17 CAB 1
Use of site: P Completion date:
Altitude: 1,138 Depth of well: 4,407

Geologic- unit code	Depth to top	Depth to bottom	Lithology
31OWLNG	0	890	SHLE
322VRGL	890	1,495	SHLE
322VRGL	1,495	1,605	LMSN
322VRGL	1,605	2,150	SHLE
323TLNT	2,150	2,296	SNDS
323MSSR	2,296	2,610	SHLE
323MSSR	2,610	2,695	SNDS
323MSSR	2,695	2,990	SHLE
325DSMS	2,990	3,132	LMSN
325DSMS	3,132	3,196	SHLE
367ABCK	3,196		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Kingfisher County, Oklahoma

Latitude: 355619 Longitude: 974613
Owner: ASH Local number: 17N-05W-19 ABD 1
Use of site: P Completion date:
Altitude: 1,005 Depth of well: 8,519

Geologic- unit code	Depth to top	Depth to bottom	Lithology
310PRMN	0	1,670	SHLE
310PRMN	1,670	3,480	SHLE
322VRGL	3,480	4,197	SDSL
322ORED	4,197	4,270	LMSN
322SHWN	4,270	4,420	SDSL
321TRNT	4,420	4,470	LMSN
322DGLS	4,470	4,660	SHLE
322DGLS	4,660	4,855	SDSL
323LNSG	4,855	5,040	SHLE
323LNSG	4,855	5,110	SDSL
323MSSR	5,110	5,500	SHLE
323MSSR	5,500	5,590	SLSN
323MSSR	5,590	5,879	SHLE
323CCKB	5,879	5,914	SHLE
323CFVL	5,914	6,162	SHLE
325MRMN	6,162	6,357	LMSN
325CHRK	6,357	6,692	SHLE
333MRMC	6,692	6,990	SLSN
338OSGE	6,990	7,200	LMSN
341WDFD	7,200	7,260	SHLE
340HNTN	7,260	7,452	LMSN
361SLVN	7,452	7,550	SHLE
361VIOL	7,550	7,610	LMSN
364SMPS	7,610	7,870	LMDM
364SMPS	7,870	8,400	SNDS
367ABCK	8,400		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Kingfisher County, Oklahoma

Latitude: 360132 Longitude: 980903
Owner: VILHAUER Local number: 18N-09W-22 BAC 1
Use of site: P Completion date:
Altitude: 1,188 Depth of well: 9,639

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313FLRP	0	40	SHLE
318HNSS	40	610	SHLE
318GRBR	610	1,405	SDSL
310WLNG	1,405	1,733	SHLE
310WLNG	1,733	2,428	GPSM
310NLNS	2,428	2,474	DLMT
319CHSE	2,474	2,480	SHLE
317WFLD	2,480	2,520	LMDM
319CHSE	2,520	2,564	SHLE
317BRNS	2,564	2,710	LMSN
319CHSE	2,710	2,730	SHLE
317WRFD	2,730	2,812	LMSN
319CCGV	2,812	2,893	SHLE
319CCGV	2,893	3,019	LMSN
319CCGV	3,019	3,073	SHLE
319GRNL	3,073	3,155	LMSN
319CCGV	3,155	3,278	SHLE
319CCGV	3,278	3,400	LMSN
319ADMR	3,400	3,990	SHLE
322WBNS	3,990	4,150	LMSN
322WBNS	4,150	4,268	SHLE
322WBNS	4,268	4,333	LMSN
322WBNS	4,333	4,490	SHLE
322TOPK	4,490	4,550	LMSN
322SHWN	4,550	4,747	SHLE
322SHWN	4,747	4,902	SDSL
322SHWN	4,902	5,122	SHLE
322SHWN	5,122	5,260	SDSL
322ORED	5,260	5,397	LMSN
322DGLS	5,397	5,647	SHLE
323LNSG	5,647	5,775	SDSL
323KSSC	5,775	6,187	SHLE
323MSSR	6,187	6,451	SDSL
323HGSR	6,451	6,453	LMSN
323MSSR	6,453	6,470	SHLE
323PLSN	6,470	6,885	SDSL
325MRMN	6,885	7,180	LMSN
325CBNS	7,180	7,454	SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Kingfisher County, Oklahoma--Continued

Latitude: 360132 Longitude: 980903
Owner: VILHAUER Local number: 18N-09W-22 BAC 1
Use of site: P Completion date:
Altitude: 1,188 Depth of well: 9,639

Geologic- unit code	Depth to top	Depth to bottom	Lithology
332CSTR	7,454	7,608	LMSN
332CSTR	7,608	8,076	SHLE
330MSSP	8,076	8,594	LMSN
339KDRK	8,594	8,598	SHLE
341WDFD	8,598	8,627	SHLE
340HNTN	8,627	8,690	LMDM
340HNTN	8,690	9,058	LMSN
361SLVN	9,058	9,160	SHLE
361VIOL	9,160	9,225	LMSN
364BRMD	9,225	9,431	LMDM
364BRMD	9,431	9,603	SNDS
364SMPS	9,603		SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Kiowa County, Oklahoma

Latitude: 350539 Longitude: 991400
Owner: EASON OIL Local number: 07N-19W-08 CBA 1
Use of site: P Completion date: 11/26/1976
Altitude: 1,689 Depth of well: 4,296

Geologic- unit code	Depth to top	Depth to bottom	Lithology
310PRMN	400	1,340	SHLE
319PNTC	1,340	1,430	SHLE
319PNTC	1,430	1,690	SHLE
319PNTC	1,690	2,430	ARKS
319PNTC	2,430	3,080	CGLM
319PNTC	3,080	3,370	CGLM
319PNTC	3,370	3,430	CGLM
319PNTC	3,430	3,640	CGLM
319PNTC	3,640	3,680	ARKS
319PNTC	3,680	3,810	CGLM
319PNTC	3,810	4,160	ARKS
370CMBR	4,160		GRNT

Latimer County, Oklahoma

Latitude: 345706 Longitude: 950120
Owner: FIELDS Local number: 06N-22E-31 BDB 1
Use of site: P Completion date: 04/08/1977
Altitude: 646 Depth of well: 12,350

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325KRBS	310	2,180	SHLE
325HRSR	2,180	2,530	SDSL
326ATCK	2,530	4,300	SHLE
326ATCK	4,300	4,890	SHLE
326ATCK	4,890	5,960	SHLE
326ATCK	5,960	6,070	SDSL
326ATCK	6,070	12,240	SHLE
325SVNN	12,240	12,310	SNDS
325SVNN	12,310		SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Leflore County, Oklahoma

Latitude: 351010 Longitude: 944115
Owner: HICKMAN Local number: 08N-25E-17 BDB 1
Use of site: P Completion date: 01/29/1952
Altitude: 465 Depth of well: 7,650

Geologic- unit code	Depth to top	Depth to bottom	Lithology
326ATCK	0	2,520	SHLE
326ATCK	2,520	2,680	SNDS
326ATCK	2,680	2,970	SDSL
326ATCK	2,970		SHLE

Leflore County, Oklahoma

Latitude: 351128 Longitude: 943503
Owner: COLEMAN Local number: 08N-26E-05 CCA 1
Use of site: P Completion date: 11/21/1974
Altitude: 419 Depth of well: 8,841

Geologic- unit code	Depth to top	Depth to bottom	Lithology
326ATCK	7,400	7,480	SHLE
326ATCK	7,480	7,530	SDSL
326ATCK	7,530	7,580	SHLE
328WPCK	7,580	7,790	LMSH
328WPCK	7,790	7,950	SHLE
327UNVL	7,950	7,990	LMSN
327UNVL	7,990	8,080	LMSN
327UNVL	8,080	8,210	LMSN
327UNVL	8,210	8,480	SHLE
341WDFD	8,480	8,628	SHLE
361SLVN	8,628	8,658	LMSH
361VIOL	8,658		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Lincoln County, Oklahoma

Latitude: 353528 Longitude: 970039
Owner: LINAN Local number: 13N-03E-20 BAC 1
Use of site: P Completion date:
Altitude: 1,038 Depth of well: 6,350

Geologic- unit code	Depth to top	Depth to bottom	Lithology
320PSLV	0	3,000	SDSL
323MSSR	3,000	3,180	SHLE
323MSSR	3,180	3,240	LMSN
323MSSR	3,240	3,428	SDSL
323HGSR	3,428	3,450	LMSN
323MSSR	3,450	3,537	SHLE
323CCKB	3,537	3,575	LMSN
323MSSR	3,575	3,785	SHLE
323CCKB	3,785	3,800	LMSN
325MRMN	3,800	4,435	SHLE
325MRMN	4,435	4,475	LMSN
325CHRK	4,475	4,575	SNDS
325CHRK	4,575	4,732	SHLE
325CHRK	4,732	4,878	SHLE
325CHRK	4,878	4,965	SHLE
325CHRK	4,965	5,058	SHLE
330MSSP	5,058	5,140	LMSN
341WDFD	5,140	5,260	SHLE
340HNTN	5,220	5,270	DLMT
361SLVN	5,270	5,360	SHLE
361FRVL	5,360	5,430	LMSN
364BRMD	5,430	5,493	LMDM
364SMPS	5,493	5,565	DLMT
364SMPS	5,565	5,990	SNDS
364SMPS	5,990	6,130	SDSL
367ABCK	6,130		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Lincoln County, Oklahoma

Latitude: 354040 Longitude: 965221
Owner: CUNNINGHAM Local number: 14N-04E-22 BCA 1
Use of site: P Completion date:
Altitude: 933 Depth of well: 5,024

Geologic- unit code	Depth to top	Depth to bottom	Lithology
322VNSS	0	490	SHLE
322VRGL	490	830	SDSL
323MSSR	830	905	LMSH
323MSSR	905	1,530	SHLE
323MSSR	1,530	1,890	SDSL
323MSSR	1,890	2,390	SDSL
323MSSR	2,390	2,420	LMSN
323MSSR	2,420	2,780	SDSL
323HGSR	2,780	2,820	LMSN
323MSSR	2,820	2,980	LMSH
323MSSR	2,980	3,110	SHLE
323CCKB	3,110	3,140	LMSN
323MSSR	3,140	3,160	SNDS
325MRMN	3,160	3,240	LMSN
325MRMN	3,240	3,820	SHLE
325MRMN	3,820	3,870	LMSH
325CHRK	3,870	3,950	SNDS
325CHRK	3,950	4,010	LMSN
325CHRK	4,010	4,140	SHLE
325CHRK	4,140	4,160	LMSN
325CHRK	4,160	4,195	SHLE
325CHRK	4,195	4,220	SNDS
325CHRK	4,220	4,275	SHLE
325CHRK	4,275	4,430	LMSH
325CHRK	4,430	4,530	SDSL
330MSSP	4,530	4,750	LMSN
341WDFD	4,750	4,803	SHLE
340HNTN	4,803	4,850	DLMT
361SLVN	4,850	4,950	SHLE
361VIOL	4,950	4,990	LMSN
364BRMD	4,990	5,000	LMSN
364SMPS	5,000		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Logan County, Oklahoma

Latitude: 354629 Longitude: 973554
Owner: KROUT Local number: 15N-04W-14 CBA 1
Use of site: P Completion date:
Altitude: 1,006 Depth of well: 8,350

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318GRBR	0	440	SDSL
310PRMN	440	1,250	SDSL
310PMPV	1,250	2,940	SHLE
322WBNS	2,940	2,980	LMSN
322WBNS	2,980	3,190	SDSL
322TOPK	3,190	3,215	LMSH
322SHWN	3,215	3,428	SDSL
322SHWN	3,428	3,460	SNDS
322SHWN	3,460	3,475	SHLE
322SHWN	3,475	3,938	SDSL
322ORED	3,938	3,970	SHLE
322SHWN	3,970	4,120	SDSL
322DGLS	4,120	4,248	SDSL
322DGLS	4,248	4,308	LMSH
322DGLS	4,308	4,340	SNDS
323MSSR	4,340	4,610	SDSL
323MSSR	4,610	4,730	LMSH
323MSSR	4,730	4,985	SHLE
323MSSR	4,985	5,010	SNDS
323MSSR	5,010	5,090	SHLE
323HGSR	5,090	5,112	LMSN
323MSSR	5,112	5,190	SNDS
323CCKB	5,190	5,250	LMSN
323MSSR	5,250	5,368	LMSH
323CCKB	5,368	5,380	LMSN
323MSSR	5,380	5,400	SNDS
325MRMN	5,400	5,660	SHLE
325MRMN	5,660	5,770	SDSL
325MRMN	5,770	5,893	LMSH
325CHRK	5,893	6,017	SHLE
361SLVN	6,017	6,095	SHLE
361FRVL	6,095	6,130	LMSN
361VIOL	6,130	6,228	LMSN
364SMPS	6,228	6,450	DLMT
364SMPS	6,450	6,660	SNDS
364MCLS	6,660	6,782	SHLE
364OLCK	6,782	7,225	SDSL
364JONS	7,225	7,258	DLMT
367ABCK	7,258		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

McClain County, Oklahoma

Latitude: 345956	Longitude: 972342
Owner: LITTLE	Local number: 06N-02W-15 AB 1
Use of site: P	Completion date: 07/08/1971
Altitude: 1,134	Depth of well: 10,037

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318HNSS	30	690	SHLE
318HNSS	690	1,060	SDSL
310WLNG	1,060	2,470	SHLE
319PNTC	2,470	3,935	SHLE
320PSLV	3,935	7,400	SHLE
341WDFD	7,400	7,560	SHLE
340HNTN	7,560	7,890	LMSN
361SLVN	7,890	8,020	SHLE
361VIOL	8,020	8,350	LMSN
364SMPS	8,350	8,510	LMSN
364SMPS	8,510	8,710	SNDS
364SMPS	8,710	9,170	SDSL
364OLCK	9,170	9,520	SDSL
367ABCK	9,520	9,850	DLMT
367ABCK	9,850		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

McIntosh County, Oklahoma

Latitude: 351503	Longitude: 954538
Owner: FOLLANSBEE	Local number: 09N-15E-18 CBC 1
Use of site: P	Completion date: 11/28/1950
Altitude: 653	Depth of well: 5,461

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325CBNS	0	150	SHLE
325CBNS	150	230	SDSL
325KRBS	230	630	SDSL
325KRBS	630	960	SHLE
325KRBS	960	1,240	SDSL
325KRBS	1,240	1,776	SHLE
325CHRK	1,776	2,025	SDSL
325CHRK	2,025	2,102	SHLE
325HRSR	2,102	2,128	SNDS
325HRSR	2,128	3,000	SHLE
326ATCK	3,000	3,200	SDSL
326ATCK	3,200	3,820	SHLE
328WPCK	3,820	3,950	LMSN
328WPCK	3,950	4,000	SHLE
328WPCK	4,000	4,057	LMSH
327UNVL	4,057	4,100	LMSH
327UNVL	4,100	4,160	LMSH
327UNVL	4,160	4,255	SNDS
327UNVL	4,255	4,445	SDSL
333DLCK	4,445	4,650	SHLE
338OGKK	4,650	4,815	SHLE
341WDFD	4,815	4,820	SDSL
340HNTN	4,820	4,955	LMSN
361SLVN	4,955	5,000	SHLE
361VIOL	5,000	5,016	LMSN
364SMPS	5,016	5,055	LMSN
364SMPS	5,055	5,210	SNDS
364SMPS	5,210	5,250	SHLE
364SMPS	5,250	5,411	SNDS
367ABCK	5,411		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Major County, Oklahoma

Latitude: 362139 Longitude: 981527
Owner: SUPERIOR Local number: 22N-10W-27 BAA 1
Use of site: P Completion date: 01/01/1945
Altitude: 1,276 Depth of well: 8,279

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318HNSS	0	200	SLSN
318HNSS	200	1,215	SHLE
310WLNG	1,215	1,583	SHLE
310WLNG	1,583	1,800	ANDR
310WLNG	1,800	2,100	ANDR
310WLNG	2,100	2,387	ANDR
310NLNS	2,387	2,458	LMSH
317WFLD	2,458	2,511	SHLE
319CHSE	2,511	2,542	LMSH
317BRNS	2,542	2,687	LMSH
319CHSE	2,687	2,762	LMSH
317WRFD	2,762	2,807	LMSH
319CCGV	2,807	2,862	SDSL
319CCGV	2,862	2,972	LMSH
319CCGV	2,972	3,056	SHLE
319GRNL	3,056	3,111	LMSH
319CCGV	3,111	3,178	SHLE
319CCGV	3,178	3,282	LMSN
319CCGV	3,282	3,660	LMSH
322WBNS	3,660	4,280	LMSH
322TOPK	4,280	4,308	LMSH
322SHWN	4,308	4,637	SHLE
322SHWN	4,637	4,920	SDSL
322ORED	4,920	5,068	LMSH
322DGLS	5,068	5,230	SHLE
323LNSG	5,230	5,395	SNDS
323KSSC	5,395	5,668	SHLE
323MSSR	5,668	5,673	LMSN
323MSSR	5,673	5,817	SNDS
323MSSR	5,817	5,920	SHLE
323HGSR	5,920	5,928	LMSN
323MSSR	5,928	6,066	SHLE
323PLSN	6,066	6,235	SHLE
325MRMN	6,235	6,483	LMSH
325CBNS	6,483	6,695	SHLE
332CSTR	6,695	6,983	SHLE
333MRMC	6,983	7,572	LMSN
339KDRK	7,572	7,632	SLSN

Table 3.--Geologic logs for wells in the study
area--Continued

Major County, Oklahoma--Continued

Latitude: 362139	Longitude: 981527
Owner: SUPERIOR	Local number: 22N-10W-27 BAA 1
Use of site: P	Completion date: 01/01/1945
Altitude: 1,276	Depth of well: 8,279

Geologic- unit code	Depth to top	Depth to bottom	Lithology
341WDFD	7,632	7,686	SHLE
340HNTN	7,686	7,706	DLMT
361SLVN	7,706	7,820	SHLE
361VIOL	7,820	7,890	LMSN
364BRMD	7,890	8,104	LMSN
364BRMD	8,104		SNDS

Table 3.--Geologic logs for wells in the study
area--Continued

Mayes County, Oklahoma

Latitude: 360823 Longitude: 951111
Owner: BALLOU Local number: 19N-20E-09 BCD 1
Use of site: P Completion date: 01/01/1967
Altitude: 740 Depth of well: 1,124

Geologic- unit code	Depth to top	Depth to bottom	Lithology
364SMPS	175	227	SHLE
367CTTR	227	497	DLMT
368JFRC	497	695	DLMT
367RBDX	695	790	DLMT
367GSCD	790	1,102	DLMT
400PCMB	1,102		RYLT

Mayes County, Oklahoma

Latitude: 362600 Longitude: 950250
Owner: DAVIS Local number: 23N-21E-34 ACA 1
Use of site: T Completion date: 01/01/1959
Altitude: 670 Depth of well: 1,622

Geologic- unit code	Depth to top	Depth to bottom	Lithology
368PWLL	170	320	DLMT
367CTTR	320	700	DLMT
368JFRC	700	940	DLMT
367RBDX	940	1,080	DLMT
367GSCD	1,080	1,320	DLMT
367GNTR	1,320	1,340	SNDS
371EMCP	1,340	1,450	DLMT
371BNTR	1,450	1,615	DLMT
400PCMB	1,615		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Murray County, Oklahoma

Latitude: 343046 Longitude: 970040
Owner: FLEMING Local number: 01N-03E-32 CAA 1
Use of site: Completion date: 06/04/1973
Altitude: 995 Depth of well: 5,178

Geologic- unit code	Depth to top	Depth to bottom	Lithology
320PSLV	0	50	SNDS
320PSLV	50	510	SHLE
320PSLV	510	750	LMSH
367ABCK	750	1,050	LMDM
367ABCK	1,050	1,810	DLMT
367ABCK	1,810	2,550	DLMT
367ABCK	2,550	3,420	DLMT
367ABCK	3,420	4,700	DLMT
367ABCK	4,700	4,960	LMSH
367ABCK	4,960	5,000	DLMT
367ABCK	5,000	5,060	SNDS
371REGN	5,060	5,170	SNDS
400PCMB	5,170		GRNT

Muskogee County, Oklahoma

Latitude: 353510 Longitude: 951528
Owner: MARSHALL Local number: 13N-19E-23 DB 1
Use of site: P Completion date: 01/09/1958
Altitude: 601 Depth of well: 3,296

Geologic- unit code	Depth to top	Depth to bottom	Lithology
331PTKN	280	340	SNDS
326ATCK	340	884	SHLE
328WPCK	884	1,039	LMSN
331PTKN	1,039	1,120	LMSN
333DLCK	1,120	1,258	SHLE
338OGKK	1,258	1,345	LMSN
341WDFD	1,345	1,370	SHLE
340HNTN	1,370	1,452	LMSN
361SLVN	1,452	1,500	DLMT
361VIOL	1,500	1,546	LMSN
364SMPS	1,546	1,548	SNDS
364TYNR	1,548	1,745	SNDS
364BRGN	1,745	1,840	SNDS
367ABCK	1,840	3,282	LMSN
400PCMB	3,282		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Noble County, Oklahoma

Latitude: 361218 Longitude: 972036
Owner: HUBBART Local number: 20N-01W-18 CDB 1
Use of site: P Completion date:
Altitude: 1,100 Depth of well: 5,239

Geologic- unit code	Depth to top	Depth to bottom	Lithology
310WLNG	0	760	SHLE
317HRNG	760	785	DLMT
319WFMP	785	1,350	SHLE
319WFMP	1,350	1,790	SHLE
322VRGL	1,790	2,720	SHLE
322ORED	2,720	2,760	LMSN
322VRGL	2,760	2,870	SHLE
322VRGL	2,870	3,135	SDSL
322VRGL	3,135	3,340	SDSL
323LNSG	3,340	3,460	LMSN
323MSSR	3,460	3,815	SHLE
323MSSR	3,815	3,920	SNDS
323MSSR	3,920	4,290	SDSL
323MSSR	4,290	4,365	LMSH
325MRMN	4,365	4,430	SHLE
325MRMN	4,430	4,635	LMSN
325CHRK	4,635	4,880	LMSN
330MSSP	4,880	4,950	LMSN
341WDFD	4,950	4,990	SHLE
361SLVN	4,990	5,045	SHLE
361VIOL	5,045	5,085	LMSN
364BRMD	5,085	5,110	LMSN
364SMPS	5,110	5,133	DLMT
364SMPS	5,133		SNDS

Noble County, Oklahoma

Latitude: 361216 Longitude: 972626
Owner: MAGNEY Local number: 20N-02W-17 CC 1
Use of site: P Completion date:
Altitude: 1,269 Depth of well: 7,088

Geologic- unit code	Depth to top	Depth to bottom	Lithology
300PLZC	0	5,274	SDMN
364SMPS	5,274	5,495	SDSL
367ABCK	5,495	6,950	DLMT
371REGN	6,950	7,050	SNDS
400PCMB	7,050		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Nowata County, Oklahoma

Latitude: 365100 Longitude: 953920
Owner: ALSUP Local number: 27N-15E-01 DBB 1
Use of site: P Completion date: 06/07/1954
Altitude: 760 Depth of well: 2,222

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325LNPH	101	132	LMSN
325NOWT	132	250	SHLE
325ALMN	250	282	LMSN
325BNDR	282	335	SHLE
325PWNE	335	369	LMSN
325LBTT	369	520	SHLE
325FRSC	520	595	LMSN
325CHRK	595	1,135	SHLE
331BOON	1,135	1,395	LMSN
341CTNG	1,395	1,465	SHLE
367ABCK	1,465		LMSN

Nowata County, Oklahoma

Latitude: 364712 Longitude: 953518
Owner: PRAIRIE O G Local number: 27N-16E-27 CDC 1
Use of site: Completion date:
Altitude: 665 Depth of well: 2,070

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325PWNE	0	30	LMSN
325LBTT	30	190	SHLE
325FRSC	190	260	LMSN
325CHRK	260	840	SHLE
331BOON	840	1,140	LMSN
330CTNG	1,140	1,200	SHLE
367ABCK	1,200	1,955	LMSN
400PCMB	1,955		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Okfuskee County, Oklahoma

Latitude: 353055	Longitude: 962714
Owner: REPLOGLE	Local number: 12N-08E-15 CAB 1
Use of site: P	Completion date:
Altitude: 944	Depth of well: 4,507

Geologic- unit code	Depth to top	Depth to bottom	Lithology
323MSSR	0	1,020	SDSL
323MSSR	1,020	1,080	SNDS
323MSSR	1,080	1,330	SHLE
323CCKB	1,330	1,350	LMSN
325MRMN	1,350	1,400	LMSH
325MRMN	1,400	1,630	SHLE
325MRMN	1,630	2,080	SDSL
325MRMN	2,080	2,400	SHLE
325CHRK	2,400	2,500	SNDS
325CHRK	2,500	2,700	SHLE
325CHRK	2,700	2,810	SNDS
325CHRK	2,810	2,900	SHLE
325CHRK	2,900	3,050	SDSL
325CHRK	3,050	3,160	SHLE
325CHRK	3,160	3,200	LMSH
325CHRK	3,200	3,280	SDSL
325CHRK	3,280	3,380	SHLE
325CHRK	3,380	3,410	LMSH
325CHRK	3,410	3,735	SHLE
327UNVL	3,735	3,825	LMSH
330MSSP	3,825	3,850	LMSN
330MSSP	3,850	4,235	SHLE
341WDFD	4,235	4,263	SHLE
340MSNR	4,263	4,264	SNDS
340HNTN	4,264	4,328	DLMT
361SLVN	4,328	4,415	SHLE
361VIOL	4,415	4,435	DLMT
364BRMD	4,435		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Oklahoma County, Oklahoma

Latitude: 352505 Longitude: 972712
Owner: FARLEY Local number: 11N-02W-19 BAC 1
Use of site: P Completion date:
Altitude: 1,242 Depth of well: 8,342

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318LNRD	0	1,000	SDSL
319WFMP	1,000	2,910	SDSL
322VRGL	2,910	2,950	LMSN
322VRGL	2,950	3,170	SHLE
322SHWN	3,170	3,400	LMSD
322SHWN	3,400	3,490	SHLE
322SHWN	3,490	3,780	SNDS
322SHWN	3,780	3,950	SHLE
322SHWN	3,950	4,020	SNDS
322SHWN	4,020	4,155	SDSL
322ORED	4,155	4,200	LMSN
322DGLS	4,200	4,340	SDSL
322DGLS	4,340	4,450	LMSH
322DGLS	4,450	4,600	SNDS
323MSSR	4,600	4,840	SHLE
323MSSR	4,840	4,870	LMSN
323MSSR	4,870	4,990	SDSL
323MSSR	4,990	5,090	SHLE
323HGSR	5,090	5,220	LMSN
323MSSR	5,220	5,470	SHLE
323CCKB	5,470	5,490	LMSN
325MRMN	5,490	5,890	SHLE
325MRMN	5,890	5,970	LMSH
325MRMN	5,970	6,010	SDSL
367ABCK	6,010	8,240	DLMT
371REGN	8,240	8,260	SNDS
400PCMB	8,260		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Oklahoma County, Oklahoma

Latitude: 353755	Longitude: 971525
Owner: MACKLIN	Local number: 13N-01W-01 BDD 1
Use of site: P	Completion date:
Altitude: 1,030	Depth of well: 5,942

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318LNRD	0	540	SDSL
319WFMP	540	2,315	SHLE
322VRGL	2,315	2,420	LMSH
322VRGL	2,420	2,740	SHLE
322VRGL	2,740	3,835	SHLE
322ORED	3,835	3,890	LMSN
323MSSR	3,890	4,280	SHLE
323MSSR	4,280	4,445	LMSH
323MSSR	4,445	4,560	SHLE
323HGSR	4,560	4,595	LMSH
323MSSR	4,595	4,835	SHLE
323CCKB	4,835	4,845	LMSN
325MRMN	4,845	5,070	SHLE
325MRMN	5,070	5,170	LMSH
325MRMN	5,170	5,500	SHLE
341WDFD	5,500	5,550	SHLE
340MSNR	5,550	5,555	SNDS
340HNTN	5,555	5,617	LMSN
361SLVN	5,617	5,720	SHLE
361VIOL	5,720	5,755	LMSN
364SMPS	5,755	5,810	DLMT
364SMPS	5,810		SDSL

Table 3.--Geologic logs for wells in the study
area--Continued

Okmulgee County, Oklahoma

Latitude: 354922	Longitude: 955050
Owner: MILLER	Local number: 16N-14E-32 BDA 1
Use of site: P	Completion date:
Altitude: 802	Depth of well: 3,915

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325WWOK	0	100	SHLE
325CHRK	100	450	SDSL
325CHRK	450	615	SLSN
325CHRK	615	1,455	SDSL
326ATCK	1,455	1,840	SHLE
332CSTR	1,840	2,250	SHLE
330MSSP	2,050	2,250	LMSH
341CTNG	2,250	2,272	SHLE
364SMPS	2,272	2,608	SDSL
367ABCK	2,608		DLMT

Table 3.--Geologic logs for wells in the study area--Continued

Osage County, Oklahoma

Latitude: 361940 Longitude: 960915
 Owner: ZINK Local number: 21N-11E-05 BC 1
 Use of site: P Completion date:
 Altitude: 890 Depth of well: 2,995

Geologic-unit code	Depth to top	Depth to bottom	Lithology
323WANN	0	190	SDSL
323MSSR	190	1,056	SDSL
323MSSR	1,056	1,186	SNDS
325MRMN	1,186	1,356	SHLE
325MRMN	1,356	1,408	LMSN
325CHRK	1,408	1,762	SHLE
325CHRK	1,762	1,852	SNDS
325CHRK	1,852	1,940	SHLE
330MSSP	1,940	2,130	LMSN
341CTNG	2,130	2,136	SHLE
364SMPS	2,136	2,228	SNDS
364SMPS	2,228	2,298	SHLE
367ABCK	2,298	2,922	DLMT
400PCMB	2,922		GRNT

Osage County, Oklahoma

Latitude: 362015 Longitude: 961313
 Owner: SUNRAY Local number: 22N-10E-34 C 1
 Use of site: P Completion date:
 Altitude: 836 Depth of well: 3,235

Geologic-unit code	Depth to top	Depth to bottom	Lithology
323BRDL	0	40	SHLE
323MSSR	40	1,225	SHLE
323MSSR	1,225	1,306	SNDS
325MRMN	1,306	1,470	SHLE
325MRMN	1,470	1,560	LMSN
325CHRK	1,560	1,914	SHLE
325CHRK	1,914	1,990	SNDS
325CHRK	1,990	2,055	SHLE
330MSSP	2,055	2,354	LMSN
341CTNG	2,354	2,358	SHLE
364SMPS	2,358	2,420	SDSL
367ABCK	2,420		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Osage County, Oklahoma

Latitude: 363722 Longitude: 962512
Owner: PHILLIPS Local number: 25N-08E-23 CCC 1
Use of site: P Completion date: 08/15/1956
Altitude: 898 Depth of well: 3,663

Geologic- unit code	Depth to top	Depth to bottom	Lithology
322VMOS	0	688	SDSL
323MSSR	688	1,144	SHLE
323MSSR	1,144	1,440	SNDS
323MSSR	1,440	1,710	SHLE
325MRMN	1,710	1,958	SHLE
325CHRK	1,958	2,296	SHLE
330MSSP	2,296	2,625	LMSN
341CTNG	2,625	2,645	SHLE
367ABCK	2,645	3,660	DLMT
400PCMB	3,660		GRNT

Ottawa County, Oklahoma

Latitude: 365324 Longitude: 945313
Owner: GOODRICH RUB Local number: 28N-22E-24 CAD 1
Use of site: W Completion date: 01/01/1944
Altitude: 798 Depth of well: 1,055

Geologic- unit code	Depth to top	Depth to bottom	Lithology
332CSTR	22	45	LMSN
333WRSW	45	167	LMSN
338SRCK	167	175	LMSN
338OSGE	175	255	LMSN
338OSGE	255	435	CHRT
341CTNG	435	443	SHLE
367CTTR	443	560	DLMT
368SCRK	560	585	DLMT
368JFRC	585	890	DLMT
367RBDX	890	1,045	DLMT
400PCMB	1,045		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Ottawa County, Oklahoma

Latitude: 365213	Longitude: 945007
Owner: MIAMI,OK	Local number: 28N-23E-33 BA 1
Use of site: W	Completion date: 01/01/1955
Altitude: 800	Depth of well: 1,526

Geologic- unit code	Depth to top	Depth to bottom	Lithology
333WRSW	0	130	LMSN
338SRCK	130	150	LMSN
338OSGE	150	250	LMSN
338OSGE	250	360	LMSN
338FRGL	360	405	LMSN
339NRTV	405	428	SHLE
341CTNG	428	440	SHLE
367CTTR	440	675	DLMT
368JFRC	675	906	DLMT
367RBDX	906	1,070	DLMT
367GSCDU	1,070	1,135	DLMT
367GSCDL	1,135	1,350	DLMT
367GNTR	1,350	1,370	SNDS
371EMNC	1,370	1,485	DLMT
371DRBD	1,485		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Pawnee County, Oklahoma

Latitude: 362551	Longitude: 965836
Owner: TRIGG	Local number: 23N-03E-34 BCB 1
Use of site: P	Completion date:
Altitude: 959	Depth of well: 4,585

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318OSCR	0	300	SHLE
322VNSS	300	800	LMSH
322ADA	800	1,200	SHLE
322VMOS	1,200	1,700	SDSL
322DGLS	1,700	1,820	SDSL
323MSSR	1,820	2,270	SDSL
323MSSR	2,270	2,310	LMSN
323MSSR	2,310	2,440	SDSL
323MSSR	2,440	2,720	SHLE
323MSSR	2,720	2,825	SDSL
323MSSR	2,825	3,155	SDSL
323CCKB	3,155	3,170	LMSN
323KSSC	3,170	3,200	SDSL
325MRMN	3,200	3,295	LMSH
325MRMN	3,295	3,490	LMSN
325CHRK	3,490	3,815	SHLE
330MSSP	3,815	4,070	LMSN
341WDFD	4,070	4,110	SHLE
340MSNR	4,110	4,112	SNDS
364SMPS	4,112	4,120	DLMT
364SMPS	4,120	4,130	SNDS
364SMPS	4,130	4,335	SDSL
367ABCK	4,335		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Payne County, Oklahoma

Latitude: 361024	Longitude: 970614
Owner: FLYNN	Local number: 20N-02E-33 BBB 1
Use of site: P	Completion date:
Altitude: 960	Depth of well: 4,877

Geologic- unit code	Depth to top	Depth to bottom	Lithology
310WLNG	0	200	SDSL
318OSCR	200	600	SDSL
322VNSS	600	760	SDSL
322VNSS	760	1,150	SHLE
322ADA	1,150	1,370	LMSH
322ADA	1,370	1,620	SHLE
322VMOS	1,620	1,850	SDSL
322VMOS	1,850	2,240	SHLE
322VMOS	2,240	2,310	SNDS
323MSSR	2,310	2,850	SDSL
323MSSR	2,850	2,900	LMSH
323MSSR	2,900	3,100	SHLE
323MSSR	3,100	3,200	SDSL
323MSSR	3,200	3,640	SHLE
323CCKB	3,640	3,650	LMSN
323MSSR	3,650	3,840	SHLE
325MRMN	3,840	4,030	LMSH
325CHRK	4,030	4,110	LMSH
325CHRK	4,110	4,120	LMSN
325CHRK	4,120	4,210	SHLE
325CHRK	4,210	4,230	LMSN
325CHRK	4,230	4,260	SHLE
325CHRK	4,260	4,280	SNDS
325CHRK	4,280	4,430	SHLE
330MSSP	4,430	4,640	LMSN
341WDFD	4,640	4,680	SHLE
361SLVN	4,680	4,740	SHLE
361VIOL	4,740	4,780	LMSN
364BRMD	4,780	4,805	LMSN
364BRMD	4,805	4,820	DLMT
364SMPS	4,820	4,850	SNDS
364SMPS	4,850	4,860	DLMT
364SMPS	4,860		SNDS

Table 3.--Geologic logs for wells in the study area--Continued

Pittsburg County, Oklahoma

Latitude: 345558 Longitude: 955923
 Owner: SEALY Local number: 05N-12E-01 CA 1
 Use of site: P Completion date: 06/01/1964
 Altitude: 796 Depth of well: 3,541

Geologic-unit code	Depth to top	Depth to bottom	Lithology
325BGGY	0	1,460	SDSL
325CHRK	1,460	2,112	SDSL
325SVNN	2,112	2,855	LMSH
325CHRK	2,855	3,320	SDSL
325HRSR	3,320	3,410	SNDS
326ATOK	3,410		SHLE

Pittsburg County, Oklahoma

Latitude: 345758 Longitude: 953023
 Owner: MANSHRICK Local number: 06N-17E-28 ADB 1
 Use of site: Completion date: 09/23/1954
 Altitude: 963 Depth of well: 12,915

Geologic-unit code	Depth to top	Depth to bottom	Lithology
326ATCK	3,325	8,970	SHLE
326ATCK	8,970	9,070	SDSL
326ATCK	9,070	9,895	SHLE
328WPCK	9,895	10,065	LMSN
328WPCK	10,065	10,500	SHLE
327UNVL	10,500	10,700	SDSL
327UNVL	10,700	10,895	SLSH
333DLCK	10,895	11,280	LMSH
338OGKK	11,280	11,410	LMSN
341WDFD	11,410	11,485	SHLE
340MSNR	11,485	11,495	CHRT
361SLVN	11,495	11,552	SHLE
361FRVL	11,552	11,630	LMSN
364BRMD	11,630	12,070	DLMT
364BRMD	12,070	12,330	SNDS
367ABCK	12,330		DLMT
367ABCK	12,330		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Pontotoc County, Oklahoma

Latitude: 344057	Longitude: 964806
Owner: BROWN	Local number: 03N-05E-32 CD 1
Use of site: P	Completion date: 03/24/1966
Altitude: 1,177	Depth of well: 5,741

Geologic- unit code	Depth to top	Depth to bottom	Lithology
322ADA	20	345	CGLM
361SLVN	345	510	SHLE
361VIOL	510	910	LMSN
364SMPS	910	1,200	LMSH
364SMPS	1,200	1,310	DLMT
364SMPS	1,310	1,375	LMSH
364SMPS	1,375	1,500	DLMT
364SMPS	1,500	1,600	SNDS
364SMPS	1,600	1,735	LMSH
364SMPS	1,735	1,800	SNDS
364SMPS	1,800	1,970	DMSH
364SMPS	1,970	2,010	SNDS
367ABCK	2,010	2,600	DLMT
367ABCK	2,600	2,910	DLMT
367ABCK	2,910	3,610	DLMT
367ABCK	3,610	4,940	DLMT
367ABCK	4,940	5,600	DLMT
371REGN	5,600	5,720	SNDS
400PCMB	5,720		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Pottawatomie County, Oklahoma

Latitude: 352108 Longitude: 970429
Owner: EAVES Local number: 10N-02E-10 DAC 1
Use of site: P Completion date:
Altitude: 1,078 Depth of well: 6,070

Geologic- unit code	Depth to top	Depth to bottom	Lithology
31OWLNG	0	415	SDSL
319WFMP	415	1,900	SDSL
322VRGL	1,900	2,065	SHLE
322SHWN	2,065	2,265	LMSH
322VRGL	2,265	2,500	SDSL
322VRGL	2,500	3,250	SHLE
322DGLS	3,250	3,345	SNDS
323MSSR	3,345	3,485	SHLE
324BLCT	3,485	3,545	SDSL
323MSSR	3,545	3,735	LMSH
323MSSR	3,735	3,940	SDSL
323HGSR	3,940	3,980	LMSH
323MSSR	3,980	4,145	SHLE
323CCKB	4,145	4,195	LMSN
323MSSR	4,195	4,365	SDSL
325MRMN	4,365	4,555	SDSL
325MRMN	4,555	4,560	LMSN
325MRMN	4,560	4,960	SHLE
325MRMN	4,960	4,995	LMSH
325CHRK	4,995	5,070	SDSL
325CHRK	5,070	5,215	SDSL
325CHRK	5,215	5,330	SDSL
325CHRK	5,330	5,385	LMSH
330MSSP	5,385	5,550	LMSH
341WDFD	5,550	5,700	SHLE
340HNTN	5,700	5,710	LMSN
361SLVN	5,710	5,805	SHLE
361VIOL	5,805	5,885	LMSN
364SMPS	5,885	5,920	LMSN
364SMPS	5,920	5,980	DLMT
364SMPS	5,980		SNDS

Table 3.--Geologic logs for wells in the study
area--Continued

Roger Mills County, Oklahoma

Latitude: 353101	Longitude: 993542
Owner: GULF OIL	Local number: 12N-23W-14 AD 1
Use of site: P	Completion date: 10/09/1951
Altitude: 2,070	Depth of well: 13,010

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313ELRN	400	750	SDSL
313ELRN	750	900	SHLE
313BLIN	900	1,070	ANDR
313ELRN	1,070	1,200	SHLE
313ELRN	1,200	1,280	SHLE
313ELRN	1,280	2,110	SHLE
313ELRN	2,110	2,470	SHLE
310PRMN	2,470	3,030	SHLE
310PRMN	3,030	3,205	SHLE
310WLNG	3,205	3,930	SHLE
319CHSE	3,930	4,175	SHLE
319CHSE	4,175	4,580	DLMT
319CHSE	4,580	4,995	LMSN
319CHSE	4,995	6,000	LMSH
322VRGL	6,000	6,060	SNDS
322VRGL	6,060	6,122	LMSN
322VRGL	6,122	6,640	LMSH
322VRGL	6,640	6,730	LMSN
322VRGL	6,730	7,190	LMSH
322VRGL	7,190	7,355	SHLE
322VRGL	7,355	7,400	LMSH
322VRGL	7,400	7,770	SNDS
322VRGL	7,770	8,595	SDSL
322DGLS	8,595	8,685	SNDS
322DGLS	8,685	9,095	LMSH
323LNSG	9,095	9,660	LMSH
323HGSR	9,660	10,090	SDSL
323CCKB	10,090	10,190	SHLE
323CFVL	10,190	10,315	SDSL
323CFVL	10,315	10,595	SDSL
325DSMS	10,595	11,230	SHLE
325CHRK	11,230	12,420	SHLE
325CHRK	12,420		SDSL

Table 3.--Geologic logs for wells in the study
area--Continued

Roger Mills County, Oklahoma

Latitude: 354737 Longitude: 993343
Owner: CLARK CNDN Local number: 15N-22W-08 BDA 1
Use of site: P Completion date: 05/17/1972
Altitude: 2,140 Depth of well: 19,435

Geologic- unit code	Depth to top	Depth to bottom	Lithology
319CHSE	4,239	4,510	LMSH
317FRRL	4,510	4,690	LMSN
319PNTC	4,690	4,980	SHLE
319PNTC	4,980	5,250	LMSN
319PNTC	5,250	5,395	SHLE
319PNTC	5,395	5,660	LMSH
319PNTC	5,660	5,800	LMSN
319PNTC	5,800	5,930	SHLE
322VRGL	5,930	6,089	LMSN
322VRGL	6,089	6,350	SHLE
322VRGL	6,350	6,480	SNDS
322VRGL	6,480	7,760	SHLE
322VRGL	7,760	7,880	SHLE
322VRGL	7,880	7,940	SNDS
322VRGL	7,940	8,250	SHLE
322VRGL	8,250	8,610	SHLE
322DGLS	8,610	8,710	SNDS
323HXBR	8,710	9,160	SHLE
323LNSG	9,160	9,210	SHLE
323HXBR	9,210	9,610	SHLE
323HGSR	9,610	9,660	SHLE
323HXBR	9,660	10,000	SHLE
323CCKB	10,000	10,110	SHLE
323CFVL	10,110	10,450	SDSL
323CFVL	10,450	10,550	SHLE
325DSMS	10,550	11,110	SHLE
325CHRK	11,110	11,170	SHLE
325CHRK	11,170	11,290	LMSN
325CHRK	11,290	11,520	SHLE
325CHRK	11,520	11,700	LMSH
325CHRK	11,700	12,100	SHLE
325CHRK	12,100	12,250	SNDS
325CHRK	12,250	13,080	SHLE
325CHRK	13,080	13,160	SHLE
328MRRW	13,160	13,990	SHLE
328MRRW	13,990	14,050	LMSN
328MRRW	14,050	14,430	SHLE
328MRRW	14,430	14,790	SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Roger Mills County, Oklahoma--Continued

Latitude: 354737	Longitude: 993343
Owner: CLARK CNDN	Local number: 15N-22W-08 BDA 1
Use of site: P	Completion date: 05/17/1972
Altitude: 2,140	Depth of well: 19,435

Geologic- unit code	Depth to top	Depth to bottom	Lithology
328MRRW	14,790	14,960	SNDS
328MRRW	14,960	15,260	SNDS
332CSTR	15,260	15,520	LMSN
332CSTR	15,520	15,970	SHLE
332CSTR	15,970	16,180	SHLE
332CSTR	16,180	16,410	LMSN
332CSTR	16,410	16,880	LMSN
332CSTR	16,880	17,030	SHLE
332CSTR	17,030	17,140	LMSN
330MSSP	17,140	17,870	LMSN
330MSSP	17,870	18,710	LMSN
341WDFD	18,710	18,830	SHLE
34OHNTN	18,830	19,145	DLMT
361SLVN	19,145	19,240	DLMT
361VIOL	19,240		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Rogers County, Oklahoma

Latitude: 361922 Longitude: 954258
Owner: Local number: 21N-15E-04 CD 1
Use of site: P Completion date:
Altitude: 865 Depth of well: 1,370

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325LBTT	0	53	SHLE
325FRSC	53	146	LMSN
325CHRK	146	508	SDSL
325CHRK	508	563	SNDS
325CHRK	563	906	SDSL
328MRRW	906	1,059	LMSH
333MRMC	1,059	1,159	LMSN
331BOON	1,159	1,229	LMSN
337STJO	1,229	1,241	LMSN
339NRTV	1,241	1,253	SHLE
341CTNG	1,253	1,308	SHLE
367CTTR	1,308		DLMT

Table 3.--Geologic logs for wells in the study area--Continued

Seminole County, Oklahoma

Latitude: 351022 Longitude: 963936
 Owner: LIVINGSTON Local number: 08N-06E-15 ABB 1
 Use of site: P Completion date:
 Altitude: 865 Depth of well: 4,880

Geologic-unit code	Depth to top	Depth to bottom	Lithology
322VMOS	0	590	SDSL
324BLCT	590	600	LMSN
323NLBL	600	1,060	SDSL
323CFVL	1,060	1,300	SDSL
323SMNL	1,300	1,500	SHLE
325HLDV	1,500	1,730	SHLE
325WWOK	1,730	2,020	SDSL
325WTMK	2,020	2,120	SHLE
325CLVN	2,120	2,450	SDSL
325CHRK	2,450	3,260	SHLE
333MRMC	3,260	3,410	SHLE
330MSSP	3,410	3,590	LMSN
341WDFD	3,590	3,727	SHLE
340MSNR	3,727	3,730	SNDS
361SLVN	3,730	3,810	SHLE
361VIOL	3,810	3,880	LMSN
364SMPS	3,880	3,940	DLMT
364SMPS	3,940	3,980	SNDS
364SMPS	3,980	4,015	DLMT
364SMPS	4,015	4,250	SDSL
364SMPS	4,250	4,640	SDSL
367ABCK	4,610		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Sequoyah County, Oklahoma

Latitude: 352757 Longitude: 945526
Owner: SNOW Local number: 12N-22E-36 CD 1
Use of site: P Completion date: 12/03/1959
Altitude: 524 Depth of well: 1,718

Geologic- unit code	Depth to top	Depth to bottom	Lithology
326ATCK	130	300	SDSL
326ATCK	300	430	SNDS
326ATCK	430	560	SHLE
328WPCK	560	730	LMSN
327UNVL	730	795	LMSH
333MRMC	795	950	LMSN
341WDFD	950	960	SHLE
340MSNR	960	990	SNDS
340HNTN	990	1,245	LMDM
361SLVN	1,245	1,280	SHLE
361VIOL	1,280	1,340	LMSN
364SMPS	1,340	1,620	LMDM
367ABCK	1,620		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Sequoyah County, Oklahoma

Latitude: 352958	Longitude: 944135
Owner: CHEEK	Local number: 12N-26E-19 CAA 1
Use of site: P	Completion date: 12/11/1958
Altitude: 595	Depth of well: 3,604

Geologic- unit code	Depth to top	Depth to bottom	Lithology
326ATCK	170	340	SHLE
326ATCK	340	820	SDSL
326ATCK	820	1,060	SDSL
326ATCK	1,060	1,180	SNDS
326ATCK	1,180	1,600	SHLE
326ATCK	1,600	1,740	SHLE
326ATCK	1,740	1,800	SNDS
326ATCK	1,800	2,140	SHLE
326ATCK	2,140	2,400	SNDS
326ATCK	2,400	2,500	SDSL
328WPCK	2,500	2,690	LMSH
328WPCK	2,690	2,710	LMSN
327UNVL	2,710	2,750	LMSN
331PTKN	2,750	2,810	LMSN
331BOON	2,810	2,915	LMSN
341WDFD	2,915	2,955	SHLE
340HNTN	2,955	3,230	LMSN
361SLVN	3,230	3,260	SHLE
361VIOL	3,260	3,315	LMSN
364SMPS	3,315		SLSN

Table 3.--Geologic logs for wells in the study area--Continued

Stephens County, Oklahoma

Latitude: 343533 Longitude: 980323
 Owner: FERGUSON Local number: 01N-08W-05 AA 1
 Use of site: P Completion date: 12/05/1971
 Altitude: 1,105 Depth of well: 9,152

Geologic-unit code	Depth to top	Depth to bottom	Lithology
318HNSS	0	520	SHLE
318HNSS	520	790	SDSL
318HNSS	790	2,730	SHLE
319PNTC	2,730	4,112	SHLE
321CSCO	4,112	4,809	SHLE
321CSCO	4,809	6,120	SDSL
321CSCO	6,120	6,370	SNDS
323HXBR	6,370	6,890	SHLE
323HXBR	6,890	7,225	LMSN
323HXBR	7,225	7,867	CGLM
323HXBR	7,867	8,270	CGLM
367ABCK	8,270	8,901	LMSN
367ABCK	8,901	9,112	LMSN
367ABCK	9,112		LMSN

Stephens County, Oklahoma

Latitude: 342743 Longitude: 980419
 Owner: KERR MCGEE Local number: 01S-08W-19 AA 1
 Use of site: P Completion date: 05/31/1966
 Altitude: 1,133 Depth of well: 8,515

Geologic-unit code	Depth to top	Depth to bottom	Lithology
323HXBR	3,000	3,050	SNDS
323HXBR	3,050	3,100	SHLE
323HXBR	3,100	3,210	SNDS
323HXBR	3,210	3,250	LMSN
323HXBR	3,250	3,400	CGLM
367ABCK	3,400	6,185	DLMT
367ABCK	6,185	7,185	LMSN
367ABCK	7,185	7,350	LMSN
367ABCK	7,350	7,395	LMSN
367ABCK	7,395	7,965	LMSN
367ABCK	7,965	8,165	SNDS
367ABCK	8,165	8,225	SHLE
371REGN	8,225	8,408	SNDS
371REGN	8,408	8,500	SHLE
370CMBR	8,500		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Texas County, Oklahoma

Latitude: 364100 Longitude: 1020015
Owner: PHILLIPS Local number: 03N-10ECM-32 ACC
Use of site: T Completion date: 05/06/1955
Altitude: 3,648 Depth of well: 6,473

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	287	SDGL
231DCKM	287	380	SHLE
311DCRK	380	415	GPSM
317CMRN	415	780	SHLE
313BLIN	780	970	GPSM
310GLRT	970	1,120	SNDS
318HNSS	1,120	1,512	SHLE
318HNSS	1,512	1,560	ANDR
310PRMN	1,560	2,930	SHLE
320PSLV	2,930	4,150	LMSH
320PSLV	4,150	4,475	SHLE
320PSLV	4,475	4,800	LMSN
320PSLV	4,800	5,350	SHLE
320PSLV	5,350	5,440	SNDS
333SGVV	5,440	5,640	LMSN
330MSSP	5,640	6,260	LMSN
361VIOL	6,260	6,320	DLMT
364SMPS	6,320		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Tulsa County, Oklahoma

Latitude: 360519 Longitude: 960715
Owner: KNOCH Local number: 19N-11E-34 AA 1
Use of site: P Completion date:
Altitude: 822 Depth of well: 2,897

Geologic- unit code	Depth to top	Depth to bottom	Lithology
323CFVL	0	564	SHLE
323CCKB	564	572	LMSN
325MRMN	572	856	SHLE
325MRMN	856	905	LMSN
325MRMN	905	1,034	SHLE
325MRMN	1,034	1,078	LMSN
325CHRK	1,078	1,778	SHLE
326ATCK	1,778	1,878	SHLE
330MSSP	1,878	2,060	LMSN
330MSSP	2,060	2,090	SHLE
341CTNG	2,090	2,118	SHLE
364SMPS	2,118	2,282	SDSL
367ABCK	2,282	2,882	DLMT
400PCMB	2,882		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Wagoner County, Oklahoma

Latitude: 355604 Longitude: 953519
Owner: LOVETT Local number: 17N-16E-22 DBD 1
Use of site: P Completion date: 06/09/1934
Altitude: 630 Depth of well: 1,600

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325BGGY	0	165	SHLE
325CHRK	165	205	SHLE
325CHRK	205	612	SDSL
325HRSR	612	775	LMSH
324STRN	775	925	SDSL
328WPCK	925	1,003	LMSH
328WPCK	1,003	1,008	SNDS
331PTKN	1,008	1,038	LMSH
332FTVL	1,038	1,105	SHLE
333DLCK	1,105	1,124	SHLE
333MRMC	1,124	1,288	LMSH
339KDRK	1,288	1,320	SHLE
341CTNG	1,320	1,352	SHLE
364SMPS	1,352	1,515	SDSL
364BRGN	1,515	1,584	SDSL
367ABCK	1,584		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Wagoner County, Oklahoma

Latitude: 355413	Longitude: 953800
Owner: SHELLY	Local number: 17N-16E-32 CCA 1
Use of site: P	Completion date: 12/22/1980
Altitude: 565	Depth of well: 1,581

Geologic- unit code	Depth to top	Depth to bottom	Lithology
325CHRK	588	622	SNDS
325CHRK	622	760	SHLE
324STRN	760	784	LMSN
324STRN	784	804	SHLE
324STRN	804	828	LMSH
324STRN	828	860	SHLE
324STRN	860	886	SNDS
324STRN	886	906	SHLE
327UNVL	906	944	LMSN
327UNVL	944	950	SNDS
331PTKN	950	976	LMSN
331PTKN	976	997	LMSH
332FTVL	997	1,088	SHLE
333DLCK	1,088	1,146	SHLE
333MRMC	1,146	1,250	LMSN
339KDRK	1,250	1,308	SHLE
341CTNG	1,308	1,325	SHLE
340MSNR	1,325	1,336	SNDS
361SLVN	1,336	1,340	SHLE
364SMPS	1,340	1,351	SNDS
364SMPS	1,351	1,366	SHLE
364TYNR	1,366	1,402	SNDS
364SMPS	1,402	1,467	SHLE
364TYNR	1,467	1,496	SNDS
364SMPS	1,496	1,504	SHLE
364BRGN	1,504	1,524	SNDS
364SMPS	1,524	1,534	SDSL
367ABCK	1,534		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Washington County, Oklahoma

Latitude: 365825	Longitude: 955250
Owner: THOMASON	Local number: 29N-13E-22 DDB 1
Use of site: P	Completion date: 02/03/1917
Altitude: 750	Depth of well: 3,175

Geologic- unit code	Depth to top	Depth to bottom	Lithology
323MSSR	0	50	LMSH
323MSSR	50	110	SDSL
323MSSR	110	200	SHLE
323MSSR	200	210	SDSL
323MSSR	210	290	SHLE
323HGSR	290	300	LMSN
323MSSR	300	340	SNDS
323MSSR	340	550	SHLE
325MRMN	550	565	LMSN
325MRMN	565	638	SHLE
325MRMN	638	665	LMSH
325MRMN	665	680	LMSN
325MRMN	680	760	SHLE
325MRMN	760	785	LMSN
325MRMN	785	795	SHLE
325MRMN	795	805	SNDS
325MRMN	805	905	SHLE
325MRMN	905	975	LMSH
325MRMN	975	1,005	LMSH
325CHRK	1,005	1,010	COAL
325CHRK	1,010	1,110	SHLE
325CHRK	1,110	1,135	SNDS
325CHRK	1,135	1,235	SHLE
325CHRK	1,235	1,275	SNDS
325CHRK	1,275	1,325	SHLE
325CHRK	1,325	1,355	LMSN
325CHRK	1,355	1,395	SHLE
325CHRK	1,395	1,485	SNDS
330MSSP	1,485	1,685	LMSN
338RSPG	1,685	1,750	LMSN
341WDFD	1,750	1,815	SHLE
367CRJF	1,815	2,270	DLMT
367RBDX	2,270	2,390	SNDS
367ABCK	2,390	2,610	DLMT
371REGN	2,610	2,720	SHLE
400PCMB	2,720		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Washita County, Oklahoma

Latitude: 350723 Longitude: 990353
Owner: NO. AMER. Local number: 08N-18W-35 DAB 1
Use of site: P Completion date:
Altitude: 1,602 Depth of well: 15,013

Geologic- unit code	Depth to top	Depth to bottom	Lithology
310PRMN	200	1,270	SHLE
319PNTC	1,270	1,675	SHLE
319PNTC	1,675	1,840	SHLE
367ABCK	1,840	2,170	DLMT
367ABCK	2,170	2,440	DLMT
367ABCK	2,440	2,590	LMSN
367ABCK	2,590	2,780	LMDM
364SMPS	2,780	2,970	LMSH
364SMPS	2,970	3,220	SHLE
364SMPS	3,220	3,270	SLSN
364SMPS	3,270	3,700	SHLE
361VIOL	3,700	4,200	LMSN
361VIOL	4,200	4,250	LMSN
361VIOL	4,250	4,500	LMSN
361VIOL	4,500	4,610	LMSN
361VIOL	4,610	4,780	LMSN
361VIOL	4,780	5,010	LMSN
361VIOL	5,010	5,280	LMSN
364SMPS	5,280	5,590	SHLE
364SMPS	5,590	5,900	SHLE
364SMPS	5,900	6,000	LMSN
364SMPS	6,000	6,480	LMSH
367ABCK	6,480	6,590	LMSN
367ABCK	6,590	6,700	LMSN
367ABCK	6,700	7,220	LMDM
332CSTR	7,220	7,320	LMSN
332CSTR	7,320	7,480	SHLE
332CSTR	7,480	7,590	LMSN
332CSTR	7,590	7,820	SHLE
332CSTR	7,820	8,820	LMSH
332CSTR	8,820	8,950	LMSN
332CSTR	8,950	10,280	SHLE
338SCMR	10,280	10,890	LMSN
338SCMR	10,890	11,420	LMSN
341WDFD	11,420	12,030	SHLE
340HNTN	12,030	12,590	LMSN
340HNTN	12,590	13,890	LMSN
357CMNL	13,890	14,180	LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Washita County, Oklahoma--Continued

Latitude: 350723	Longitude: 990353
Owner: NO. AMER.	Local number: 08N-18W-35 DAB 1
Use of site: P	Completion date:
Altitude: 1,602	Depth of well: 15,013

Geologic- unit code	Depth to top	Depth to bottom	Lithology
361SLVN	14,180	14,300	SHLE
361SLVN	14,300	14,410	SHLE
361VIOL	14,410	14,730	LMSN
364SMPS	14,730	14,840	SHLE
364SMPS	14,840	14,990	LMSH
364SMPS	14,990	15,010	SNDS
364SMPS	15,010		QRTZ

Table 3.--Geologic logs for wells in the study
area--Continued

Woods County, Oklahoma

Latitude: 364257
Owner: ATLANTIC
Use of site: T
Altitude: 1,465

Longitude: 984616
Local number: 26N-15W-24 CB
Completion date: 07/31/1948
Depth of well: 7,370

Geologic- unit code	Depth to top	Depth to bottom	Lithology
31OPRMN	0	2,350	SHLE
319WFMP	2,350	3,290	LMSH
322WBNS	3,290	3,684	SHLE
322WBNS	3,684	3,818	LMSN
322SHWN	3,818	4,460	SHLE
322SHWN	4,460	4,580	LMSN
322DGLS	4,580	4,820	SHLE
322DGLS	4,820	5,000	SNDS
323HXBR	5,000	5,700	LMSH
330MSSP	5,700	6,470	LMSN
341WDFD	6,470	6,525	SHLE
340HNTN	6,525	6,552	LMSN
361SLVN	6,552	6,675	SHLE
361VIOL	6,675	6,824	LMSN
364SMPS	6,824	6,970	SNDS
364SMPS	6,970	7,090	SHLE
367ABCK	7,090		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Woodward County, Oklahoma

Latitude: 362941 Longitude: 991557
Owner: SINCLAIR Local number: 23N-19W-06 DD
Use of site: T Completion date: 05/07/1951
Altitude: 2,010 Depth of well: 10,327

Geologic- unit code	Depth to top	Depth to bottom	Lithology
112TRRCH	120	150	SAND
310WTRS	150	280	SNDS
310PRMN	280	2,022	SHLE
310WLNG	2,022	3,020	ANDR
310WLNG	3,020	3,236	SHLE
319CHSE	3,236	3,710	LMSN
319CCGV	3,710	4,185	LMSN
322VRGL	4,185	4,820	LMSN
322SHWN	4,820	5,228	SHLE
322ORED	5,228	5,240	LMSN
322SHWN	5,240	5,550	SHLE
322SHWN	5,550	5,610	SNDS
321TRNT	5,610	5,695	LMSN
322DGLS	5,695	5,910	SHLE
323HXBR	5,910	6,025	SNDS
323MSSR	6,025	6,364	SHLE
323KSSC	6,364	6,415	SNDS
323HXBR	6,415	6,480	SHLE
323HGSR	6,480	6,492	LMSN
323CCKB	6,492	6,636	LMSN
325FRSC	6,636	6,698	LMSN
325DSMS	6,698	8,180	LMSH
330MSSP	8,180	9,303	LMSN
341WDFD	9,303	9,320	SHLE
340HNTN	9,320	9,525	LMSN
361SLVN	9,525	9,560	SHLE
361VIOL	9,560	9,703	DLMT
364SMPS	9,703	9,870	DLMT
364SMPS	9,870	9,950	SNDS
364SMPS	9,950	10,047	SHLE
364SMPS	10,047	10,070	DLMT
364SMPS	10,070	10,125	SNDS
364SMPS	10,125	10,295	DLMT
367ABCK	10,295		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Carson County, Texas

Latitude: 352030 Longitude: 1013000
Owner: WHITTENBURG Local number: GIBSON BLK M4 SEC 4
Use of site: T Completion date: 08/01/1953
Altitude: 3,500 Depth of well: 9,311

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	805	SDGL
310PRMN	805	1,520	SDSL
313BLIN	1,520	1,740	ANDR
317CMRN	1,740	1,820	DLMT
310GLRT	1,820	1,850	SNDS
318HNSS	1,850	2,985	EVPR
318HNSS	2,985	3,245	ANDR
318LNRD	3,245	3,505	SHLE
318LNRD	3,505	3,570	ANDR
318WCHT	3,570	4,145	DLMT
319WFMP	4,145	4,694	DLMT
319WFMP	4,694	5,900	LMSN
320PSLV	5,900		ARKS

Dallam County, Texas

Latitude: 360630 Longitude: 1025300
Owner: SKELLY Local number: CSS BLK 5 SEC 58
Use of site: T Completion date: 11/07/1958
Altitude: 4,327 Depth of well: 8,085

Geologic- unit code	Depth to top	Depth to bottom	Lithology
120TRTR	0	438	LMSD
220JRSC	438	640	SDSL
230TRSC	640	1,494	SDSL
310PRMN	1,494	1,900	SDSL
313BLIN	1,900	2,114	ANDR
310GLRT	2,114	2,186	SNDS
318HNSS	2,186	2,700	SDSL
318LNRD	2,700	2,858	EVPR
318LNRD	2,858	3,296	SDSL
319WFMP	3,296	4,792	ARKS
319WFMP	4,792	5,360	LMSH
320PSLV	5,360	8,010	ARKS
333MRMC	8,010		LMSN

Table 3.--Geologic logs for wells in the study area--Continued

Dallam County, Texas

Latitude: 361940 Longitude: 1025245
 Owner: CONTINENTAL Local number: CSS BLK.81,7
 Use of site: P Completion date:
 Altitude: 4,415 Depth of well: 7,808

Geologic-unit code	Depth to top	Depth to bottom	Lithology
313BLIN	1,440	1,970	ANDR
318CLFK	1,970	2,565	SHLE
31OPRMN	2,565	4,900	ARKS
31OPMPV	4,900	6,780	ARKS
328MRRW	6,780	7,380	ARKS
367ELBG	7,380	7,770	DLMT
40OGRNT	7,770		GRNT

Dallam County, Texas

Latitude: 362645 Longitude: 1021540
 Owner: HUMBLE OIL C Local number: H TC RR BLK.50,16
 Use of site: P Completion date:
 Altitude: 3,854 Depth of well: 6,214

Geologic-unit code	Depth to top	Depth to bottom	Lithology
313GDLP	610	1,120	ANDR
318CLFK	1,120	1,755	SDSL
318WCHT	1,755	2,165	SDSL
318WCHT	2,165	2,970	ANDR
319WFMP	2,970	3,240	DLMT
321CSCO	3,240	3,470	LMSN
321CNYN	3,470	3,810	LMSN
324STRN	3,810	4,200	LMSN
326ATCK	4,200	4,380	LMSH
328MRRW	4,380	4,750	LMSH
332CSTR	4,750	4,835	LMSN
333MRMC	4,835	5,450	LMSN
361VIOL	5,450	5,515	LMSN
364SMPS	5,515	5,600	SDSL
367ABCK	5,600	6,200	LMDM
40OGRNT	6,200		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Gray County, Texas

Latitude: 353030	Longitude: 1003730
Owner: PHILLIPS	Local number: H GN;BLK A-6 SEC 53
Use of site: T	Completion date: 08/14/1972
Altitude: 2,854	Depth of well: 13,594

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	340	SDGL
310PRMN	340	1,020	SDSL
313BLIN	1,020	1,180	ANDR
318HNSS	1,180	2,783	EVPR
318HNSS	2,783	3,150	SHLE
310WLNG	3,150	3,845	ANDR
319WFMP	3,845	4,223	LMDM
310PMPV	4,223	6,400	ARKS
320PSLV	6,400	11,200	ARKS
320PSLV	11,200	11,330	CHRT
339KDRK	11,330	11,350	SNDS
340HNTN	11,350	12,100	LMSN
361SLVN	12,100	12,250	DMSH
361VIOL	12,250	12,620	LMSN
364SMPS	12,620	13,040	SDSL
367ABCK	13,040		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Hansford County, Texas

Latitude: 361760	Longitude: 1012400
Owner: GULF OIL	Local number: H GN;BLK P, SEC 17
Use of site: T	Completion date: 07/17/1968
Altitude: 3,193	Depth of well: 9,440

Geologic- unit oode	Depth to top	Depth to bottom	Lithology
121OGLL	0	490	SDGL
310PRMN	490	970	SNDS
313BLIN	970	1,110	ANDR
310GLRT	1,110	1,160	SNDS
318HNSS	1,160	1,800	EVPR
318HNSS	1,800	2,455	SHLE
310WLNG	2,455	3,050	ANDR
319WFMP	3,050	3,404	DLMT
319WFMP	3,404	4,150	LMSN
310PMPV	4,150	5,090	SHLE
323MSSR	5,090	5,150	SNDS
323MSSR	5,150	5,800	SHLE
325DSMS	5,800	6,055	LMSN
325DSMS	6,055	6,205	SHLE
320PSLV	6,205	6,730	LMSH
332CSTR	6,730	7,185	LMSH
330MSSP	7,185	7,800	LMSN
338OSGE	7,800	8,000	LMSN
339KDRK	8,000	8,250	SDSL
340HNTN	8,250	8,500	LMSN
340HNTN	8,500	8,830	SDSL
361VIOL	8,830	9,080	LMSN
364SMPS	9,080	9,205	SDSL
367ELBG	9,205		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Hartley County, Texas

Latitude: 354400	Longitude: 1024900
Owner: SHAMROCK OIL	Local number: G M,LE,7
Use of site: P	Completion date:
Altitude: 4,031	Depth of well: 6,114

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313BLIN	1,305	1,865	ANDR
318CLFK	1,865	2,624	SHLE
318WCHT	2,624	3,400	SDSL
318WCHT	3,400	3,890	SHLE
319WFMP	3,890	4,770	DLMT
320PSLV	4,770	6,055	ARKS
400GRNT	6,055		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Hartley County, Texas

Latitude: 355330	Longitude: 1023500
Owner: PHILLIPS	Local number: T NO;BLK ITO SEC 18
Use of site: T	Completion date: 12/02/1955
Altitude: 3,955	Depth of well: 9,166

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	434	SDGL
230TRSC	434	1,150	SHLE
231DCKM	1,150	1,225	SNDS
313GDLP	1,225	1,636	SDSL
313BLIN	1,636	1,958	ANDR
310GLRT	1,958	2,290	SNDS
318HNSS	2,290	2,826	EVPR
310PRMN	2,826	3,890	SDSL
319WFMP	3,890	4,424	DLMT
319WFMP	4,424	5,160	LMSN
319WFMP	5,160	5,690	SDSL
320PSLV	5,690	6,265	SHLE
323HXBR	6,265	6,618	ARKS
320PSLV	6,618	7,420	LMSN
320PSLV	7,420	8,432	SHLE
333MRMC	8,432	8,510	LMSN
333STLS	8,510	8,764	LMSN
338OSGE	8,764	8,873	DLMT
367ELBG	8,873	9,146	DLMT
400PCMB	9,146		IGNS

Table 3.--Geologic logs for wells in the study
area--Continued

Hemphill County, Texas

Latitude: 354130 Longitude: 1000530
Owner: PHILLIPS Local number: G MMB A; BLK C,S 255
Use of site: T Completion date: 08/26/1967
Altitude: 2,488 Depth of well: 20,113

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	257	SDGL
310PRMN	257	600	SDSL
310PRMN	600	770	ANDR
318HNSS	770	2,028	EVPR
317CMRN	2,028	2,556	EVPR
317CMRN	2,556	3,073	SHLE
310WLNG	3,073	4,160	ANDR
319WFMP	4,160	4,293	DLMT
319WFMP	4,293	5,910	LMSN
319WFMP	5,910	6,150	SHLE
319WFMP	6,150	6,320	LMSN
310PRMN	6,320	8,090	SHLE
310PRMN	8,090	8,490	SDSL
322VRGL	8,490	8,900	SHLE
323MSSR	8,900	9,330	SDSL
323MSSR	9,330	10,364	SHLE
325DSMS	10,364	11,320	SDSL
325DSMS	11,320	12,950	ARKS
320PSLV	12,950	13,425	LMSH
328MRRW	13,425	13,525	SHLE
328MRRW	13,525	13,565	SNDS
328MRRW	13,565	15,040	SHLE
328MRRW	15,040	15,650	SDSL
328MRRW	15,650	15,890	SNDS
332CSTR	15,890	16,240	LMSN
332CSTR	16,240	16,720	SHLE
332CSTR	16,720	17,554	LMSN
330MSSP	17,554	18,440	LMSN
338OSGE	18,440	19,180	LMSN
341WDFD	19,180	19,280	SHLE
340HNTN	19,280	19,800	LMSN
361SLVN	19,800	19,908	SHLE
361VIOL	19,908		LMSN

Table 3.--Geologic logs for wells in the study
area--Continued

Hutchinson County, Texas

Latitude: 360100 Longitude: 1010900
Owner: SUN COMPANY Local number: GB CNG;BLK R;SEC 77
Use of site: T Completion date: 01/17/1958
Altitude: 3,154 Depth of well: 8,287

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	514	SDGL
310PRMN	514	735	SNDS
313BLIN	735	902	ANDR
310GLRT	902	955	SNDS
317CMRN	955	2,180	EVPR
317CMRN	2,180	2,526	SHLE
310WLNG	2,526	3,490	ANDR
319WFMP	3,490	3,820	DLMT
319WFMP	3,820	4,690	LMSN
320PSLV	4,690	5,400	SHLE
320PSLV	5,400	6,230	SDSL
323MSSR	6,230	6,490	LMSH
325DSMS	6,490	7,633	SHLE
328MRRW	7,633	8,125	SHLE
328MRRW	8,125	8,258	SNDS
332CSTR	8,258		LMSN

Hutchinson County, Texas

Latitude: 353930 Longitude: 1013545
Owner: TEXAS OIL GA Local number: H TC RR,46,89
Use of site: P Completion date:
Altitude: 3,111 Depth of well: 5,457

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318WCHT	1,500	1,750	SDSL
318WCHT	1,750	2,140	SHLE
319WFMP	2,140	2,890	DMSH
322VRGL	2,890	3,495	SHLE
320PSLV	3,495	5,380	ARKS
400GRNT	5,380	5,457	GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Lipscomb County, Texas

Latitude: 361130
Owner: GULF OIL
Use of site: T
Altitude: 2,785

Longitude: 1003000
Local number: H TCRR;BLK 43;S 413
Completion date: 12/08/1949
Depth of well: 14,278

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	190	SDGL
317CMRN	190	620	SNDS
317CMRN	620	1,170	SHLE
318LNRD	1,170	1,430	EVPR
318LNRD	1,430	1,525	SHLE
318LNRD	1,525	1,850	EVPR
318LNRD	1,850	2,890	SHLE
310WLNG	2,890	3,575	ANDR
319WFMP	3,575	5,195	LMSN
322VRGL	5,195	6,150	SHLE
320PSLV	6,150	6,420	SNDS
320PSLV	6,420	7,515	SDSL
325DSMS	7,515	7,630	LMSH
325DSMS	7,630	8,190	SDSL
325DSMS	8,190	8,280	LMSN
320PSLV	8,280	9,225	SHLE
320PSLV	9,225	10,430	SHLE
332CSTR	10,430	10,900	LMSH
332CSTR	10,900	11,000	SHLE
330MSSP	11,000	12,670	LMSN
338OSGE	12,670	13,010	LMSN
341WDFD	13,010	13,060	SHLE
340HNTN	13,060	13,120	LMSN
361SLVN	13,120	13,180	SHLE
361VIOL	13,180	13,565	LMSN
364SMPS	13,565	13,860	SDSL
367ELBG	13,860		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Moore County, Texas

Latitude: 355630	Longitude: 1014300
Owner: SAC-MOBILE	Local number: T NO, BLK 3T, SEC 183
Use of site: T	Completion date:
Altitude: 3,416	Depth of well: 6,987

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318HNSS	950	1,385	SHLE
318HNSS	1,385	1,750	EVPR
318HNSS	1,750	2,185	SHLE
310WLNG	2,185	2,580	ANDR
319CHSE	2,580	2,890	DLMT
310PMPV	2,890	4,485	LMSN
325DSMS	4,485	4,920	ARKS
320PSLV	4,920	5,345	SHLE
333MRMC	5,345	5,685	LMSN
338OSGE	5,685	5,900	LMDM
339KDRK	5,900	6,060	LMSD
364SMPS	6,060	6,165	SHLE
367ELBG	6,165	6,943	DLMT
371REGN	6,943	6,968	SNDS
400PCMB	6,968		IGNS

Table 3.--Geologic logs for wells in the study
area--Continued

Ochiltree County, Texas

Latitude: 360530 Longitude: 1005730
Owner: GULF OIL Local number: J.J.BALINTINE SURVEY
Use of site: T Completion date: 01/25/1950
Altitude: 3,077 Depth of well: 11,640

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	898	SDGL
313ELRN	898	940	SNDS
313BLIN	940	1,095	ANDR
317CMRN	1,095	1,160	SHLE
317CMRN	1,160	1,310	SNDS
317CMRN	1,310	1,500	SHLE
317CMRN	1,500	2,125	EVPR
318LNRD	2,125	2,490	SHLE
318LNRD	2,490	3,450	ANDR
317HRNG	3,450	3,825	DLMT
319WFMP	3,825	4,600	LMSN
319WFMP	4,600	5,580	SHLE
322VRGL	5,580	5,730	SNDS
320PSLV	5,730	6,880	SHLE
325DSMS	6,880	6,910	SNDS
325DSMS	6,910	7,325	LMSN
325DSMS	7,325	8,150	SHLE
328MRRW	8,150	8,260	SHLE
328MRRW	8,260	8,290	SNDS
328MRRW	8,290	8,950	LMSH
332CSTR	8,950	9,326	LMSH
330MSSP	9,326	10,505	LMSN
339KDRK	10,505	10,745	SNDS
340HNTN	10,745	10,820	LMSN
357CMNL	10,820	10,848	LMSN
361SLVN	10,848	10,922	DLMT
361VIOL	10,922	11,250	LMSN
364SMPS	11,250	11,402	SHLE
367ELBG	11,402		DLMT

Table 3.--Geologic logs for wells in the study
area--Continued

Oldham County, Texas

Latitude: 353500 Longitude: 1021200
Owner: SHELL Local number: G M;BLK 2;SEC 64
Use of site: T Completion date: 02/16/1960
Altitude: 3,496 Depth of well: 12,964

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	85	125	SDGL
230TRSC	125	540	SDSL
230TRSC	540	810	SHLE
231DCKM	810	923	SNDS
317CMRN	923	1,397	SHLE
313BLIN	1,397	1,650	ANDR
317CMRN	1,650	1,690	DLMT
310GLRT	1,690	1,740	SNDS
318HNSS	1,740	2,060	EVPR
318HNSS	2,060	2,290	SDSL
318LNRD	2,290	3,100	EVPR
318LNRD	3,100	3,690	SHLE
310WLNG	3,690	3,890	ANDR
310WLNG	3,890	4,093	DLMT
319WFMP	4,093	4,330	DLMT
319WFMP	4,330	5,400	LMSN
319WFMP	5,400	6,230	LMSN
319WFMP	6,230	6,444	DLMT
319WFMP	6,444	6,644	SDSL
320PSLV	6,644	7,760	ARKS
323MSSR	7,760	8,348	SDSL
325DSMS	8,348	8,990	LMSN
320PSLV	8,990	10,075	SNDS
320PSLV	10,075	11,620	ARKS
320PSLV	11,620	11,960	LMSH
320PSLV	11,960	12,348	SHLE
320PSLV	12,348	12,710	LMSH
333MRMC	12,710	12,920	LMSN
400PCMB	12,920		IGNS

Table 3.--Geologic logs for wells in the study
area--Continued

Oldham County, Texas

Latitude: 352315 Longitude: 1024240
Owner: SUPERIOR OIL Local number: LGE 31 CAPITAL LANDS
Use of site: P Completion date:
Altitude: 3,861 Depth of well: 5,499

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313BLIN	750	1,390	ANDR
318CLFK	1,390	2,820	ANDR
318WCHT	2,820	3,365	SDSL
318WCHT	3,365	3,670	LMSH
319WFMP	3,670	4,820	LMSH
321CSCO	4,820	5,460	SHLE
400GRNT	5,460		GRNT

Oldham County, Texas

Latitude: 351130 Longitude: 1025715
Owner: LIVERMORE IN Local number: 7N-1E, SEC.26
Use of site: P Completion date:
Altitude: 3,881 Depth of well: 6,884

Geologic- unit code	Depth to top	Depth to bottom	Lithology
313BLIN	2,170	2,680	ANDR
318CLFK	2,680	3,290	SHLE
318WCHT	3,290	4,375	SDSL
318WCHT	4,375	4,680	SHLE
319WFMP	4,680	5,780	DLMT
320PSLV	5,780	6,740	ARKS
400GRNT	6,740		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Potter County, Texas

Latitude: 352100 Longitude: 1014030
Owner: WHITTENBURG Local number: BS F;BLK 1;SEC 28
Use of site: T Completion date: 01/30/1955
Altitude: 3,568 Depth of well: 12,581

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	30	338	SDGL
230TRSC	338	550	SHLE
313ALBS	550	600	DLMT
317CMRN	600	895	SDSL
317CMRN	895	1,095	ANDR
313SADR	1,095	1,770	EVPR
317CMRN	1,770	1,800	SNDS
317CMRN	1,800	2,703	EVPR
317CMRN	2,703	2,790	SNDS
317CMRN	2,790	3,330	EVPR
318LNRD	3,330	3,435	SHLE
318LNRD	3,435	3,665	ANDR
318WCHT	3,665	4,280	DLMT
319WFMP	4,280	5,596	DLMT
319WFMP	5,596	6,100	LMSH
320PSLV	6,100	7,520	SDSL
323MSSR	7,520	7,690	LMSH
323MSSR	7,690	7,850	LMSN
324STRN	7,850	8,600	LMSH
324STRN	8,600	8,740	ARKS
400PCMB	8,740		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Roberts County, Texas

Latitude: 354130 Longitude: 1003730
Owner: PENNZOIL Local number: H GN;BLK M2;SEC 62
Use of site: T Completion date: 08/29/1974
Altitude: 2,795 Depth of well: 14,552

Geologic- unit code	Depth to top	Depth to bottom	Lithology
121OGLL	30	500	SDGL
310PMPV	500	1,170	SDSL
318HNSS	1,170	2,600	EVPR
318LNRD	2,600	3,055	SHLE
310WLNG	3,055	4,180	ANDR
319WFMP	4,180	5,490	LMSN
319WFMP	5,490	5,700	SHLE
310PMPV	5,700	6,710	LMSH
322VRGL	6,710	6,920	SNDS
322VRGL	6,920	7,170	ARKS
322VRGL	7,170	7,530	LMSH
323MSSR	7,530	7,912	LMSH
320PSLV	7,912	9,400	ARKS
325DSMS	9,400	10,380	ARKS
326ATOK	10,380	10,644	LMSH
328MRRW	10,644	10,700	CGLM
332CSTR	10,700	10,755	SHLE
330MSSP	10,755	12,225	LMSN
339KDRK	12,225	12,250	SNDS
341WDFD	12,250	12,260	SHLE
340HNTN	12,260	12,784	LMSN
361SLVN	12,784	12,900	LMSH
361VIOL	12,900	13,292	LMSN
364SMPS	13,292	13,670	SDSL
367ABCK	13,670		DLMT

Table 3.--Geologic logs for wells in the study area--Continued

Sherman County, Texas

Latitude: 362230 Longitude: 1014430
 Owner: PHILLIPS Local number: GH H;BLK 1C,SEC 68
 Use of site: T Completion date: 01/13/1960
 Altitude: 3,448 Depth of well: 8,210

Geologic-unit code	Depth to top	Depth to bottom	Lithology
121OGLL	0	320	SDGL
317CMRN	320	1,603	SDSL
317CMRN	1,603	1,695	ANDR
317CMRN	1,695	2,525	SDSL
310WLNG	2,525	2,855	ANDR
319CHSE	2,855	3,055	DLMT
310PMPV	3,055	4,538	LMSN
322SHWN	4,538	4,576	SNDS
322SHWN	4,576	4,658	LMSD
323MSSR	4,658	5,520	LMSN
325DSMS	5,520	6,070	LMSN
320PSLV	6,070	6,878	SHLE
332CSTR	6,878	7,074	LMSH
333MRMC	7,074	7,690	LMSN
338OSGE	7,690	7,820	LMSN
339KDRK	7,820	7,956	SNDS
361VIOL	7,956	8,103	LMSN
364SMPS	8,103	8,180	SNDS
367ELBG	8,180		DLMT

Sherman County, Texas

Latitude: 360700 Longitude: 1020130
 Owner: I.T.I.O. Local number: T NO RR,IT,369
 Use of site: P Completion date:
 Altitude: 3,639 Depth of well: 5,138

Geologic-unit code	Depth to top	Depth to bottom	Lithology
318WCHT	1,400	2,175	SDSL
318WCHT	2,175	2,240	DLMT
319WFMP	2,240	2,800	DMSH
321CSCO	2,800	3,440	LMSH
321CNYN	3,440	3,900	LMSD
330MSSP	3,900	4,350	LMSH
364SMPS	4,350	4,460	SDSL
367ELBG	4,460	5,120	DLMT
400GRNT	5,120		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Wheeler County, Texas

Latitude: 352100
Owner: STD TEXAS
Use of site: T
Altitude: 2,197

Longitude: 1000500
Local number: H GN;BLK A7,SEC 36
Completion date: 10/02/1970
Depth of well: 21,648

Geologic- unit code	Depth to top	Depth to bottom	Lithology
318LNRD	385	550	ANDR
318LNRD	550	1,485	EVPR
318LNRD	1,485	2,610	SHLE
318LNRD	2,610	3,055	SHLE
310WLNG	3,055	4,335	ANDR
319WFMP	4,335	6,145	LMSN
319WFMP	6,145	6,220	SNDS
310PMPV	6,220	9,297	SDSL
322DGLS	9,297	9,440	SDSL
322DGLS	9,440	10,780	SHLE
320PSLV	10,780	12,560	SDSL
320PSLV	12,560	14,000	ARKS
320PSLV	14,000	15,060	LMSH
320PSLV	15,060	15,610	ARKS
320PSLV	15,610	17,274	LMSH
330MSSP	17,272	18,650	LMSN
338OSGE	18,650	20,470	LMSN
341WDFD	20,470	20,530	SHLE
340HNTN	20,530	21,605	LMDM
361SLVN	21,605		SHLE

Table 3.--Geologic logs for wells in the study
area--Continued

Union County, New Mexico

Latitude: 360140 Longitude: 1030745
Owner: OIL EXPLORAT Local number: 21N-36E-29 BB
Use of site: P Completion date: 01/31/1956
Altitude: 4,526 Depth of well: 7,360

Geologic- unit code	Depth to top	Depth to bottom	Lithology
211DKOT	130	280	SNDS
217KIOW	280	298	SHLE
217CYNN	298	345	SNDS
221MRSN	345	525	SDSL
221ENRD	525	555	SNDS
231DCKM	555	1,010	SDSL
231SNRS	1,010	1,525	SDSL
310PRMN	1,525	1,847	DLMT
313BLIN	1,847	2,112	ANDR
310GLRT	2,112	2,173	SNDS
318HNSS	2,173	2,687	SNDS
317CMRN	2,687	3,045	SNDS
310SGRC	3,045	7,268	ARKS
367ELBG	7,268	7,297	DLMT
371REGN	7,297	7,320	SNDS
400PCMB	7,320		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Union County, New Mexico

Latitude: 362015 Longitude: 1030320
Owner: CONTINENTAL Local number: 24N-36E-2-DD
Use of site: P Completion date: 04/04/1957
Altitude: 4,678 Depth of well: 5,308

Geologic- unit code	Depth to top	Depth to bottom	Lithology
217CYNN	110	238	SNDS
221MRSN	238	600	SDSL
221ENRD	600	650	SNDS
231CHNL	650	1,305	SDSL
310PRMN	1,305	1,340	SDSL
310PRMN	1,340	1,660	DLMT
313BLIN	1,660	2,043	ANDR
310GLRT	2,043	2,108	SNDS
318HNSS	2,108	2,492	ANDR
317CMRN	2,492	2,530	ANDR
318WCHT	2,530	2,685	SDSL
310SGRC	2,685	5,015	ARKS
330MSSP	5,015	5,180	LMSN
367ELBG	5,180	5,265	DLMT
400PCMB	5,265		GRNT

Table 3.--Geologic logs for wells in the study
area--Continued

Union County, New Mexico

Latitude: 362745 Longitude: 1033030
Owner: HOXSEY OIL C Local number: 26N-32E-27 AD
Use of site: P Completion date: 08/01/1966
Altitude: 5,509 Depth of well: 3,898

Geologic- unit code	Depth to top	Depth to bottom	Lithology
221MRSN	290	465	SDSL
221ENRD	465	503	SNDS
231DCKM	503	1,380	SDSL
310PRMN	1,380	1,942	DLMT
313BLIN	1,942	2,125	ANDR
310GLRT	2,125	2,245	SDSL
318HNSS	2,245	2,570	SNDS
317CMRN	2,570	2,640	ANDR
310SGRC	2,640	3,800	ARKS

Union County, New Mexico

Latitude: 364438 Longitude: 1030408
Owner: TEXACO 1 CRU Local number: 29N-36E-14 CCA 1
Use of site: T Completion date: 02/05/1964
Altitude: 4,835 Depth of well: 6,460

Geologic- unit code	Depth to top	Depth to bottom	Lithology
211DKOT	20	266	SDSL
220JRSC	266	465	SDSL
220JRSC	465	550	LMSH
230TRSC	550	1,422	SDSL
310PRMN	1,422	1,448	DLMT
317CMRN	1,448	1,690	SHLE
313BLIN	1,690	1,940	GPSM
310GLRT	1,940	1,970	SNDS
318HNSS	1,970	2,505	EVPR
319WFMP	2,505	3,715	SDSL
320PSLV	3,715	5,600	ARKS
330MSSP	5,600	6,015	LMDM
367ELBG	6,015	6,422	DLMT
400PCMB	6,422		IGNS

Table 3.--Geologic logs for wells in the study
area--Continued

Union County, New Mexico

Latitude: 364710 Longitude: 1035110
Owner: NELSON MOO Local number: 30N-29E-33 DCC
Use of site: Completion date: 07/25/1951
Altitude: 6,710 Depth of well: 2,685

Geologic- unit code	Depth to top	Depth to bottom	Lithology
211DKOT	0	81	SNDS
217KIOW	81	105	SHLE
217CYNN	105	145	SNDS
221MRSN	145	500	SDSL
221TDLT	500	535	GPSM
221ENRD	535	600	SNDS
231CHNL	600	1,055	SDSL
310WTRS	1,055	1,115	SNDS
310PRMN	1,115	1,320	DLMT
313BLIN	1,320	1,378	ANDR
310GLRT	1,378	1,510	SNDS
318HNSS	1,510	1,798	SNDS
310SGRC	1,798	2,620	ARKS
400PCMB	2,620		GRNT

Union County, New Mexico

Latitude: 365545 Longitude: 1032650
Owner: GULF OIL CO Local number: 31N-33E-17BC
Use of site: P Completion date: 03/08/1970
Altitude: 5,300 Depth of well: 2,855

Geologic- unit code	Depth to top	Depth to bottom	Lithology
231CHNL	330	760	SDSL
231SNRS	760	885	SNDS
310PRMN	885	915	DLMT
310WTRS	915	1,067	
313BLIN	1,067	1,180	
310GLRT	1,180	1,280	SNDS
310YESO	1,280	1,558	
310SGRC	1,558	2,538	ARKS
330MSSP	2,538	2,605	LMSN
367ELBG	2,605	2,755	DLMT
400PCMB	2,755		GRNT

Table 4.--Geophysical logs for wells
in the study area

Adair County, Oklahoma

Latitude: 355931	Longitude: 943400
Owner: WESTVILLE OK	Local number: 18N-26E-31 DAD 1
Use of site: W	Completion date: 08/07/1981
Altitude: 1,123	Depth of well: 1,500

Type of log	Begin depth	End depth
Caliper	400	1,497
Electric	490	1,498
Gamma	4	1,495
Neutron	3	1,499

Adair County, Oklahoma

Latitude: 360507	Longitude: 944022
Owner: ARTIE BROWN ONE	Local number: 19N-25E-32 BDA 1
Use of site: W	Completion date:
Altitude: 1,070	Depth of well: 1,430

Type of log	Begin depth	End depth
Drillers	400	1,497

Alfalfa County, Oklahoma

Latitude: 363402	Longitude: 981901
Owner: OLSON DRLG	Local number: 24N-11W-12 DDA 1
Use of site: T	Completion date: 09/05/1942
Altitude: 1,379	Depth of well: 7,300

Type of log	Begin depth	End depth
Electric	100	7,300
Geologist	40	7,300

Table 4.--Geophysical logs for wells
in the study area--Continued

Atoka County, Oklahoma

Latitude: 342016 Longitude: 961130
Owner: LEWIS Local number: 02S-11E-31 CA 1
Use of site: P Completion date: 03/15/1958
Altitude: 599 Depth of well: 11,833

Type of log	Begin depth	End depth
Geologist	50	11,833
Induction	100	11,828
Microlog	9,200	11,833

Atoka County, Oklahoma

Latitude: 341450 Longitude: 961304
Owner: CROSSLAND Local number: 03S-10E-35 DD 1
Use of site: P Completion date: 10/08/1973
Altitude: 512 Depth of well: 8,125

Type of log	Begin depth	End depth
Caliper	550	8,124
Induction	604	8,122
Gamma	0	8,124
Sonic	603	8,124

Beaver County, Oklahoma

Latitude: 365335 Longitude: 1001507
Owner: PURE OIL Local number: 05N-26ECM-16 CDD 1
Use of site: T Completion date: 12/30/1951
Altitude: 2,597 Depth of well: 9,240

Type of log	Begin depth	End depth
Electric	270	9,228
Geologist	0	9,240

Table 4.--Geophysical logs for wells
in the study area--Continued

Beckham County, Oklahoma

Latitude: 351225 Longitude: 992823
Owner: CARTER Local number: 09N-22W-36 DDB 1
Use of site: P Completion date: 05/22/1951
Altitude: 1,799 Depth of well: 3,100

Type of log	Begin depth	End depth
Electric	170	3,099
Geologist	259	3,090

Beckham County, Oklahoma

Latitude: 351835 Longitude: 993142
Owner: LONE STAR Local number: 10N-22W-28 DCA 1
Use of site: P Completion date: 10/20/1972
Altitude: 1,953 Depth of well: 30,000

Type of log	Begin depth	End depth
Caliper	4,822	30,000
Electric	4,822	30,000
Geologist	5,160	30,000
Gamma	0	30,000
Neutron	4,822	22,726
Sonic	4,822	30,000
Gamma-gamma	4,823	29,978
Other	23,390	30,000

Beckham County, Oklahoma

Latitude: 351816 Longitude: 993453
Owner: CARTER Local number: 10N-23W-36 ABA 1
Use of site: P Completion date: 09/28/1950
Altitude: 1,828 Depth of well: 10,654

Type of log	Begin depth	End depth
Electric	86	10,648
Geologist	0	10,654

Table 4.--Geophysical logs for wells
in the study area--Continued

Blaine County, Oklahoma

Latitude: 360746 Longitude: 981658
Owner: SUPERIOR Local number: 19N-10W-17 AAA 1
Use of site: P Completion date: 01/01/1945
Altitude: 1,200 Depth of well: 11,008

Type of log	Begin depth	End depth
Electric	25	11,008
Geologist	0	11,008

Caddo County, Oklahoma

Latitude: 351119 Longitude: 982556
Owner: SUPERIOR Local number: 08N-12W-11 ABB 1
Use of site: P Completion date: 01/01/1947
Altitude: 1,440 Depth of well: 17,823

Type of log	Begin depth	End depth
Electric	1,539	17,738
Geologist	140	17,823

Canadian County, Oklahoma

Latitude: 352521 Longitude: 980450
Owner: PETREE Local number: 11N-08W-18 DD 1
Use of site: P Completion date:
Altitude: 1,310 Depth of well: 11,177

Type of log	Begin depth	End depth
Electric	365	11,170
Geologist	450	11,177

Canadian County, Oklahoma

Latitude: 353053 Longitude: 975418
Owner: HUCHTEMAN Local number: 12N-07W-14 DAB 1
Use of site: P Completion date:
Altitude: 1,344 Depth of well: 11,700

Type of log	Begin depth	End depth
Electric	417	11,500
Geologist	620	11,700
Microlog	7,250	11,500

Table 4.--Geophysical logs for wells
in the study area--Continued

Carter County, Oklahoma

Latitude: 342921 Longitude: 972402
Owner: MEEKS Local number: 01S-02W-10 BBD 1
Use of site: P Completion date: 03/22/1966
Altitude: 938 Depth of well: 3,018

Type of log	Begin depth	End depth
Geologist	316	3,000
Induction	317	3,017
Gamma	10	316
Microlog	316	3,016
Neutron	10	316
Gamma-gamma	316	3,017

Carter County, Oklahoma

Latitude: 341618 Longitude: 971010
Owner: WHITE EAGLE Local number: 03S-01E-26 BAD 1
Use of site: P Completion date: 10/31/1977
Altitude: 763 Depth of well: 16,950

Type of log	Begin depth	End depth
Geologist	6,400	16,925
Laterolog	4,088	16,122
Neutron	6,946	16,918
Sonic	4,088	16,122

Cherokee County, Oklahoma

Latitude: 354856 Longitude: 950444
Owner: PINE Local number: 16N-21E-33 DCA 1
Use of site: T Completion date: 01/01/1962
Altitude: 690 Depth of well: 2,093

Type of log	Begin depth	End depth
Geologist	62	2,093

Table 4.--Geophysical logs for wells
in the study area--Continued

Cherokee County, Oklahoma

Latitude: 360502 Longitude: 950152
Owner: M F OIL CO Local number: 19N-21E-35 AD 1
Use of site: T Completion date: 01/01/1961
Altitude: 800 Depth of well: 1,935

Type of log	Begin depth	End depth
Geologist	460	1,935

Cimarron County, Oklahoma

Latitude: 365818 Longitude: 1024134
Owner: SUN CO. Local number: 06N-03E-24 CB 1
Use of site: T Completion date: 06/24/1954
Altitude: 4,305 Depth of well: 5,904

Type of log	Begin depth	End depth
Electric	0	5,904
Geologist	0	5,904

Cleveland County, Oklahoma

Latitude: 351432 Longitude: 973138
Owner: ROSE Local number: 09N-03W-21 BCA 1
Use of site: P Completion date:
Altitude: 1,127 Depth of well: 10,590

Type of log	Begin depth	End depth
Electric	1,002	10,588
Geologist	3,000	10,590
Microlog	8,050	10,588

Coal County, Oklahoma

Latitude: 343349 Longitude: 960953
Owner: CRIM Local number: 01N-11E-17 ABA 1
Use of site: P Completion date: 07/14/1972
Altitude: 574 Depth of well: 11,632

Type of log	Begin depth	End depth
Induction	70	11,632
Gamma	70	1,257
Neutron	1,550	11,632

Table 4.--Geophysical logs for wells
in the study area--Continued

Coal County, Oklahoma

Latitude: 344000 Longitude: 962036
Owner: MORGAN Local number: 02N-09E-03 DC 1
Use of site: P Completion date: 09/13/1968
Altitude: 725 Depth of well: 8,038

Type of log	Begin depth	End depth
Geologist	0	8,038
Induction	609	8,038
Gamma-gamma	610	8,038

Comanche County, Oklahoma

Latitude: 344545 Longitude: 982218
Owner: HUMBLE OIL Local number: 03N-11W-05 AD 1
Use of site: P Completion date: 10/15/1964
Altitude: 1,210 Depth of well: 1,591

Type of log	Begin depth	End depth
Electric	253	1,588
Geologist	0	1,591

Comanche County, Oklahoma

Latitude: 344626 Longitude: 981746
Owner: Local number: 04N-10W-31 CBA 1
Use of site: P Completion date: 11/11/1968
Altitude: 1,272 Depth of well: 6,603

Type of log	Begin depth	End depth
Caliper	1,208	6,591
Electric	70	6,594
Geologist	50	6,603
Gamma	1,208	6,591
Sonic	1,420	6,591

Table 4.--Geophysical logs for wells
in the study area--Continued

Craig County, Oklahoma

Latitude: 365016 Longitude: 950705
Owner: NEILL Local number: 27N-20E-12 BDD 2
Use of site: W Completion date: 06/13/1971
Altitude: 900 Depth of well: 1,090

Type of log	Begin depth	End depth
Geologist	550	1,090

Craig County, Oklahoma

Latitude: 365000 Longitude: 950101
Owner: RWD-3 Local number: 27N-21E-12 CCB 1
Use of site: W Completion date: 07/07/1980
Altitude: 876 Depth of well: 1,352

Type of log	Begin depth	End depth
Caliper	687	1,350
Electric	200	1,352
Fluid	185	1,350
Gamma	4	1,352

Creek County, Oklahoma

Latitude: 355718 Longitude: 960308
Owner: BERRYHILL Local number: 17N-12E-17 ACA 1
Use of site: P Completion date:
Altitude: 710 Depth of well: 3,932

Type of log	Begin depth	End depth
Electric	280	3,930
Microlog	660	3,928

Custer County, Oklahoma

Latitude: 354318 Longitude: 990029
Owner: ARKLA Local number: 14N-17W-04 A 1
Use of site: P Completion date: 05/12/1972
Altitude: 1,795 Depth of well: 16,700

Type of log	Begin depth	End depth
Geologist	600	16,700

Table 4.--Geophysical logs for wells
in the study area--Continued

Custer County, Oklahoma

Latitude: 354548	Longitude: 985328
Owner: MACNOLIA	Local number: 15N-16W-22 BD 1
Use of site: P	Completion date: 04/07/1959
Altitude: 1,794	Depth of well: 17,000

Type of log	Begin depth	End depth
Electric	269	16,996
Geologist	10,800	17,000
Sonic	11,479	16,993

Delaware County, Oklahoma

Latitude: 362442	Longitude: 945208
Owner: RWD-1	Local number: 22N-23E-05 DCA 1
Use of site: W	Completion date: 06/18/1979
Altitude: 1,100	Depth of well: 1,538

Type of log	Begin depth	End depth
Geologist	0	1,540

Dewey County, Oklahoma

Latitude: 360821	Longitude: 992007
Owner: MAGNOLIA	Local number: 19N-20W-09 AC 1
Use of site: P	Completion date: 09/28/1947
Altitude: 2,225	Depth of well: 12,856

Type of log	Begin depth	End depth
Caliper	6,700	12,748
Electric	332	13,800
Geologist	310	13,811
Gamma	6,700	12,748
Neutron	6,700	12,748

Table 4.--Geophysical logs for wells
in the study area--Continued

Ellis County, Oklahoma

Latitude: 355912 Longitude: 994508
Owner: MCCULLOCH Local number: 18N-24W-34 CCA 1
Use of site: T Completion date: 03/12/1971
Altitude: 2,395 Depth of well: 17,500

Type of log	Begin depth	End depth
Caliper	11,800	16,419
Geologist	7,000	17,500
Induction	4,370	16,419
Gamma	16,250	17,500
Laterolog	11,800	16,419
Neutron	16,250	17,500
Sonic	11,770	16,415
Other	11,771	16,419

Ellis County, Oklahoma

Latitude: 363140 Longitude: 995830
Owner: GULF OIL Local number: 24N-26W-27 CA 1
Use of site: T Completion date: 05/15/1944
Altitude: 2,382 Depth of well: 9,305

Type of log	Begin depth	End depth
Electric	483	9,298
Geologist	120	9,305

Garfield County, Oklahoma

Latitude: 362951 Longitude: 973446
Owner: VOLIN Local number: 23N-04W-01 CAA 1
Use of site: P Completion date:
Altitude: 1,050 Depth of well: 7,152

Type of log	Begin depth	End depth
Geologist	2,400	7,100
Neutron	5,200	7,150
Gamma-gamma	1,070	7,150

Table 4.--Geophysical logs for wells
in the study area--Continued

Garvin County, Oklahoma

Latitude: 343139 Longitude: 972018
Owner: HUMBLE OIL Local number: 01N-01W-30 DAB 1
Use of site: P Completion date: 06/24/1971
Altitude: 857 Depth of well: 13,187

Type of log	Begin depth	End depth
Caliper	60	13,174
Geologist	50	13,180
Gamma	60	13,174
Dip meter	1,105	13,065
Sonic	60	13,174

Grady County, Oklahoma

Latitude: 344547 Longitude: 974029
Owner: PARKER Local number: 03N-05W-01 AC 1
Use of site: P Completion date: 11/01/1966
Altitude: 1,123 Depth of well: 18,413

Type of log	Begin depth	End depth
Electric	2,490	18,382
Geologist	6,600	18,413
Gamma	15,814	18,382
Sonic	15,814	18,382

Grady County, Oklahoma

Latitude: 350345 Longitude: 980307
Owner: PHILLIPS Local number: 07N-08W-21 CAC 1
Use of site: P Completion date: 10/29/1969
Altitude: 1,161 Depth of well: 10,754

Type of log	Begin depth	End depth
Caliper	7,300	10,747
Electric	1,525	10,754
Geologist	100	10,754
Gamma	7,300	10,747
Other	7,300	10,747

Table 4.--Geophysical logs for wells
in the study area--Continued

Grant County, Oklahoma

Latitude: 365939 Longitude: 980513
Owner: HENDRIXON Local number: 29N-08W-17 BDB 1
Use of site: P Completion date:
Altitude: 1,271 Depth of well: 5,660

Type of log	Begin depth	End depth
Electric	262	5,660
Geologist	400	5,660

Harper County, Oklahoma

Latitude: 364014 Longitude: 993209
Owner: CONTINENTAL Local number: 25N-22W-02 DBD 1
Use of site: T Completion date: 09/10/1949
Altitude: 1,924 Depth of well: 9,440

Type of log	Begin depth	End depth
Electric	321	9,440
Geologist	0	9,436

Haskell County, Oklahoma

Latitude: 350957 Longitude: 951138
Owner: GORDON Local number: 08N-20E-16 DBB 1
Use of site: P Completion date: 02/03/1955
Altitude: 636 Depth of well: 6,077

Type of log	Begin depth	End depth
Electric	529	6,069
Geologist	15	6,077

Haskell County, Oklahoma

Latitude: 351010 Longitude: 951345
Owner: ALLRED Local number: 08N-20E-18 ADB 1
Use of site: P Completion date: 08/28/1951
Altitude: 685 Depth of well: 7,483

Type of log	Begin depth	End depth
Electric	763	7,482
Geologist	800	7,483
Microlog	5,590	7,480

Table 4.--Geophysical logs for wells
in the study area--Continued

Hughes County, Oklahoma

Latitude: 345529 Longitude: 961838
Owner: PIERCE Local number: 05N-09E-12 BAD 1
Use of site: P Completion date:
Altitude: 825 Depth of well: 6,957

Type of log	Begin depth	End depth
Electric	100	6,557
Geologist	700	6,957

Johnston County, Oklahoma

Latitude: 341328 Longitude: 964912
Owner: CHAPMAN Local number: 04S-05E-07 BDD 1
Use of site: P Completion date: 04/15/1979
Altitude: 655 Depth of well: 11,747

Type of log	Begin depth	End depth
Caliper	1,660	11,705
Geologist	70	11,747
Induction	1,660	11,705
Neutron	1,660	11,705

Kay County, Oklahoma

Latitude: 365414 Longitude: 971324
Owner: WELCH Local number: 28N-01E-17 CAB 1
Use of site: P Completion date:
Altitude: 1,138 Depth of well: 4,407

Type of log	Begin depth	End depth
Electric	100	4,407
Microlog	1,692	4,407

Table 4.--Geophysical logs for wells
in the study area--Continued

Kingfisher County, Oklahoma

Latitude: 355619 Longitude: 974613
Owner: ASH Local number: 17N-05W-19 ABD 1
Use of site: P Completion date:
Altitude: 1,005 Depth of well: 8,519

Type of log	Begin depth	End depth
Electric	1,024	8,518
Geologist	4,000	8,515
Microlog	6,081	7,282

Kingfisher County, Oklahoma

Latitude: 360132 Longitude: 980903
Owner: VILHAUER Local number: 18N-09W-22 BAC 1
Use of site: P Completion date:
Altitude: 1,188 Depth of well: 9,639

Type of log	Begin depth	End depth
Electric	255	9,639
Geologist	0	9,639

Kiowa County, Oklahoma

Latitude: 350539 Longitude: 991400
Owner: EASON OIL Local number: 07N-19W-08 CBA 1
Use of site: P Completion date: 11/26/1976
Altitude: 1,689 Depth of well: 4,296

Type of log	Begin depth	End depth
Caliper	407	4,296
Geologist	400	4,290
Gamma	407	4,296
Neutron	407	4,296

Table 4.--Geophysical logs for wells
in the study area--Continued

Latimer County, Oklahoma

Latitude: 345706 Longitude: 950120
Owner: FIELDS Local number: 06N-22E-31 BDB 1
Use of site: P Completion date: 04/08/1977
Altitude: 646 Depth of well: 12,350

Type of log	Begin depth	End depth
Geologist	300	12,350
Induction	312	12,324
Gamma	312	12,324
Neutron	4,500	12,322
Gamma-gamma	312	12,322

Leflore County, Oklahoma

Latitude: 361010 Longitude: 944115
Owner: HICKMAN Local number: 08N-25E-17 BDB 1
Use of site: P Completion date: 01/29/1952
Altitude: 465 Depth of well: 7,650

Type of log	Begin depth	End depth
Electric	400	6,916
Geologist	0	7,650

Leflore County, Oklahoma

Latitude: 361128 Longitude: 943503
Owner: COLEMAN Local number: 08N-26E-05 CCA 1
Use of site: P Completion date: 11/21/1974
Altitude: 419 Depth of well: 8,841

Type of log	Begin depth	End depth
Geologist	7,400	8,841
Induction	502	8,827
Microlog	6,100	7,646
Temperature	502	8,834
Gamma-gamma	5,750	8,826

Table 4.--Geophysical logs for wells
in the study area--Continued

Lincoln County, Oklahoma

Latitude: 353528 Longitude: 970039
Owner: LINAN Local number: 13N-03E-20 BAC 1
Use of site: P Completion date:
Altitude: 1,038 Depth of well: 6,350

Type of log	Begin depth	End depth
Electric	264	6,341
Geologist	3,000	6,340

Lincoln County, Oklahoma

Latitude: 354040 Longitude: 965221
Owner: CUNNINGHAM Local number: 14N-04E-22 BCA 1
Use of site: P Completion date:
Altitude: 933 Depth of well: 5,024

Type of log	Begin depth	End depth
Electric	151	5,023
Geologist	190	5,024

Logan County, Oklahoma

Latitude: 354629 Longitude: 973554
Owner: KROUT Local number: 15N-04W-14 CBA 1
Use of site: P Completion date:
Altitude: 1,006 Depth of well: 8,350

Type of log	Begin depth	End depth
Electric	311	8,350
Geologist	2,400	7,350
Gamma	7,180	8,350
Microlog	3,800	7,350

Table 4.--Geophysical logs for wells
in the study area--Continued

McClain County, Oklahoma

Latitude: 345956	Longitude: 972342
Owner: LITTLE	Local number: 06N-02W-16 AB 1
Use of site: P	Completion date: 07/08/1971
Altitude: 1,134	Depth of well: 10,037

Type of log	Begin depth	End depth
Caliper	7,100	10,030
Electric	521	10,036
Geologist	30	9,700
Gamma	7,100	10,030
Sonic	7,100	10,030

McIntosh County, Oklahoma

Latitude: 351503	Longitude: 954538
Owner: FOLLANSBEE	Local number: 09N-15E-18 CBC 1
Use of site: P	Completion date: 11/28/1950
Altitude: 653	Depth of well: 5,461

Type of log	Begin depth	End depth
Electric	503	5,451
Geologist	20	5,461
Microlog	1,790	5,458

Major County, Oklahoma

Latitude: 362139	Longitude: 981527
Owner: SUPERIOR	Local number: 22N-10W-27 BAA 1
Use of site: P	Completion date: 01/01/1945
Altitude: 1,276	Depth of well: 8,279

Type of log	Begin depth	End depth
Electric	30	8,279
Geologist	30	8,279

Table 4.--Geophysical logs for wells
in the study area--Continued

Mayes County, Oklahoma

Latitude: 360823	Longitude: 951111
Owner: BALLOU	Local number: 19N-20E-09 BCD 1
Use of site: P	Completion date: 01/01/1967
Altitude: 740	Depth of well: 1,124

Type of log	Begin depth	End depth
Geologist	175	1,124

Murray County, Oklahoma

Latitude: 343046	Longitude: 970040
Owner: FLEMING	Local number: 01N-03E-32 CAA 1
Use of site: T	Completion date: 06/04/1973
Altitude: 995	Depth of well: 5,178

Type of log	Begin depth	End depth
Induction	100	5,178
Microlog	100	799
Gamma-gamma	819	5,178
Geologist	0	5,178

Muskogee County, Oklahoma

Latitude: 353510	Longitude: 951528
Owner: MARSHALL	Local number: 13N-19E-23 DB 1
Use of site: P	Completion date: 01/09/1958
Altitude: 601	Depth of well: 3,296

Type of log	Begin depth	End depth
Electric	250	3,290
Gamma	300	3,289
Microlog	400	2,000
Neutron	300	3,289

Table 4.--Geophysical logs for wells
in the study area--Continued

Noble County, Oklahoma

Latitude: 361218 Longitude: 972036
Owner: HUBBART Local number: 20N-01W-18 CDB 1
Use of site: P Completion date:
Altitude: 1,100 Depth of well: 5,239

Type of log	Begin depth	End depth
Electric	200	5,239
Geologist	220	5,239

Noble County, Oklahoma

Latitude: 361216 Longitude: 972626
Owner: MAGNEY Local number: 20N-02W-17 CC 1
Use of site: P Completion date:
Altitude: 1,269 Depth of well: 7,088

Type of log	Begin depth	End depth
Electric	5,062	7,085
Geologist	5,274	7,088

Nowata County, Oklahoma

Latitude: 365100 Longitude: 953920
Owner: ALSUP Local number: 27N-15E-01 DBB 1
Use of site: P Completion date: 06/07/1954
Altitude: 760 Depth of well: 2,222

Type of log	Begin depth	End depth
Electric	101	2,216
Microlog	101	2,212

Okfuskee County, Oklahoma

Latitude: 353055 Longitude: 962714
Owner: REPLOGLE Local number: 12N-08E-15 CAB 1
Use of site: P Completion date:
Altitude: 944 Depth of well: 4,507

Type of log	Begin depth	End depth
Electric	89	4,506
Geologist	1,000	4,500

Table 4.--Geophysical logs for wells
in the study area--Continued

Oklahoma County, Oklahoma

Latitude: 352505 Longitude: 972712
Owner: FARLEY Local number: 11N-02W-19 BAC 1
Use of site: P Completion date:
Altitude: 1,242 Depth of well: 8,342

Type of log	Begin depth	End depth
Electric	1,087	8,342
Geologist	1,500	8,342

Oklahoma County, Oklahoma

Latitude: 353755 Longitude: 971525
Owner: MACKLIN Local number: 13N-01W-01 BDD 1
Use of site: P Completion date:
Altitude: 1,030 Depth of well: 5,942

Type of log	Begin depth	End depth
Electric	228	5,934
Geologist	350	5,942

Okmulgee County, Oklahoma

Latitude: 354922 Longitude: 955050
Owner: MILLER Local number: 16N-14E-32 BDA 1
Use of site: P Completion date:
Altitude: 802 Depth of well: 3,915

Type of log	Begin depth	End depth
Electric	115	3,915

Osage County, Oklahoma

Latitude: 361940 Longitude: 960915
Owner: ZINK Local number: 21N-11E-05 BC 1
Use of site: P Completion date:
Altitude: 890 Depth of well: 2,995

Type of log	Begin depth	End depth
Electric	80	2,990
Microlog	1,000	2,990

Table 4.--Geophysical logs for wells
in the study area--Continued

Osage County, Oklahoma

Latitude: 362015 Longitude: 961313
Owner: SUNRAY Local number: 22N-10E-34 C 1
Use of site: P Completion date:
Altitude: 836 Depth of well: 3,235

Type of log	Begin depth	End depth
Electric	327	3,234
Microlog	2,300	3,232

Osage County, Oklahoma

Latitude: 363722 Longitude: 962512
Owner: PHILLIPS Local number: 25N-08E-23 CCC 1
Use of site: P Completion date: 08/15/1956
Altitude: 898 Depth of well: 3,663

Type of log	Begin depth	End depth
Caliper	2,316	3,663
Electric	127	3,663
Microlog	2,316	3,663

Ottawa County, Oklahoma

Latitude: 365324 Longitude: 945313
Owner: GOODRICH RUB.CO Local number: 28N-22E-24 CAD 1
Use of site: W Completion date: 01/01/1944
Altitude: 798 Depth of well: 1,055

Type of log	Begin depth	End depth
Geologist	2,316	3,663

Pawnee County, Oklahoma

Latitude: 362551 Longitude: 965836
Owner: TRIGG Local number: 23N-03E-34 BCB 1
Use of site: P Completion date:
Altitude: 959 Depth of well: 4,585

Type of log	Begin depth	End depth
Electric	147	4,375
Geologist	1,500	4,375

Table 4.--Geophysical logs for wells
in the study area--Continued

Payne County, Oklahoma

Latitude: 361024	Longitude: 970614
Owner: FLYNN	Local number: 20N-02E-33 BBB 1
Use of site: P	Completion date:
Altitude: 960	Depth of well: 4,877

Type of log	Begin depth	End depth
Electric	162	4,877
Geologist	200	4,877

Pittsburg County, Oklahoma

Latitude: 345558	Longitude: 955923
Owner: SEALY	Local number: 05N-12E-01 CA 1
Use of site: P	Completion date: 06/01/1964
Altitude: 796	Depth of well: 3,541

Type of log	Begin depth	End depth
Electric	175	3,536
Geologist	400	3,541

Pittsburg County, Oklahoma

Latitude: 345758	Longitude: 963023
Owner: MANSHRICK	Local number: 06N-17E-28 ADB 1
Use of site: P	Completion date: 09/23/1964
Altitude: 963	Depth of well: 12,915

Type of log	Begin depth	End depth
Electric	58	12,914
Geologist	3,325	12,915

Table 4.--Geophysical logs for wells
in the study area--Continued

Pontotoc County, Oklahoma

Latitude: 344057 Longitude: 964806
Owner: BROWN Local number: 03N-05E-32 CD 1
Use of site: P Completion date: 03/24/1966
Altitude: 1,177 Depth of well: 5,741

Type of log	Begin depth	End depth
Electric	80	5,741
Geologist	20	5,741
Microlog	80	5,740
Sonic	2,000	5,733

Pottawatomie County, Oklahoma

Latitude: 352108 Longitude: 970429
Owner: EAVES Local number: 10N-02E-10 DAC 1
Use of site: P Completion date:
Altitude: 1,078 Depth of well: 6,070

Type of log	Begin depth	End depth
Electric	245	6,041
Geologist	270	5,981

Roger Mills County, Oklahoma

Latitude: 353101 Longitude: 993542
Owner: GULF OIL Local number: 12N-23W-14 AD 1
Use of site: P Completion date: 10/09/1951
Altitude: 2,070 Depth of well: 13,010

Type of log	Begin depth	End depth
Electric	247	13,010
Geologist	400	12,941

Table 4.--Geophysical logs for wells
in the study area--Continued

Roger Mills County, Oklahoma

Latitude: 354737	Longitude: 993343
Owner: CLARK CNDN	Local number: 15N-22W-08 BDA 1
Use of site: P	Completion date: 05/17/1972
Altitude: 2,140	Depth of well: 19,435

Type of log	Begin depth	End depth
Caliper	7,700	19,435
Electric	4,230	19,435
Geologist	4,240	19,435
Gamma	7,700	19,435
Neutron	12,910	19,435
Sonic	4,230	19,435
Other	7,700	19,435

Seminole County, Oklahoma

Latitude: 351022	Longitude: 963936
Owner: LIVINGSTON	Local number: 08N-06E-15 ABB 1
Use of site: P	Completion date:
Altitude: 865	Depth of well: 4,880

Type of log	Begin depth	End depth
Geologist	490	4,880

Sequoyah County, Oklahoma

Latitude: 352757	Longitude: 945526
Owner: SNOW	Local number: 12N-22E-36 CD 1
Use of site: P	Completion date: 12/03/1959
Altitude: 524	Depth of well: 1,718

Type of log	Begin depth	End depth
Electric	117	1,714
Geologist	130	1,718
Microlog	140	1,716

Table 4.--Geophysical logs for wells
in the study area--Continued

Sequoyah County, Oklahoma

Latitude: 352958	Longitude: 944135
Owner: CHEEK	Local number: 12N-25E-19 CAA 1
Use of site: P	Completion date: 12/11/1958
Altitude: 595	Depth of well: 3,504

Type of log	Begin depth	End depth
Electric	126	3,503
Geologist	170	3,500
Microlog	600	3,503

Stephens County, Oklahoma

Latitude: 343533	Longitude: 980323
Owner: FERGUSON	Local number: 01N-08W-05 AA 1
Use of site: P	Completion date: 12/05/1971
Altitude: 1,105	Depth of well: 9,152

Type of log	Begin depth	End depth
Caliper	795	9,152
Electric	795	9,152
Geologist	0	9,150
Gamma	795	9,152
Sonic	795	9,152
Other	795	9,152

Stephens County, Oklahoma

Latitude: 342743	Longitude: 980419
Owner: KERR MCGEE	Local number: 01S-08W-19 AA 1
Use of site: P	Completion date: 05/31/1966
Altitude: 1,133	Depth of well: 8,515

Type of log	Begin depth	End depth
Electric	121	8,514
Geologist	3,000	8,515
Gamma	3,521	8,505
Microlog	1,900	8,515
Sonic	3,521	8,505

Table 4.--Geophysical logs for wells
in the study area--Continued

Texas County, Oklahoma

Latitude: 364100 Longitude: 1020015
Owner: PHILLIPS Local number: 03N-10ECM-32 ACC
Use of site: T Completion date: 05/06/1955
Altitude: 3,648 Depth of well: 6,473

Type of log	Begin depth	End depth
Geologist	0	6,400
Gamma	100	5,429
Laterolog	100	5,429

Tulsa County, Oklahoma

Latitude: 360519 Longitude: 960715
Owner: KNOCH Local number: 19N-11E-34 AA 1
Use of site: P Completion date:
Altitude: 822 Depth of well: 2,897

Type of log	Begin depth	End depth
Electric	64	2,897
Sonic	400	2,897

Wagoner County, Oklahoma

Latitude: 355604 Longitude: 953519
Owner: LOVETT Local number: 17N-16E-22 DBD 1
Use of site: P Completion date: 06/09/1934
Altitude: 630 Depth of well: 1,600

Type of log	Begin depth	End depth
Geologist	0	1,600

Wagoner County, Oklahoma

Latitude: 355413 Longitude: 953800
Owner: SHELLEY Local number: 17N-16E-32 CCA 1
Use of site: P Completion date: 12/22/1980
Altitude: 565 Depth of well: 1,581

Type of log	Begin depth	End depth
Induction	140	1,580
Gamma-gamma	750	1,580

Table 4.--Geophysical logs for wells
in the study area--Continued

Washington County, Oklahoma

Latitude: 365825	Longitude: 955250
Owner: THOMASON	Local number: 29N-13E-22 DDB 1
Use of site: P	Completion date: 02/03/1917
Altitude: 750	Depth of well: 3,175

Type of log	Begin depth	End depth
Geologist	0	3,175

Washita County, Oklahoma

Latitude: 350723	Longitude: 990353
Owner: NO. AMER.	Local number: 08N-18W-35 DAB 1
Use of site: P	Completion date:
Altitude: 1,602	Depth of well: 15,013

Type of log	Begin depth	End depth
Caliper	10,306	14,893
Electric	294	15,010
Geologist	200	15,013
Gamma	10,306	14,893
Neutron	600	1,913
Sonic	600	14,996
Other	10,302	14,890
Microlog	10,306	14,893

Woods County, Oklahoma

Latitude: 364257	Longitude: 984616
Owner: ATLANTIC	Local number: 26N-15W-24 CB
Use of site: T	Completion date: 07/31/1948
Altitude: 1,465	Depth of well: 7,370

Type of log	Begin depth	End depth
Electric	389	7,271
Geologist	410	7,370

Table 4.--Geophysical logs for wells
in the study area--Continued

Woodward County, Oklahoma

Latitude: 362941	Longitude: 991557
Owner: SINCLAIR	Local number: 23N-19W-06 DD
Use of site: T	Completion date: 05/07/1951
Altitude: 2,010	Depth of well: 10,327

Type of log	Begin depth	End depth
Electric	3,157	10,310
Geologist	120	10,327

Carson County, Texas

Latitude: 352030	Longitude: 1013000
Owner: WHITTENBURG	Local number: GIBSON BLK M4 SEC 4
Use of site: T	Completion date: 08/01/1953
Altitude: 3,500	Depth of well: 9,311

Type of log	Begin depth	End depth
Electric	0	9,311
Gamma	1,061	9,166
Laterolog	1,061	9,166

Dallam County, Texas

Latitude: 360630	Longitude: 1025300
Owner: SKELLY	Local number: CSS BLK 5 SEC 58
Use of site: T	Completion date: 11/07/1958
Altitude: 4,327	Depth of well: 8,085

Type of log	Begin depth	End depth
Geologist	0	8,085
Induction	2,937	8,084
Laterolog	2,938	8,085
Microlog	2,938	8,085

Table 4.--Geophysical logs for wells
in the study area--Continued

Dallam County, Texas

Latitude: 361940 Longitude: 1025245
Owner: CONTINENTAL OIL Local number: CSS BLK.81,7
Use of site: P Completion date:
Altitude: 4,415 Depth of well: 7,808

Type of log	Begin depth	End depth
Geologist	1,440	7,808

Dallam County, Texas

Latitude: 362645 Longitude: 1021540
Owner: HUMBLE OIL CO. Local number: H TC RR BLK.50,16
Use of site: P Completion date:
Altitude: 3,854 Depth of well: 6,214

Type of log	Begin depth	End depth
Geologist	610	6,214

Gray County, Texas

Latitude: 353030 Longitude: 1003730
Owner: PHILLIPS Local number: H GN;BLK A-6 SEC 53
Use of site: T Completion date: 08/14/1972
Altitude: 2,854 Depth of well: 13,594

Type of log	Begin depth	End depth
Caliper	3,677	13,583
Geologist	0	13,594
Induction	3,677	13,578
Gamma	3,677	13,583
Laterolog	3,677	13,578
Neutron	3,677	13,583
Sonic	3,677	13,575
Other	3,677	13,583

Table 4.--Geophysical logs for wells
in the study area--Continued

Hansford County, Texas

Latitude: 361760	Longitude: 1012400
Owner: GULF OIL	Local number: H GN;BLK P, SEC 17
Use of site: T	Completion date: 07/17/1968
Altitude: 3,193	Depth of well: 9,440

Type of log	Begin depth	End depth
Caliper	0	9,438
Geologist	0	9,432
Induction	2,985	9,436
Gamma	0	9,438
Laterolog	2,985	9,436

Hartley County, Texas

Latitude: 354400	Longitude: 1024900
Owner: SHAMROCK OIL CO.	Local number: G M,LE,7
Use of site: P	Completion date:
Altitude: 4,031	Depth of well: 6,114

Type of log	Begin depth	End depth
Geologist	1,305	6,114

Hartley County, Texas

Latitude: 355330	Longitude: 1023500
Owner: PHILLIPS	Local number: T NO;BLK ITO SEC 18
Use of site: T	Completion date: 12/02/1955
Altitude: 3,955	Depth of well: 9,166

Type of log	Begin depth	End depth
Electric	468	9,166
Geologist	0	9,150
Microlog	3,990	5,995

Table 4.--Geophysical logs for wells
in the study area--Continued

Hemphill County, Texas

Latitude: 354130	Longitude: 1000530
Owner: PHILLIPS	Local number: G MMB A; BLK C,S 255
Use of site: T	Completion date: 08/26/1967
Altitude: 2,488	Depth of well: 20,113

Type of log	Begin depth	End depth
Caliper	4,020	16,703
Geologist	0	20,100
Induction	4,020	20,103
Gamma	4,020	16,703
Sonic	100	20,105
Other	4,020	20,110

Hutchinson County, Texas

Latitude: 360100	Longitude: 1010900
Owner: SUN COMPANY	Local number: GB CNG;BLK R;SEC 77
Use of site: T	Completion date: 01/17/1958
Altitude: 3,154	Depth of well: 8,287

Type of log	Begin depth	End depth
Caliper	2,709	8,282
Electric	2,709	8,285
Geologist	0	8,287

Hutchinson County, Texas

Latitude: 353930	Longitude: 1013545
Owner: TEXAS OIL GAS	Local number: H TC RR,46,89
Use of site: P	Completion date:
Altitude: 3,111	Depth of well: 5,457

Type of log	Begin depth	End depth
Geologist	1,500	5,457

Table 4.--Geophysical logs for wells
in the study area--Continued

Lipscomb County, Texas

Latitude: 361130 Longitude: 1003000
Owner: GULF OIL Local number: H TCRR;BLK 43;S 413
Use of site: T Completion date: 12/08/1949
Altitude: 2,785 Depth of well: 14,278

Type of log	Begin depth	End depth
Electric	306	13,494
Geologist	120	14,278
Gamma	306	13,494

Moore County, Texas

Latitude: 355630 Longitude: 1014300
Owner: SAC-MOBILE Local number: T NO,BLK 3T,SEC 183
Use of site: T Completion date:
Altitude: 3,416 Depth of well: 6,987

Type of log	Begin depth	End depth
Caliper	2,276	6,976
Geologist	950	6,985
Induction	2,276	6,972
Gamma	2,276	6,970
Sonic	2,276	6,970

Ochiltree County, Texas

Latitude: 360530 Longitude: 1005730
Owner: GULF OIL Local number: J.J.BALINTINE SURVEY
Use of site: T Completion date: 01/25/1950
Altitude: 3,077 Depth of well: 11,640

Type of log	Begin depth	End depth
Electric	927	11,632
Geologist	0	11,640

Table 4.--Geophysical logs for wells
in the study area--Continued

Oldham County, Texas

Latitude: 353500	Longitude: 1021200
Owner: SHELL	Local number: G M;BLK 2;SEC 64
Use of site: T	Completion date: 02/16/1960
Altitude: 3,496	Depth of well: 12,964

Type of log	Begin depth	End depth
Geologist	85	12,964
Gamma	20	12,960
Laterolog	110	12,960
Microlog	38	9,296
Sonic	10,602	12,958

Oldham County, Texas

Latitude: 352315	Longitude: 1024240
Owner: SUPERIOR OIL CO	Local number: LGE 31 CAPITAL LANDS
Use of site: P	Completion date:
Altitude: 3,861	Depth of well: 5,499

Type of log	Begin depth	End depth
Geologist	750	5,499

Oldham County, Texas

Latitude: 351130	Longitude: 1025715
Owner: LIVERMORE INC.	Local number: 7N-1E, SEC.26
Use of site: P	Completion date:
Altitude: 3,881	Depth of well: 6,884

Type of log	Begin depth	End depth
Geologist	2,170	6,884

Table 4.--Geophysical logs for wells
in the study area--Continued

Potter County, Texas

Latitude: 352100 Longitude: 1014030
Owner: WHITTENBURG Local number: BS F;BLK 1;SEC 28
Use of site: T Completion date: 01/30/1955
Altitude: 3,568 Depth of well: 12,581

Type of log	Begin depth	End depth
Geologist	30	12,581
Gamma	586	12,194
Laterolog	586	12,194

Roberts County, Texas

Latitude: 354130 Longitude: 1003730
Owner: PENNZOIL Local number: H GN;BLK M2;SEC 62
Use of site: T Completion date: 08/29/1974
Altitude: 2,795 Depth of well: 14,552

Type of log	Begin depth	End depth
Caliper	4,887	14,167
Geologist	30	14,552
Induction	790	14,164
Gamma	790	14,164
Sonic	4,887	14,167
Other	4,887	14,187

Sherman County, Texas

Latitude: 362230 Longitude: 1014430
Owner: PHILLIPS Local number: GH H;BLK 1C,SEC 68
Use of site: T Completion date: 01/13/1960
Altitude: 3,448 Depth of well: 8,210

Type of log	Begin depth	End depth
Geologist	0	8,210
Induction	2,101	7,702
Laterolog	2,101	7,702
Microlog	2,101	7,702
Other	3,000	8,210

Table 4.--Geophysical logs for wells
in the study area--Continued

Sherman County, Texas

Latitude: 360700	Longitude: 1020130
Owner: I.T.I.O.	Local number: T NO RR, IT, 369
Use of site: P	Completion date:
Altitude: 3,639	Depth of well: 5,138

Type of log	Begin depth	End depth
Geologist	1,400	5,138

Wheeler County, Texas

Latitude: 352100	Longitude: 1000500
Owner: STD TEXAS	Local number: H GN; BLK A7, SEC 36
Use of site: T	Completion date: 10/02/1970
Altitude: 2,197	Depth of well: 21,648

Type of log	Begin depth	End depth
Caliper	380	21,647
Geologist	385	21,640
Laterolog	380	21,642
Sonic	380	21,647
Other	4,410	21,647

Union County, New Mexico

Latitude: 360140	Longitude: 1030745
Owner: OIL EXPLORATION	Local number: 21N-36E-29 BB
Use of site: P	Completion date: 01/31/1956
Altitude: 4,526	Depth of well: 7,360

Type of log	Begin depth	End depth
Electric	153	7,354
Geologist	750	7,360

Table 4.--Geophysical logs for wells
in the study area--Continued

Union County, New Mexico

Latitude: 362015 Longitude: 1030320
Owner: CONTINENTAL OIL Local number: 24N-36E-2-DD
Use of site: P Completion date: 04/04/1957
Altitude: 4,678 Depth of well: 5,308

Type of log	Begin depth	End depth
Geologist	0	5,308
Gamma	80	5,308
Neutron	80	5,308

Union County, New Mexico

Latitude: 362745 Longitude: 1033030
Owner: HOXSEY OIL CO. Local number: 26N-32E-27 AD
Use of site: P Completion date: 08/01/1956
Altitude: 5,509 Depth of well: 3,898

Type of log	Begin depth	End depth
Electric	203	3,521
Geologist	290	3,898

Union County, New Mexico

Latitude: 364438 Longitude: 1030408
Owner: TEXACO 1 CRUZ Local number: 29N-36E-14 CCA 1
Use of site: T Completion date: 02/05/1964
Altitude: 4,835 Depth of well: 6,460

Type of log	Begin depth	End depth
Electric	20	6,460
Induction	431	6,448
Laterolog	431	6,448

Union County, New Mexico

Latitude: 364710 Longitude: 1035110
Owner: NELSON MOORE Local number: 30N-29E-33 DCC
Use of site: T Completion date: 07/25/1951
Altitude: 6,710 Depth of well: 2,685

Type of log	Begin depth	End depth
Geologist	0	2,685

Table 4.--Geophysical logs for wells
in the study area--Continued

Union County, New Mexico

Latitude: 365545	Longitude: 1032650
Owner: GULF OIL CO	Local number: 31N-33E-17BC
Use of site: P	Completion date: 03/08/1970
Altitude: 5,300	Depth of well: 2,855

Type of log	Begin depth	End depth
Electric	333	2,828