

TEXAS WATER DEVELOPMENT BOARD

REPORT 146

Public Library

DEC 13 1972

Dallas, Texas

WATER WELL AND GROUND-WATER CHEMICAL ANALYSIS
DATA, IRION COUNTY, TEXAS

By

James R. Pool
Texas Water Development Board

April 1972

TEXAS WATER DEVELOPMENT BOARD

W. E. Tinsley, Chairman
Robert B. Gilmore
Milton T. Potts

Marvin Shurbet, Vice Chairman
John H. McCoy
Carl Illig

Harry P. Burleigh, Executive Director

Authorization for use or reproduction of any original material contained in this publication, i.e., not obtained from other sources, is freely granted. The Board would appreciate acknowledgement.

Published and distributed
by the
Texas Water Development Board
Post Office Box 13087
Austin, Texas 78711

628.11
T355r
Report-
146
TABLE OF CONTENTS

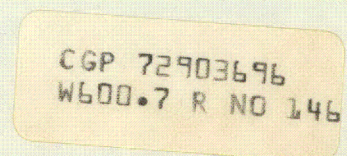
	Page
PURPOSE AND SCOPE	1
LOCATION AND EXTENT	1
METHOD OF INVESTIGATION	1
HISTORICAL DATA	2
WELL-NUMBERING SYSTEM	2
ACKNOWLEDGEMENTS	2
PERSONNEL	2

TABLES

1. Records of Wells and Springs in Irion County	4
2. Chemical Analyses of Water From Wells and Springs in Irion County	27

FIGURES

1. Location of Irion County	1
2. Well-Numbering System	3
3. Map Showing Location of Wells and Springs in Irion County	39



1947

1948

1949

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

1971

1972

1973

1974

1975



WATER WELL AND GROUND-WATER CHEMICAL ANALYSIS DATA, IRION COUNTY, TEXAS

PURPOSE AND SCOPE

The purpose of this report is to present to the public basic ground-water data collected in Irion County during intermittent periods from March 1966 to September 1968. Historical records pertinent to this investigation have also been included.

The investigation, covering several counties in the northwestern part of the Edwards Plateau, was initiated in response to a petition from citizens and officials of Glasscock, Irion, Midland, Reagan, and Upton Counties to the Texas Water Rights Commission to designate an underground water reservoir or subdivision of an underground water reservoir under the provisions of the Underground Water Conservation Act (Article 7880-3c) enacted by the Fifty-first Legislature in 1949. The statute requires designation of an underground water reservoir or subdivision prior to the creation of an Underground Water Conservation District. The purpose of the investigation was to collect and compile basic data in the area to provide the Texas Water Rights Commission with information necessary to determine if a reservoir or subdivision exists in the area and to determine its extent.

The investigation in Irion County is also part of an overall regional investigation of the ground-water resources of the Edwards Plateau, a study encompassing all or parts of 26 counties. This study will determine and describe the occurrence, availability, and chemical quality of the ground-water resources in the region.

This report contains the basic data collected in Irion County and is one of a series of similar basic data reports on selected counties in the Edwards Plateau region. Published reports in this series are as follows:

Report 132, *Water Well and Ground-Water Chemical Analysis Data, Schleicher County, Texas*;

Report 143, *Water Well and Ground-Water Chemical Analysis Data, Glasscock County, Texas*; and

Report 145, *Water Well and Ground-Water Chemical Analysis Data, Reagan County, Texas*.

LOCATION AND EXTENT

Irion County is located in the west-central part of Texas on the northeast edge of the physiographic province known as the Edwards Plateau (Figure 1). The county is situated approximately between $100^{\circ}40'$ and $101^{\circ}15'$ west longitude and $31^{\circ}05'$ and $31^{\circ}35'$ north latitude and is bounded by Tom Green County on the north and east, Crockett and Schleicher Counties on the south, and Reagan County on the west. Irion County covers an area of 1,073 square miles and ranges in elevation from approximately 2,000 to 2,700 feet above mean sea level.

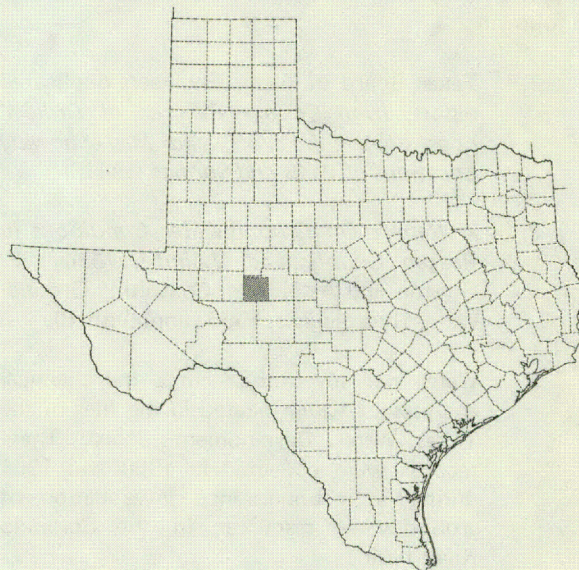


Figure 1.—Location of Irion County

METHOD OF INVESTIGATION

Collection of the data presented in this report was accomplished for the most part between August and December 1967. Some fieldwork, mostly in the western part of the county, was done during a period of about five weeks in the spring and fall of 1966.

Initially, the United States Department of Agriculture Office of Stabilization and Conservation was visited to obtain information about location of the farms and ranches throughout the county.

A representative number of springs and wells, including domestic and livestock, irrigation, industrial, and public supply wells, were visited throughout the county. Public officials and individual landowners and lessees were contacted in order to obtain all available information on each well. When possible, the static water level and depth of each well were measured, and water samples for chemical analysis were taken from representative wells. The altitude of the land surface at each well location was determined from 15-minute topographic maps where available. Where topographic maps were not available, elevation of the well site was obtained by use of a Paulin altimeter. Aerial photographs were used in locating wells within the sections and surveys. A total of 474 wells and four springs were inventoried (Table 1), and 201 water samples were collected for chemical analysis (Table 2).

HISTORICAL DATA

Data on several wells in Irion County were collected during previous investigations. Some of these earlier data, especially water-level records and chemical analyses, are included in the tables of this report for comparison purposes. The sources of these data include the following:

1. Texas Board of Water Engineers duplicated report, *Irion County Records of Drillers' Logs, Water Analyses, and Map Showing Locations of Wells and Springs, 1941.*
2. *A Report On Ground-Water Conditions in Reagan County and Vicinity*, William F. Guyton and Associates, Consulting Ground-Water Hydrologists, 1956 (unpublished).
3. Water well inventory records and chemical analyses of water located in the files of the Texas Water Development Board. These records were collected in 1960 and 1961 during a reconnaissance investigation of ground-water resources in the Colorado River basin.

WELL-NUMBERING SYSTEM

The numbers assigned to wells in this report conform to the statewide well-numbering system used by the Texas Water Development Board. Each well is assigned a number to facilitate record keeping, electronic data processing, and locating the well within the State. The system is based on division of the State into quadrangles formed by degrees of latitude and longitude,

and repeated divisions of these quadrangles into smaller ones as illustrated in Figure 2.

The largest quadrangle, a 1-degree quadrangle, is divided into sixty-four 7½-minute quadrangles. Each 1-degree quadrangle in the State has been assigned a number for identification; Irion County is located within the 1-degree quadrangles 43 and 44. The 7½-minute quadrangles are numbered consecutively from left to right beginning in the upper left hand corner of each 1-degree quadrangle. The 2½-minute quadrangles within each 7½-minute quadrangle are similarly numbered from 1 to 9. The first two digits of a well number identify the 1-degree quadrangle, the third and fourth digits identify the 7½-minute quadrangle, the fifth digit identifies the 2½-minute quadrangle, and the last two digits designate the order in which the well was inventoried within the 2½-minute quadrangle. In addition to the 7-digit well number, a 2-letter prefix is used to identify the county. The prefix for Irion County is PK.

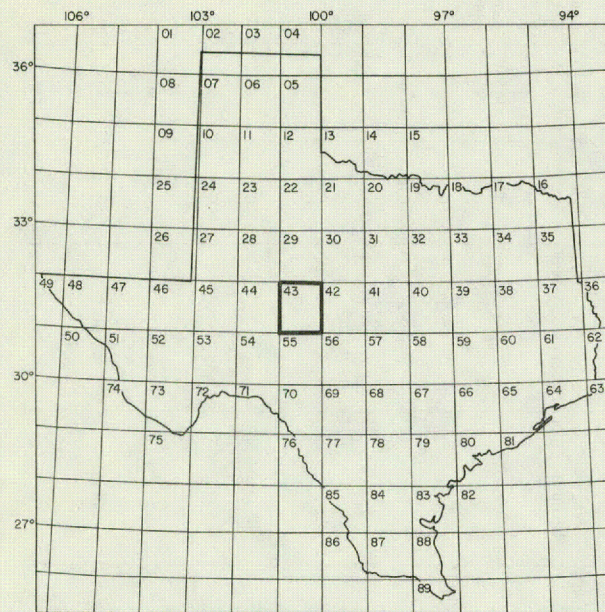
On the well location map (Figure 3), only the last three digits of the well number are shown at the location of the well; the second two digits are shown in the northwest corner of each 7½-minute quadrangle; and the first two digits are shown by the large block numerals 43 and 44.

ACKNOWLEDGEMENTS

The author wishes to express his thanks to the ranchers, farmers, and others whose cooperation and interest made this investigation possible. Special thanks go to County Judge Reginald Atkinson for his interest and assistance, and to Lewis (Bud) Jagers, Office Manager of the Irion County Agricultural Stabilization and Conservation Committee for his kind assistance in providing aerial photographs to locate wells and for information on farm and ranch outlines. Thanks also go to C. M. Martin, Irion County well contractor, and to Bill Sims, Executive Secretary of the Texas Sheep and Goat Raisers Association, for their help in locating and giving needed information on several wells in the county.

PERSONNEL

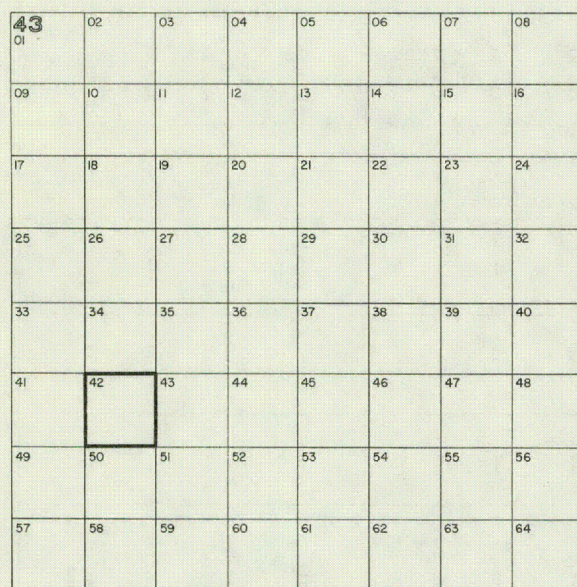
Texas Water Development Board personnel who assisted in collecting and compiling the data included in this report are geologists James R. Pool, Herbert E. Couch, Ruben M. Frank, Daniel A. Muller, and Robert D. Price.



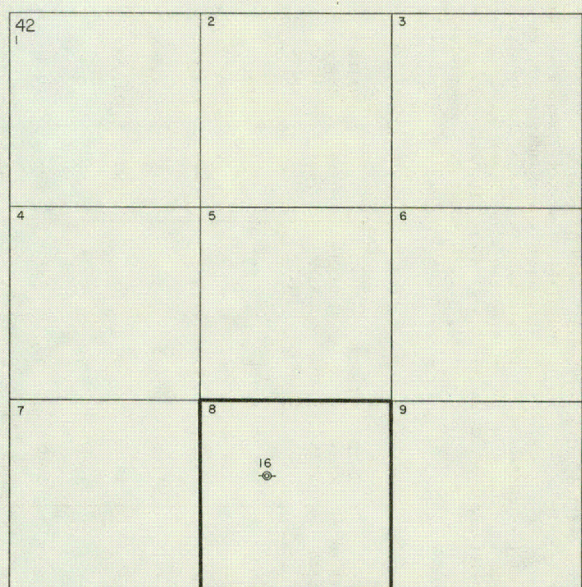
1 - degree Quadrangles

Location of Well 43-42-816

- 43 1 - degree quadrangle
- 42 7 1/2 - minute quadrangle
- 8 2 1/2 - minute quadrangle
- 16 Well number within 2 1/2 - minute quadrangle



7 1/2 - minute Quadrangles



2 1/2 - minute Quadrangles

Figure 2
Well-Numbering System

Table 1.--Records of Wells and Springs in Irion County

All wells are drilled unless otherwise noted in remarks.

Water-bearing unit : Qal, Alluvium; Kea, Edwards and associated limestones; Kt, Trinity sand; Trs, Santa Rosa Sandstone; P, Permian rocks, undifferentiated.

Altitudes of land surface : Determined by use of Paulin altimeter unless otherwise designated by footnotes.

Water levels : Reported water levels given in feet; measured water levels given in feet and tenths.

Method of lift and type of power: C, cylinder; Cf, centrifugal; E, electric; G, natural gas butane or gasoline; H, hand; J, jet; N, none; S, submersible; T, turbine; W, windmill.

Use of water : D, domestic; Ind, industrial; Irr, irrigation; N, none; P, public supply; S, livestock.

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR - ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-25-701	Leasel A. Harris Estate	Andy Smith	--	115	--	--	Kea,Kt	2,451	60.9	Jan. 28, 1968	C,W	S	
901	John S. Cargile	--	1930	120	5	--	Kea,Kt	2,361	94.2	Sept. 13, 1967	C,W	S	
902	do	--	1952	83	5	83	Qal,Kea	2,288	9.5	do	C,W	S	
* 26-701	do	--	1930	80	5	80	Qal,Kt	2,258	28.9	do	C,W	S	
* 703	do	--	1940	45	5	45	Qal	2,210	28.2	Sept. 11, 1967	S,E	D,S	
704	do	--	1940	58	--	--	Qal	2,211	28.1	do	N	N	Abandoned well.
705	do	--	--	45	5	45	Qal	2,211	--	--	C,W	S	
801	do	--	1940	143	5	143	Kt	--	124.4	Sept. 13, 1967	C,W	S	
901	Cathrine Funk Wall	D.D. Wall	--	139	6	--	Kea,Kt	2,286	112.9 78.3	July 14, 1961 Aug. 15, 1968	N	N	Formerly supplied water for oil well drilling operations.
902	do	do	--	235	--	--	Kea,Kt	--	--	--	T,E	D,S	Reported yield 70 gpm.
* 905	do	do	--	--	--	--	Kea,Kt	--	--	--	C,W	D,S	
906	Blue Danube Oil Company	--	1951	--	--	--	--	--	--	--	C,E	Ind	Oil test, now plugged back and used as waterflood supply well.
* 907	Cathrine Funk Wall	D.D. Wall	--	--	--	--	Kea,Kt	--	--	--	C,W	S	
* 27-701	J.W. Field	--	1935	165	5	--	Kt	--	137.0	Oct. 3, 1967	C,W	S	
33-101	A.A. Sugg, Jr., et al.	R.C. Leffel	--	111	6	--	Kea,Kt	2,456	107.0	July 14, 1967	C,W	S	
* 102	Carol S. White Richey	O.C. Schlinke	--	199	--	--	Kea,Kt	2,488	147.6	Aug. 9, 1968	C,W	S	
* 202	Mary McManus, et al.	Houston McManus	--	199	--	--	Kt	2,383	76.6	do	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-33-203	Mary McManus, et al.	Houston McManus	1950	100+	6	--	Kt	--	--	--	C,W	S	
204	do	do	--	142	6	--	Kea,Kt	2,445	77.5	Aug. 9, 1968	C,W	S	
205	do	do	1940	33	6	--	Qa1,Kt	2,325	8.6	do	C,W	S	
* 301	John S. Cargile	--	--	120	5	120	Kea,Kt	2,396	72.5	Sept. 13, 1967	C,W	S	
* 302	Sue Noelke Houser	O.C. Schlinke	--	108+	6	--	Kea	2,464	94.6	Aug. 9, 1968	C,W	S	
401	A.A. Sugg, Jr., et al.	R.C. Leffel	--	35	6	--	Kea,Kt	2,365	32.3	July 14, 1967	C,W	S	
* 402	do	do	--	190+	6	--	Kea,Kt	--	150	1940	C,W	S	Well 102. <u>4</u>
403	do	W.M. Hemphill	1910	61	6	--	Kea,Kt	--	46.0 36.2	Aug. 9, 1940 Aug. 4, 1967	C,W	S	Well 101. <u>4</u>
501	do	R.C. Leffel	--	42	6	--	Qa1,Kt	2,293	17.9	July 12, 1967	C,W	S	
502	do	do	--	77	6	--	Kea,Kt	2,356	48.4	do	C,W	S	
* 601	O.C. Schlinke	--	1900	93	6	60	Qa1,Kt	2,384	27.4 23.6	June 25, 1940 Aug. 9, 1968	C,W	D,S	Well 109. <u>4</u>
* 702	A.A. Sugg, Jr., et al.	W.M. Hemphill	1960	130	6	--	Kea,Kt	2,430 <u>2</u>	98.5	Aug. 4, 1967	C,W	S	
703	John Sheen	--	1927	108	5	108	Kt	--	76.8	Aug. 14, 1967	C,W	S	
704	do	--	--	87	5	--	Kt	--	52.6	do	C,W	S	
* 705	A.A. Sugg, Jr., et al.	W.M. Hemphill	--	37	6	--	Kt	--	24.9 20.4	July 22, 1940 Aug. 4, 1967	C,W	S	Well 130. <u>4</u>
* 801	do	R.C. Leffel	--	158	--	--	Trs,P	--	33.0 56.1 86.7	May 21, 1940 July 21, 1961 July 13, 1967	C,W	D	Well 128. <u>4</u>
* 802	do	W.M. Hemphill	--	48	6	--	Kt	--	25.2 26.4	July 22, 1940 July 21, 1961	C,W	D,S	Well 131. <u>4</u>
803	do	do	1952	100	--	85	Kt	--	--	--	S,E	D	
804	do	do	1943	100	6	--	Kt	2,201	22.1	Aug. 4, 1967	C,W	S	
805	do	do	--	40	6	--	Kt	--	--	--	C,W	S	
806	do	do	--	88	6	--	Kt	--	21.5	Aug. 9, 1940	C,W	S	Well 129. <u>4</u>
* 807	do	do	--	76	6	--	Kt	--	48.4 32.0	do Aug. 4, 1967	C,W	S	Well 108. <u>4</u>

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
43-33-808	A.A. Sugg, Jr., et al.	W.M. Hemphill	1954	147	5	150	Kt	--	55.0	Aug. 3, 1967	C,W	S	
901	do	R.C. Leffel	--	64	6	--	Kt	2,559	46.1	July 12, 1967	C,W	S	
902	do	A.A. Sugg, Jr.	--	36	--	--	Qal	2,151	28.4	Aug. 9, 1940	N	N	Dug well. Well 127. <u>4/</u>
* 34-101	John S. Cargile	--	--	120	5	--	Kea,Kt	--	--	--	C,W	S	
102	do	--	1930's	77	5	--	Kt	2,319	69.6	Sept. 12, 1967	C,W	S	
103	do	--	--	80	--	--	Kt	--	--	--	C,W	S	
104	do	--	--	80	--	--	Kt	2,294	74.4	Sept. 12, 1967	C,W	S	
105	do	--	--	70	6	--	Kt	--	46.6	do	C,W	S	
* 201	do	--	1930's	91	5	91	Kt	2,264	53.7	do	C,W	S	
202	do	--	1930's	220	5	220	Kt	--	--	--	C,W	S	
* 203	do	--	1940's	39	5	39	Qal	2,173	27.4	Sept. 8, 1967	C,W	S	
301	do	--	1940's	30	5	30	Qal	--	--	--	C,W	N	
302	do	--	1940's	86	5	--	Kt	2,151	68.7	Sept. 8, 1967	C,W	S	
* 303	J.W. Field	--	1950	75	--	--	Kt	2,119	45.7 52.4	May 15, 1940 Oct. 5, 1967	C,W	S	Well 119. <u>4/</u>
304	do	--	1917	145	5	--	Kt	2,124	123.6	do	C,W	S	
401	Katherine Thompson, et al.	John S. Cargile	1930's	80	5	--	Qal,Kt	2,150	49.3	Sept. 15, 1967	C,W	S	
* 402	O.C. Schlinke	--	--	55	6	--	Qal,Kt	2,208	37.2	Aug. 9, 1968	C,W	S	
* 403	Katherine Thompson, et al.	John S. Cargile	1948	121	5	121	Qal,Kt Trs	--	40.4	Sept. 15, 1967	C,W	S	
501	John S. Cargile	--	1940's	114	10	114	Kt	2,191	102.5	do	C,W	S	
502	do	--	1940's	77	6	--	Kt	2,133	41.2	do	C,W	S	
503	Katherine Thompson, et al.	--	--	80	5	80	Kt	2,191	69.2	do	C,W	S	
601	John S. Cargile	--	1941	75	5	75	Qal?,P?	2,091	44.6	Sept. 8, 1967	C,W	N	
602	do	--	--	72	5	72	Qal,Kt	--	43.9	do	C,W	N	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-34-603	John S. Cargile	--	1940's	52	5	52	Qal,Kt	--	39.3	Sept. 8, 1967	C,W	D,S	
604	do	--	1940's	84	5	84	Kt Trs?	2,176	78.2	do	C,W	S	
605	Gladys Mayer	Len Mertz	1953	58	12	58	Qal	--	13.0	Oct. 6, 1967	T,G	S	Reported yield 100 gpm.
* 701	A.A. Sugg, Jr., et al.	R.C. Leffel	1964	52	5	52	Kt	2,200	37.4	July 12, 1967	C,W	S	
* 702	do	A.A. Sugg, Jr.	1935	56	5	52	Kt,Trs	2,142	37.9 50.9	June 25, 1940 July 22, 1968	C,W	D,S	Well 111. <u>4</u>
* 801	do	R.C. Leffel	1966	73	5	73	Kt	2,179	52.00	July 12, 1967	C,W	S	
* 901	Ernestine M. Mertz	Len Mertz	1936	100	5	--	Kt	2,210	77.7	Oct. 6, 1967	C,W	S	
902	do	do	1930	135	5	--	Kt	2,229	96.9	do	C,W	S	
903	do	do	1960	156	5	--	Kt	2,205	92.0	do	S,E	S	
* 904	do	do	1960	143	6	--	Kt	--	92.9	do	C,W	D,S	
905	Gladys Mayer	do	1953	105	5	30	Kt?,P	--	66.4	do	C,W	S	
35-101	Joe B. Mayer	--	1915	63	5	--	Kt	--	48.0	Sept. 7, 1967	C,W	D,S	
102	do	--	1958	65	6	65	Kt	--	48.1	do	S,E	D,S	
103	J.W. Field	--	--	82	6	--	Qal,Kt P?	2,145 <u>1</u>	20.5	Oct. 3, 1967	C,W	S	
104	do	--	--	45	5	--	Qal? Kt	--	30.5	Oct. 5, 1967	N	N	
105	do	--	--	92	--	--	Kt	--	73.7	Oct. 3, 1967	N	N	
106	do	--	1952	102	9	102	Kt,P?	2,136 <u>1</u>	77.1	do	C,W	S	
107	do	--	1936	100	5	100	Qal? Kt,P?	2,101 <u>1</u>	26.3	Oct. 5, 1967	C,W	S	
201	Joe B. Mayer	--	1955	64	5	64	Qal?,Kt	2,120 <u>1</u>	35.7	Sept. 7, 1967	S,E	S	
203	J.W. Field	--	1950	124	5	--	Kt	2,164 <u>1</u>	62.5	Oct. 3, 1967	J,E	D	
* 204	do	--	1914	115	5	120	Kt	2,164 <u>1</u>	60.9	do	C,W	S	
* 401	do	--	1907	90	5	--	Qal,P	2,268	40.2 40.5 40.4	June 25, 1940 July 12, 1961 Oct. 5, 1967	C,W	S	Well 122. <u>4</u>

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-35-402	M.C. Shook	G.C. Magruder, Jr.	--	40	--	--	Qa1,P	2,038 <u>1/2</u>	--	--	S,E	D,S	
403	do	do	1963	100	6	100	Qa1,P	2,039 <u>1/2</u>	21.4	Oct. 25, 1966	C,W	S	
* 404	A.J. Haney	do	--	72+	--	--	Qa1,P	--	57.1 63.6	June 25, 1940 Oct. 25, 1966	C,W	S	Well 123. <u>4/</u>
405	Joe B. Mayer	--	1961	80	6	80	Qa1,P	--	50.9	Sept. 7, 1967	S,E	S	
* 406	J.W. Field	--	1917	108	5	--	Qa1,P	2,101 <u>1/2</u>	55.5	Oct. 5, 1967	C,W	S	
* 501	Joe B. Mayer	--	--	65	5	65	Qa1	2,059 <u>1/2</u>	37.6	Sept. 7, 1967	C,W	S	
502	do	--	--	88	5	88	Qa1,P	2,079 <u>1/2</u>	49.3	do	N	N	Abandoned livestock well.
* 41-101	Mrs. Della Burney	A.J. Burney	1942	200	6	200	Kt	2,272	76.9	Feb. 28, 1968	C,W	S	
102	do	do	1900	54	5	--	Kt	2,209	34.6	do	C,E	D,S	
* 201	A.A. Sugg, Jr., et al.	J.T. David	--	--	--	--	Kt	2,241	--	--	C,W	S	
* 202	do	W.M. Hemphill	1940	65	6	--	Kt	--	--	--	C,W	S	
* 301	do	A.A. Sugg, Jr.	--	140	4	--	Kea,Kt	2,293	--	--	C,W	S	
* 302	do	do	--	129	5	--	Kt,Trs	2,230	103.4	July 21, 1968	C,W	S	
* 303	do	do	1929	80	5	--	Trs	2,176	56.2 59.7	Aug. 9, 1940 July 21, 1968	C,W	D,S	Well 126. <u>4/</u>
401	George Parks	--	--	180±	5	--	Kt	--	83.6	July 22, 1961	C,W	S	
403	Mable Cox	Emerson Cox	1955	180	6	10	Kt	--	145.8	Oct. 19, 1966	C,W	S	
* 404	A.A. Sugg, Jr., et al.	Newman T. Busby	1920	72	6	8	Kea,Kt	2,313	49.5 42.9	May 27, 1940 Oct. 25, 1966	C,W	S	Well 117. <u>4/</u>
* 502	do	R.C. Leffel	1910	98	6	--	Kt	2,314	80.9 78.7	July 22, 1940 July 14, 1967	C,W	S	Well 133. <u>4/</u>
503	do	do	--	130	6	--	Kt	2,368	132.1	do	C,W	S	
* 504	do	J.T. Davis	--	139	5 1/2	--	Kt	2,272	87.4 85.0	July 28, 1961 July 24, 1968	C,W	S	
601	do	A.J. Burney	1959	196	6	5	Kea,Kt	2,418	161.3	Feb. 28, 1968	C,W	S	
602	Idabel Van Keuren	J.T. Davis	--	--	--	--	Kea	2,449	179.8	July 23, 1968	C,W	D,S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-41-603	Idabel Van Keuren	J.T. Davis	--	221	--	--	Kea	2,463	198.7	July 24, 1968	C,W	S	
* 801	A.A. Sugg, Jr., et al.	R.C. Leffel	--	321	6	--	Kea,Kt	2,506	296.4	July 17, 1967	C,W	S	
* 802	do	Henry Lindley	--	260	6	260	Kea	2,454	227.9	July 25, 1968	N	N	Formerly supplied water for oil well drilling operations.
* 901	do	do	--	310	6	30	Kea,Kt	2,441	250.0	July 25, 1968	C,W	S	
* 902	do	J.T. Davis	--	217	--	--	Kea,Kt	2,429	162.5	July 23, 1968	C,W	S	
* 903	Idabel Van Keuren	do	--	200	6	--	Kea	2,446	177.2	do	C,W	S	
* 904	A.A. Sugg, Jr., et al.	Henry Lindley	--	290	8	--	Kea	2,505	251.3	July 25, 1968	C,W	S	
* 42-101	do	A.A. Sugg, Jr.	1930's	240	--	--	Kt	2,396	--	--	C,W	S	
* 102	do	do	1957	236	5	--	Kea	2,458	177.4	July 21, 1968	N	N	Abandoned well.
* 103	do	do	1957	270	5	260-270	Kt,Trs	2,357	146.0	July 22, 1968	C,W	S	
* 201	Howard Parks	--	--	70	5	60	Kt	--	--	--	C,W	S	
* 301	do	--	--	113	5	113	P	2,167	64.9	Aug. 14, 1967	C,W	S	
302	Ernestine M. Mertz	Len Mertz	1936	144	6	--	Kt	2,251	127.9	Oct. 6, 1967	C,W	S	
303	do	do	1965	119	5	119	Trs	2,193	64 82.1	Oct. 6, 1965 1967	C,W	S	
* 401	A.A. Sugg, Jr., et al.	A.J. Burney	1932	73+	10	73+	Kea,Kt	2,323	58.3	Feb. 28, 1968	C,W	S	
* 402	do	do	--	150	5	150	Kt	2,307	119.8	do	C,W	S	
403	do	do	--	29	5	--	Qal	2,227	12.4	do	C,E	D,S	
* 404	do	do	1959	185	--	--	Kea,Kt	--	--	--	C,W	S	
* 405	do	do	--	Spring	--	--	Qal	--	--	--	Flows	S	Known as "Lopez Springs". Well 201. 4/
501	Mrs. Buford Carney	Ruben Stanley	1947	--	--	--	Qal	--	--	--	T,E	N	Abandoned irrigation well.
* 502	M.H. Carr	--	1947	44	5	44	Qal	2,155	17.2	Sept. 9, 1967	J,E	D,S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-42-601	Howard Parks	--	1941	202	9	180	P	--	79.1	July 13, 1961	T,G	Irr	Reported yield 397 gpm. Well 210. <u>4/</u>
602	do	--	1949	110	5	110	Kt,P?	--	53.1 56.3	do Aug. 7, 1967	C,W	S	
603	Ida Nutt Estate	Howard Parks	1952	90	5	90	Kt,P?	--	--	--	C,W	N	Abandoned irrigation well.
* 604	Howard Parks	--	1918	65	5	65	Qal,Kt	2,150	31.8	Aug. 7, 1967	C,W	D,S	
* 605	Mrs. D.E. Hughes	Ray Ivey	1962	70	5	70	Qal,P	2,083	15	July 18, 1968	C,E	D,S	
606	Howard Parks	--	--	162	6	--	Kt,P	--	68.9	Aug. 7, 1967	N	N	Abandoned well.
* 607	Fred Grey	--	1960	40	--	40	Qal,P	--	10.0	Dec. 18, 1967	S,E	D,S	
* 608	Carlotta Hartman	Charles H. Trigg	--	89	6	--	Qal,Kt	2,168	72.5	July 19, 1968	C,W	S	
* 609	Mrs. D.E. Hughes	Ray Ivy	1967	52	5	--	Qal,P	2,080	8.6	do	C,W	S	
701	Sammie H. Sugg, et al.	A.J. Burney	--	224	5	--	Kea,Kt	2,388	149.8 153.8	July 11, 1961 Feb. 27, 1968	C,W	S	
* 703	G.C. Magruder, Jr.	--	1921	150	6	5	Kea,Kt	--	123.7	July 23, 1940	C,W	S	Well 165. <u>4/</u>
* 704	Henry Lindley	--	1890	200	6	30	Kt	2,274	135 198.4	July 24, 1940 1968	C,W	D,S	Well 166. <u>4/</u>
* 705	do	--	1895	186	--	--	Kea,Kt	2,287	134.6	July 23, 1940	C,W	S	Well 164. <u>4/</u>
706	do	--	1959	208	6	--	Kea	2,406	180.3	July 25, 1968	C,W	D,S	
* 802	Street Whitley	--	1966	80	4	--	Kea,Kt	2,166	22.9	Aug. 8, 1968	S,E	D	
* 803	George Parks	--	1951	180	6	--	Kt	--	160.9	Aug. 20, 1947	C,E	P	Well deepened in 1951 from 150 feet to 180 feet.
* 804	Boyd Baze	--	--	87	6	87	Qal,Kt Trs	2,161	17.8 12.5	July 12, 1961 Aug. 8, 1968	C,E	S	
* 805	O.D. Baze	--	--	185	6	--	Kea,Kt	2,196	67.6	July 18, 1968	J,E	D	
* 806	S.S. Evans	--	--	150	5	150	Kt	--	58.5	Oct. 3, 1966	C,W	D	
* 807	Irion County	--	1967	204	8 5	32 204	Qal,P	--	30	Aug. 1, 1967	S,E	P	
808	H.F. Woody	Bill Baze	1965	21	12	--	Qal	--	8.8	Aug. 15, 1967	S,E	Irr	
* 810	J.T. Robinson	--	--	120	5	--	Kt,Trs	2,182	49.1	do	J,E	D	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
43-42-811	J.T. Robinson	--	1964	110	5	--	Kt,Trs?	--	70	1964	C,W	S	
812	H.F. Woody	Bill Baze	1958	129	6	--	Kt,Trs	--	31.4	Aug. 15, 1967	S,E	S	
813	do	do	1962	70	6	70	Qal	--	--	--	C,W	S	
814	do	do	1955	51	6	51	Qal?,Kt	--	21.6	Aug. 15, 1967	J,E	D,S	
816	George Parks	--	1964	174	5	174	Kt	2,261	--	--	S,E	P	Pumping level was 59.5 feet below land surface on August 14, 1967.
* 817	Mertzon Independent School District	D.C. Moore	1909	165	5	135	Kt	2,251	77.7 85.3	June 17, 1940 Oct. 18, 1967	C,W	P	Well 274. <u>4</u>
818	Irion County	--	1963	--	--	--	Kt	--	--	--	S,E	P	
819	George Parks	--	1932	160	6	--	Kt	--	104.2	Aug. 20, 1947	C,W	P	
* 820	Claude L. Tankersley	--	--	Spring	--	--	Kea	2,186 <u>1</u>	+	Aug. 16, 1968	Flows	S	Reported flow 30 gpm. Known as "Yardley Springs". Well 269. <u>4</u>
* 821	Boyd Baze	--	--	54	6	--	Qal,Kt	2,161	--	--	C,E	D,S	
901	C.B. Brooks	--	1961	244	5	244	Kt	2,309	190.6	Dec. 19, 1967	S,E	D	
902	do	--	--	--	--	--	Kea,Kt	--	--	--	C,W	S	
903	do	--	1957	172	--	--	Kea,Kt	2,306	102.4	Dec. 19, 1967	S,E	D,S	
* 904	do	--	1966	128	5	127	Kea,Kt	2,203	77.1	Dec. 20, 1967	C,W	S	
43-102	Fred Grey	--	--	86	--	--	Qal	2,093 <u>1</u>	36.9	Dec. 18, 1967	C,W	S	
* 402	Katharine Trigg	Charles H. Trigg	1961	87	--	87+	P	2,090	74.9	July 19, 1968	C,W	S	
* 403	do	do	1966	139	5	110	Qal,P	2,165	88.1	do	S,E	S	
* 404	Fred Grey	--	1963	160	3	110	Qal,P	2,061	--	--	S,E	D,S	
702	C.B. Brooks	--	1955	145	6	10	Kea,Kt	--	107.8	Dec. 19, 1967	S,E	S	
* 703	do	--	--	266	--	--	Kea,Kt	2,342	219.6	do	S,E	D	
704	do	--	1952	--	8	12	Kea,Kt?	2,212	91.3	do	C,W	S	
* 705	do	--	--	135	--	5	Kt	2,192	140.0	do	C,W	D,S	
706	do	--	--	132+	--	--	Kea,Kt	2,300	112.2	do	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-49-101	Street Whitley	Buck Whitley	1929	60	5	60	Kea	--	32.8 31.1	Aug. 6, 1940 Sept. 26, 1966	C,E	D,S	Well 169. <u>4</u>
102	do	do	1962	100±	--	--	Kea	--	28.9	Sept. 27, 1966	N	N	Abandoned well.
* 103	do	do	1963	400	5	400	Kea,Kt	2,539	267.7	do	S,E	D,S	
* 104	H.M. Noelke	do	1910	450	3	10	Kea,Kt	--	238	Aug. 6, 1940	C,W	S	Well 72. <u>4</u>
105	Street Whitley	Buck Whitley	1935	300±	4	10	Kea,Kt	--	65.4	Sept. 27, 1966	C,W	S	
* 106	Mrs. J.R. Medlock	do	1945	240	5	240	Kea,Kt	--	217.1	do	C,W	S	
* 107	A.A. Sugg, Jr., et al.	R.C. Leffel	1966	430	5	420	Kea,Kt	--	--	--	S,E	S	
* 201	T.P. Lowdermilk	--	1939	433	--	--	Kea,Kt	--	360.5	Aug. 6, 1940	S,E	D,S	Well 168. <u>4</u>
202	do	--	1947	263+	--	--	Kea,Kt	--	262.3	Sept. 30, 1966	C,W	S	
203	George B. Cathey	C.C. Aiken	--	280+	--	--	Kea,Kt	--	280.0	do	C,W	S	
* 301	H.B. Mayse	H.F. Mayse	--	308	6	--	Kea,Kt	2,540	287.1 292.7	July 20, 1961 Aug. 14, 1968	C,W	S	
* 302	do	do	--	200	--	--	Kea,Kt	2,394	165	1940	C,W	S	Well 167. <u>4</u>
303	Henry Lindley	do	1955	135	--	--	Kea	2,381	--	--	C,W	S	
* 401	Sam Chaney	--	1931	409	6	5	Kea,Kt	--	329 310.9	Oct. 20, 1940 1966	C,W	D,S	Well 175. <u>4</u>
501	Leona Wilson	Charles C. Aiken	1905	240	--	--	Kea,Kt	--	198 218.7	1940 Sept. 30, 1966	C,W	N	Well 173. <u>4</u>
* 502	do	do	1947	240	--	--	Kea,Kt	--	207.5	do	C,W	D,S	
* 503	do	do	--	370	--	--	Kea,Kt	--	198 296.2	1940 Sept. 30, 1966	C,W	S	Well 172. <u>4</u>
504	Mrs. Elta Murphy	M.B. Noelke, Jr.	1936	308	--	--	Kea,Kt?	--	--	--	C,W	S	
* 505	M.B. Noelke, Sr.	do	1946	308	6	10	Kea,Kt	--	--	--	S,E	D,S	
506	do	do	1905	225±	6	10	Kea,Kt	--	165.1	Oct. 19, 1966	C,W	S	
* 602	do	do	1936	225	5	10	Kea,Kt	--	--	--	C,W	S	
603	Brooks Gas Corporation	--	1959	250	4	250	Kt	--	--	--	S,E	Ind	
604	do	--	1962	250	6	250	Kt	--	--	--	S,E	Ind	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-49-605	Brooks Gas Corporation	--	1966	310	6	310	Kt,Trs	2,340± 1/	--	--	S,E	Ind	Reported yield 10 gpm.
606	do	--	1966	311	6	311	Kt	2,340	221.6	Oct. 20, 1966	N	N	Drilled for gasoline plant supply well but did not produce sufficient water.
607	do	--	1967	343	6	343	Kt,Trs	--	--	--	S,E	Ind	
608	do	--	1967	525	--	--	Kea,Kt Trs,P?	2,340	--	--	S,E	Ind	
609	Mrs. Ada Morehead	Dick Farrington	1956	261	8 5	-- --	Kea,Kt	2,354	149.9	Aug. 14, 1968	N	N	Reported yield 50 gpm. Formerly supplied water for oil well drilling operations.
* 701	Ela C. Sugg	H.M. Noelke	1898	291	6	5	Kea	--	270.7	Aug. 9, 1967	C,W	S	
702	H.M. Noelke	--	1920	265	--	--	Kea	2,420	169.4	Dec. 28, 1967	C,W	S	
* 703	M.B. Noelke, Sr.	M.B. Noelke, Jr.	1947	412	8	412	Kea,Kt	2,552	308.1	Oct. 19, 1966	C,W	S	
* 801	Mrs. Elta Murphy	do	--	160	6	10	Kea,Kt	--	--	--	S,E	D,S	
802	Marie Noelke Baker	do	1927	150	5	130	Kea,Kt	--	--	--	C,W	S	
803	M.B. Noelke, Sr.	do	--	--	6	10	Kea,Kt	--	--	--	C,W	S	
901	Marie Noelke Baker	do	1907	150	6	10	Kea,Kt	--	76.7 82.8	July 20, 1961 Oct. 14, 1966	C,W	S	
* 902	do	do	1915	175	6	10	Kea	2,395	140.9	do	S,E	D,S	
* 50-101	Mrs. Ada Morehead	Dick Farrington	1951	147	6	5	Kea,Kt	2,265	81.2 88.4	July 20, 1961 Aug. 14, 1968	C,W	S	
102	Victor Lindley	--	1932	200	5	200	Kea,Kt	--	80	July 16, 1967	C,E	D,S	
103	do	--	1959	189	6	10	Kt	--	--	--	C,W	S	
* 104	Mrs. Ada Morehead	Dick Farrington	--	69	--	--	Kea	2,265	41.1 56.4	July 5, 1940 Aug. 14, 1968	C,W	S	Well 161. 4/
105	Hugo Reed	Victor Lindley	--	135	--	--	Kea	2,255	70.9	Aug. 17, 1967	C,W	S	
* 201	Reginald Atkinson	--	--	Spring	--	--	Kea	--	+ +	June 6, 1940 1968	Flows	--	Known as "Head Water Spring". Well 293. 4/

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-50-202	Boyce E. Tankersley	--	1900	11	5	11	Kea	2,213	1.4 5.8	May 24, 1940 Aug. 17, 1967	T,G	Irr	Dug well. Well 290. <u>4/</u>
* 203	S.S. Evans	--	1907	110	6	--	Kt	--	92.9 63.3	July 23, 1940 Oct. 3, 1966	C,W	D,S	Well 280. <u>4/</u>
205	Hugo Reed	Victor Lindley	1965	100	10	100	Qal Kea	2,230 <u>1/</u>	15 15.5	Oct. 1966 Aug. 17, 1967	S,E	Irr	
206	do	do	1965	20	10	20	Kea	--	--	--	S,E	Irr	
207	do	do	1966	100	5	100	Kea?,Kt	--	90	1966	S,E	S	
* 208	Boyce E. Tankersley	--	--	100	--	--	Kt	2,236	59.6 66.5	June 17, 1940 Aug. 17, 1967	C,W	S	Well 286. <u>4/</u>
* 209	do	--	--	103	5 1/2	--	Kt	--	69.4 80.1	July 23, 1940 Aug. 17, 1967	C,W	S	Well 282. <u>4/</u>
210	C.B. Brooks	--	1964	101+	--	--	Kea?,Kt	--	49.2	Dec. 19, 1967	S,E	D,S	
211	do	--	1959	63	7	60	Qal?,Kt	--	16.2	do	S,E	D	
212	do	Victor Lindley	1957	--	--	10	Kea	2,265 <u>2/</u>	55.0	Dec. 19, 1967	S,E	Irr	
213	Mrs. Reva McMillian	M.S. McMillian	1927	143	6	--	Kea	2,276	105.7	Aug. 16, 1968	C,W	D,S	
* 302	do	do	1966	269	6	--	Kea,Kt	2,360	213.8	do	C,W	S	
* 401	Marie Noelke Baker	M.B. Noelke, Jr.	1961	200+	6	10	Kt	--	--	--	C,W	S	
* 402	Sinclair Oil and Gas Company	--	1967	265	--	--	Kt,Trs	2,272	--	--	S,E	Ind	Water used in secondary recovery operations.
403	H.M. Phillips	--	--	97+	6	--	Kea	--	80.6	Oct. 9, 1967	C,W	S	
404	Atlantic-Richfield Refining Company	--	1962	--	--	5	Kt	2,268	108	May 1963	N	N	Formerly supplied water for secondary recovery operations.
405	do	--	1962	--	7	201	Kt	2,268	92.9	Oct. 18, 1967	S,E	Ind	
406	do	--	1962	164	5	164	Kt	2,268	--	--	S,E	Ind	
* 407	do	--	1962	300	5	300	Kt,Trs	2,271	--	--	S,E	Ind	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
43-50-408	Sinclair Oil and Gas Company	--	1967	233	5	150	Kt,Trs	2,275	82.1	Aug. 14, 1968	N	N	Reported yield 50 gpm. Drilled for water supply for secondary recovery operations but did not supply enough water.
409	do	--	1967	263	--	--	Kt,Trs	2,289	60.8	do	N	N	Do.
* 501	H.M. Phillips	--	1929	110	5	--	Kea,Kt	2,293	93.6 81.2	June 27, 1940 Oct. 9, 1967	C,W	D,S	Well 156. <u>4/</u>
* 502	do	--	--	168	--	--	Kea?,Kt	--	106.9	do	S,E	D,S	
504	do	--	1938	236	6	--	Kea,Kt	2,348	166.8	do	S,E	S	
* 505	do	--	1929	359	6	--	Kea,Kt	--	249.6	do	S,E	S	
506	do	--	--	201	7	--	Kea,Kt	--	181.3	do	N	N	Formerly supplied water for oil well drilling operations.
* 601	Myrtle, May, and Lucy Williams	Elton Davis	1960	260	--	--	Kea	2,387	81.9 209.5 206.1	June 27, 1940 July 20, 1961 Aug. 12, 1968	C,W	S	Well 155. <u>4/</u>
* 602	Mrs. R.S. Williams	Hayden Ellis	1947	250	6	10	Kea,Kt	2,265	96.3	Sept. 1, 1967	C,W	S	
* 701	Marie Noelke Baker	M.B. Noelke, Jr.	1917	335	6	10?	Kea,Kt	--	--	--	C,W	S	
* 801	H.M. Phillips	--	--	333	5	--	Kea,Kt	2,485	253.4	Oct. 9, 1967	C,W	S	
* 901	Mrs. Lillian S. Winterbotham	Charles Schriner	--	320	5	12	Kea,Kt	2,253	79.4	Sept. 5, 1967	C,W	S	
* 51-102	do	do	--	112	6	--	Kea,Kt	2,272	65.2	Sept. 1, 1967	C,W	S	
103	C.B. Brooks	--	1941	192+	6	--	Kea?,Kt	2,351	165.9	Dec. 19, 1967	C,W	S	
401	Mrs. Lillian S. Winterbotham	Charles Schriner	1930's	51	--	--	Kt	2,206	27.1 39.3 41.9	Aug. 12, 1940 July 12, 1961 Sept. 1, 1967	C,W	S	Well 151. <u>4/</u>
402	do	do	1965	191	--	--	Kt	--	102.5	Sept. 5, 1967	C,W	S	
* 403	do	do	--	Spring	--	--	Kea	--	--	--	Flows	D	Known as "Dove Spring". Well 150. <u>4/</u>
* 404	do	do	1930	235	--	--	Kt	--	--	--	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 43-51-501	Hubert Jones	--	--	33	48	33	Qa1	2,168	29.9	Aug. 28, 1967	C,W	D,S	
* 701	Mrs. R.S. Williams	Hayden Ellis	1952	335	5	335	Kea,Kt	2,366	210.6	Sept. 1, 1967	C,W	S	
* 702	do	do	--	259	7	--	Kea,Kt	--	180.5	do	C,W	S	
703	do	do	1963	220	10	20	Kea,Kt	--	157.0	do	C,W	D,S	
704	Mrs. Lillian S. Winterbotham	Charles Schriner	1930	320	--	--	Kea,Kt	2,335	258.9	Sept. 5, 1967	C,W	S	
* 801	do	do	1965	365	7	10	Kea,Kt	--	266.0	Sept. 6, 1967	C,W	S	
57-102	H.M. Noelke	Edwin S. Mayer, Jr.	--	195	--	--	Kea	2,446	183.4	July 26, 1968	C,W	S	
* 103	Mrs. Emma Gibson	do	--	175	--	--	Kea	2,400	143.7	do	C,W	S	
* 104	do	do	--	175+	6	--	Kea	--	--	--	C,W	S	
* 106	M.B. Noelke, Sr.	M.B. Noelke, Jr.	1925	185	6	10	Kea,Kt	2,403	149.8 148.2	July 2, 1940 Oct. 20, 1966	C,W	S	Well 176. 4/
301	Marie Noelke Baker	do	--	250	6	10	Kea,Kt	--	--	--	C,W	S	
58-102	do	do	1900	400	6	10?	Kea,Kt	--	--	--	C,W	S	
201	Boyce E. Tankersley	--	1939	260	5	15	Kea,Kt	2,392	210.3	Aug. 17, 1967	C,W	S	
* 202	do	--	1937	--	--	--	Kea,Kt	--	--	--	C,W	S	
203	H.M. Phillips	--	--	--	6	--	Kea,Kt	2,454	220.2	Oct. 9, 1967	C,W	S	
301	Reginald Atkinson	--	1951	135	12	10	Kea	--	--	--	T,E	Irr	Reported yield 300 gpm.
* 302	do	--	1951	145	12	11	Kea	2,274 2/	85.2 86.8	July 12, 1961 July 21, 1967	T,E	Irr	
* 303	Myrtle, May, and Lucy Williams	David Wilson	1949	135	10	15	Kea	--	105.5	Aug. 28, 1967	S,E	D,S	Reported yield 30 gpm.
* 304	Reginald Atkinson	--	--	140	5	140	Kea	2,269	103.5	July 21, 1967	S,E	D	
* 305	do	--	1900	150	5	120	Kea	--	94.8	June 27, 1940	C,W	S	Well 179. 4/
306	do	--	--	200+	5	--	Kea	--	111.3	July 21, 1967	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
43-58-307	Myrtle, May, and Lucy Williams	David Wilson	1967	299	9	--	Kea	--	98.9	Aug. 28, 1967	N	N	Formerly supplied water for oil well drilling operations.
* 308	do	do	1904	150	6	--	Kea	2,298	66.9 107.6	June 27, 1940 Aug. 27, 1967	C,W	D,S	Well 180. <u>4</u>
309	Boyce E. Tankersley	do	--	--	--	--	Kea	--	--	--	C,W	S	
* 310	do	--	1920	325	5	32	Kea	--	96.4	June 27, 1940	C,W	S	Well recently deepened from 125 feet to approximately 325 feet. Well 181. <u>4</u>
* 59-102	Mrs. R.S. Williams	Haydon Ellis	1928	400	12	250	Kea,Kt	2,332	169.7	Sept. 1, 1967	C,W	S	
* 103	Myrtle, May, and Lucy Williams	David Wilson	--	240	5	--	Kea	--	131.4	Aug. 28, 1967	C,W	S	
* 104	Mrs. R.S. Williams	Hayden Ellis	1953	220	6	12	Kea	2,342	172.9	Sept. 1, 1967	C,W	S	
* 105	Myrtle, May, and Lucy Williams	David Wilson	1950	445	--	--	Kea,Kt	2,426	262.9	Aug. 24, 1965	C,W	S	
201	Mrs. R.S. Williams	Hayden Ellis	1932	270	--	--	Kea	2,437	244.8	Sept. 1, 1967	C,W	S	
202	Mrs. Lillian S. Winterbotham	Charles Schriener	1964	285+	--	--	Kea	2,551	285.5	Sept. 6, 1967	C,W	S	
44-31-701	Calvin H. Sugg	J.R. Wales	1962	78	--	--	Kea,Kt	2,433	39.8	Sept. 26, 1967	C,W	S	
* 901	do	do	1962	126	6	126	Kea,Kt	2,409	72.0	Sept. 25, 1967	C,W	S	
902	do	do	1940's	62	--	--	Kea,Kt	2,355	27.5	do	C,W	S	
32-703	Ela C. Sugg	R.B. Wales	1957	172	6	--	Kea,Kt?	2,498	140.4	Sept. 26, 1967	C,W	S	
803	do	do	--	100+	6	--	Kea	--	94.0	Sept. 22, 1967	C,W	S	
804	do	do	1927	94+	6	--	Kea	--	--	--	C,W	S	
901	do	do	1958	232	5	232	Kea	2,569	194.7	Sept. 22, 1967	C,W	S	
* 38-303	Calvin H. Sugg	J.R. Wales	1940's	108	--	--	Qal,Kt	--	39.4	Sept. 26, 1967	C,W	S	
902	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	235	--	--	Kt	--	--	--	C,W	S	
* 39-101	Calvin H. Sugg	J.R. Wales	1960	139	5	--	Kea,Kt	2,423	82.3	Sept. 26, 1967	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR - ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
44-39-201	Calvin H. Sugg	J.R. Wales	1930's	93	5	--	Kea,Kt	2,383	73.9	Sept. 25, 1967	C,W	S	
202	do	do	--	112+	--	--	Kea,Kt	2,435	105.2	Sept. 20, 1967	C,W	S	
* 203	do	do	1961	291	6	291	Kea	2,536	170.9	do	C,W	S	
204	do	do	--	142	--	--	Kea,Kt	2,452	108.9	Sept. 25, 1967	C,W	S	
303	do	do	1962	55	6	55	Kea	2,324 <u>1/</u>	29.2	do	C,W	S	
304	do	do	1962	177	5	177	Kea	2,385± <u>1/</u>	77.0	do	C,W	S	
305	do	do	1962	207	6	207	Kea,Kt	--	128.9	do	C,W	S	
* 401	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	--	--	--	Kt	--	--	--	C,W	S	
* 402	Calvin H. Sugg	J.R. Wales	--	76	--	--	Kea,Kt	2,375 <u>1/</u>	64.7	Sept. 25, 1967	C,W	S	
501	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	--	--	--	Kt	--	--	--	C,W	S	
502	Calvin H. Sugg	J.R. Wales	--	97	6	--	Kea,Kt	2,413 <u>1/</u>	76.9	Sept. 25, 1967	C,W	S	
* 601	do	do	1965	93	6	93	Kt	2,298 <u>1/</u>	32.3	Sept. 20, 1967	C,W	S	
602	do	do	1943	123	--	--	Kea,Kt	2,382 <u>1/</u>	80.4	do	C,W	S	
* 701	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	95	--	--	Kt	--	79.5 85.1	Oct. 17, 1961 Mar. 22, 1966	S,E	D,S	
801	do	do	--	124	--	--	Kea,Kt	2,330 <u>1/</u>	47.4	Oct. 19, 1961	C,W	S	
802	do	do	--	--	--	--	Kea,Kt	--	131.1	Mar. 22, 1966	C,W	S	
* 902	do	do	--	143	--	--	Kea,Kt	2,345 <u>3/</u>	105.6	do	C,W	S	
40-101	Raymond Clark	--	1943	105	5	10	Kea	2,406	79.1	Oct. 3, 1966	C,W	S	
* 201	Ela C. Sugg	R.B. Wales	--	162	6	--	Kea,Kt	--	121.6	Sept. 22, 1967	C,W	S	
202	do	do	1960	110	5	99	Kea,Kt	2,425	73.2	do	C,W	S	
* 301	A.A. Sugg, Jr., et al.	R.C. Leffel	1952	152	6	--	Kea,Kt	--	117.7	July 14, 1967	C,W	S	
302	Ela C. Sugg	R.B. Wales	--	78	--	--	Kea	2,393 <u>1/</u>	33.5	Sept. 22, 1967	C,W	S	
401	Raymond Clark	--	1945	210	5	10	Kea,Kt	2,443	179.3 171.5	July 21, 1961 Oct. 3, 1966	C,W C,W	S S	
* 402	do	--	1945	125	5	10	Kt	2,325	--	--	C,W	D,S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER-BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
44-60-403	Raymond Clark	--	--	--	8	102	Kt?	2,275 $\frac{1}{2}$	219.2	Oct. 3, 1966	N	N	Abandoned irrigation well.
404	S.S. Evans	--	1904	28	6	28	Qal,Kt	2,268 $\frac{1}{2}$	20.7	1940	C,W	S	
501	Ela C. Sugg	R.B. Wales	1963	82	6	82	Kea,Kt	--	27.8	Sept. 19, 1967	C,W	D,S	
502	do	do	1963	161	5	161	Kt	2,296	68.9	Aug. 15, 1968	C,W	S	Reported yield 30 gpm.
503	do	do	--	84	5	--	Kea,Kt	2,334 $\frac{1}{2}$	25.1	Sept. 19, 1967	C,W	S	
* 504	do	do	1964	159	5 1/2	159	Kea,Kt	2,335 $\frac{1}{2}$	28.0	do	S,E	D	
505	do	do	1927	147	5	--	Kt	2,338 $\frac{1}{2}$	130.5	Sept. 22, 1967	C,W	S	
* 601	A.A. Sugg, Jr., et al.	R.C. Liffel	1952	152	6	--	Kt	--	105.4	July 14, 1967	C,W	S	
602	Ela C. Sugg	R.B. Wales	1950	137	--	--	Kea?,Kt	2,345 $\frac{1}{2}$	97.8	Sept. 22, 1967	C,W	S	
603	Terrel Sheen, et al.	Bill Sheen	--	123	6	--	Kt	--	--	--	C,W	S	
* 701	S.S. Evans	--	1919	125	5	125	Kea,Kt	--	69.3	July 29, 1940	C,W	D,S	Reported yield 18 gpm. Well 6. $\frac{4}{4}$
702	do	--	1956	100	6	100	Kea,Kt	--	--	--	C,W	S	Reported yield 5 gpm.
703	do	--	1957	97	6	97	Kt	--	--	--	C,W	S	Reported yield 50 gpm.
* 802	Ela C. Sugg	R.B. Wales	1963	109	5	110	Kt	2,292	68.8	Sept. 20, 1967	C,W	S	
* 803	J.R. Scott	do	1959	74	6	100	Kt	2,328	30.6	do	C,W	S	
* 901	John Sheen	--	1951	121	10	42 42-121	Qal,Kt	--	20.4	Aug. 14, 1967	T,G	Irr	Reported yield 420 gpm.
902	Terrel Sheen, et al.	Bill Sheen	1965	130	10-12	120	Kt	2,238 $\frac{1}{2}$	98	Jan. 1965	T,G	Irr	Reported yield 700 gpm.
903	John Sheen	--	1964	150	5	150	Kt	2,250 $\frac{1}{2}$	65.0	Aug. 14, 1967	C,W	S	
* 904	do	--	--	34	6	34	Qal	--	29.6	do	C,W	S	
905	do	--	1920	28	--	--	Qal	2,226 $\frac{1}{2}$	21.2 23.3	July 29, 1940 Aug. 14, 1967	N	N	Well abandoned. Well 11. $\frac{4}{4}$
906	do	--	1948	43	5 1/2	40	Qal	--	--	--	J,E	D	
907	do	--	1957	67	5 1/2	67	Qal	--	51 50.9	1957 Aug. 14, 1967	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
44-46-301	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	160	--	--	Kea,Kt	--	128.8	Mar. 22, 1966	C,W	S	
302	do	do	--	--	--	--	Kea,Kt	--	110.3	do	S,E	S	
601	do	do	--	251	--	--	Kea,Kt	2,529 <u>3/</u>	203.3	Mar. 21, 1966	S,E	S	
602	do	do	--	180	--	--	Kea,Kt	--	--	--	C,W	S	
* 47-101	do	do	--	160	--	--	Kea,Kt	2,420 <u>1/</u>	104.1	Mar. 22, 1966	C,W	S	
102	do	do	--	140	--	--	Kea,Kt	2,405 <u>3/</u>	81.5	do	C,W	S	
201	do	do	--	82	--	--	Kea,Kt	--	--	--	C,W	S	
* 301	do	do	1920	100	--	--	Kea,Kt?	2,384 <u>1/</u>	--	--	C,W	S	Well 23. <u>4/</u>
* 302	S.T. Brister Estate	C.L. Johnson	1890	140	6	140	Kea,Kt	2,385 <u>1/</u>	59.0 59.3	July 8, 1940 Oct. 11, 1966	C,W	S	Reported yield 30 gpm. Well 25. <u>4/</u>
303	George Tucker	--	1959	170	--	--	Kea,Kt	--	103.3	Oct. 19, 1966	C,W	S	
* 304	Ela C. Sugg	Emerson Cox	1935	170	6	10	Kea,Kt	--	77.9 82.2	July 8, 1940 Oct. 19, 1966	C,W	S	Well 24. <u>4/</u>
* 403	Texas Scottish Rite Hospital	Lewis L. Farr, III	1962	230	5	230	Kea,Kt	--	--	--	S,E	D,S	
404	do	do	--	224	--	--	Kea,Kt	--	--	--	C,W	S	
* 501	Ela C. Sugg	C.L. Johnson	--	280	6	100	Kea,Kt	2,420 <u>1/</u>	106.3	May 27, 1940	C,W	D,S	
* 502	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	90	--	--	Kea	2,364 <u>1/</u>	84.9	Mar. 22, 1966	C,W	S	
503	Ela C. Sugg	C.L. Johnson	--	225	6	20	Kea,Kt	--	--	--	C,W	S	
* 603	J.R. Scott	do	1959	350	6	20	Kea,Kt	--	164.4	July 20, 1966	C,W	S	
604	Ela C. Sugg	do	--	280	6	20	Kea,Kt	2,504 <u>1/</u>	205.8	Oct. 11, 1966	C,W	S	
605	do	do	--	309	6	20	Kea,Kt	--	295 127.7	Oct. 11, 1940 1966	C,W	S	Well 29. <u>4/</u>
* 701	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	208	--	--	Kea,Kt	2,463 <u>1/</u>	148.7 156.6	Oct. 19, 1961 Mar. 22, 1966	C,W	S	Well 27. <u>4/</u>
704	do	do	--	208	--	--	Kea,Kt	2,463 <u>1/</u>	172.9	do	C,W	S	Well 28. <u>4/</u>
705	do	do	--	260	--	--	Kea,Kt	2,512 <u>1/</u>	175.5	Mar. 21, 1966	C,W	S	
* 706	do	do	1928	265	--	--	Kea,Kt	--	--	--	S,E	D,S	Well 26. <u>4/</u>
803	Ela C. Sugg	C.L. Johnson	1938	275	6	20	Kea	--	180.1	Oct. 11, 1966	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 44-47-804	Ela C. Sugg	C.L. Johnson	--	200	6	20	Kea	2,486 <u>1</u> / ₂	178.7 180.0	July 5, 1940 Oct. 11, 1966	C,W	D,S	Well 31. <u>4</u> / ₂
* 901	Mrs. Bertha B. Becton	--	1934	300	--	--	Kea	--	72.3	May 27, 1940	C,E	D,S	Well 37. <u>4</u> / ₂
903	do	--	1904	300	--	--	Kea	2,513 <u>1</u> / ₂	74.4	do	C,W	S	Well 36. <u>4</u> / ₂
* 904	J.R. Scott	Bill Scott	1923	309	6	10	Kea	--	71.0	do	C,W	S	Well 32. <u>4</u> / ₂
* 905	do	do	1933	350	6	10	Kea,Kt	--	--	--	S,E	D,S	
906	do	do	--	--	--	--	--	2,560 <u>1</u> / ₂	277.0	Oct. 12, 1960	N	N	Abandoned well.
907	do	do	1906	352	8	18	Kea,Kt	2,558 <u>1</u> / ₂	260 273.3	Oct. 12, 1942 1966	C,W	S	
48-101	Emerson Cox	--	1959	170	4	170	Kea	2,487 <u>1</u> / ₂	169.0	Oct. 19, 1966	C,W	S	
102	Ela C. Sugg	Emerson Cox	--	170	--	120	Kea	--	--	--	C,W	S	
103	Emerson Cox	--	--	170	6	3	Kea	--	145.9	Oct. 19, 1966	C,W	S	
104	Ela C. Sugg	Emerson Cox	1959	170	4	170	Kea	--	155.0	do	C,W	S	
201	do	G.C. Magruder, Jr.	1942	260+	6	260	Kea,Kt	2,531	258.0	Oct. 21, 1966	C,W	S	
* 202	do	do	--	--	6	5	Kea	--	135.5	do	C,W	S	
* 301	do	do	1928	160	5	160	Kea,Kt	2,405 <u>1</u> / ₂	47.2	July 29, 1940	C,W	S	Well 14. <u>4</u> / ₂
302	A.A. Sugg, Jr., et al.	Newman T. Busby	--	200	6	8	Kea,Kt	--	--	--	C,W	S	
303	Ann S. Fisher	do	1947	105	6	8	Kea,Kt	--	--	--	C,W	S	
* 401	Emerson Cox	--	--	160+	6	10	Kea	--	61.6	July 8, 1940	C,W	D,S	Well 22. <u>4</u> / ₂
* 402	Ela C. Sugg	G.C. Magruder, Jr.	--	330	6	5	Kea	2,552 <u>2</u> / ₂	300.3 258.6	July 22, 1961 Oct. 25, 1966	C,W	S	Reported yield 4 to 5 gpm.
403	Emerson Cox	--	1903	250	--	--	Kea	2,458 <u>1</u> / ₂	143.6	Aug. 7, 1940	N	N	Well 21. <u>4</u> / ₂
501	Ela C. Sugg	G.C. Magruder, Jr.	--	220	6	5	Kea	--	--	--	C,W	S	
502	do	do	1927	366	6	366	Kea	--	334.8	Oct. 21, 1966	C,W	D,S	
* 503	do	do	1960	362	6	362	Kea,Kt	2,580	309.6	do	S,E	D,S	
506	J.R. Scott	Bill Scott	1963	308	7	8	Kea,Kt	--	257.8	Oct. 11, 1966	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR- ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 44-48-601	Newman T. Busby	--	1942	242	6 5	8 242	Kea,Kt	--	--	--	C,W	D,S	
602	A.A. Sugg, Jr., et al.	Newman T. Busby	1958	192	6	192	Kea,Kt	--	149.5	Oct. 25, 1966	C,W	S	
* 603	Newman T. Busby	--	--	102	8	--	Kea,Kt	--	79.7	July 29, 1940	C,W	S	Well 16. <u>4</u>
604	do	--	--	200+	--	--	Kea,Kt	2,517 <u>1</u>	202.2	Oct. 25, 1960	N	N	Abandoned well.
* 701	J.R. Scott	Bill Scott	1926	418	6	10	Kea,Kt	2,624	337.2 345.2	Aug. 7, 1940 Oct. 13, 1966	C,W	S	Well 34. <u>4</u>
703	do	do	1954	400	5	30	Kea,Kt?	--	377.6	do	N	N	Abandoned well. Oil on top of water.
* 704	do	do	1920	410	6	10	Kea,Kt	2,587	267.8 319.8	Aug. 7, 1940 Oct. 13, 1966	C,W	S	Well 35. <u>4</u>
802	do	do	1927	306	6	10	Kea,Kt	--	145.9	Aug. 7, 1940	C,W	S	Well 19. <u>4</u>
* 803	do	do	--	360	6	10	Kea,Kt	2,462	194.0	Oct. 12, 1966	C,W	S	
901	do	do	1937	225+	6	10	Kea,Kt	2,450	146.5 182.5	Aug. 7, 1940 Oct. 12, 1966	C,W	S	Well 18. <u>4</u>
* 902	A.A. Sugg, Jr., et al.	R.C. Leffel	1949	191	6	--	Kea,Kt	--	--	--	C,W	S	
54-302	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	380	--	--	Kea,Kt	--	--	--	C,W	S	
* 601	Mrs. Elta Murphy	E.H. Linthicum	--	400+	5	--	Kea,Kt	--	--	--	C,W	S	
602	Texas Scottish Rite Hospital	Lewis L. Farr, III	--	584	8	--	Kea,Kt	2,695 <u>2</u>	368.0 368.0	Oct. 17, 1961 Mar. 21, 1966	N	N	Formerly supplied water for oil well drilling operations.
* 55-101	do	do	--	518	--	--	Kea,Kt	2,621 <u>3</u>	350.6	do	C,W	S	
* 201	Ela C. Sugg	G.L. Johnson	1920	240	6	20	Kea	--	163.1	July 5, 1940	C,W	S	Well 39. <u>4</u>
* 202	do	do	1934	260	6	20	Kea	--	--	--	C,W	S	
203	do	do	1959	270	6	20	Kea	2,559	250.2	Oct. 11, 1966	C,W	S	
204	do	do	1939	330	6	50	Kea	--	277.2	do	C,W	S	
302	do	do	1959	280	6	20	Kea	--	201.4	do	C,W	S	
303	Mrs. Bertha B. Becton	--	1933	350	--	--	Kea,Kt?	--	70	1940	C,W	S	Well 38. <u>4</u>
304	Ela C. Sugg	Bill Scott	1940	347	6	10	Kea	--	--	--	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 44-55-305	J.R. Scott	Bill Scott	--	352	6	10	Kea	--	312.0	Oct. 12, 1966	C,W	S	
401	Mrs. Elta Murphy	E.H. Linthicum	1963	440	6	--	Kea	2,685	363.3	Aug. 24, 1967	S,E	S	
402	do	do	1963	420	6	35	Kea	--	--	--	S,E	S	
* 501	do	do	1954	240	12	--	Kea	--	--	--	T,E	Irr	Reported yield 900 gpm.
* 502	do	do	1900	270	5	--	Kea	--	165 208.7	Aug. 24, 1940 1967	N	N	Abandoned well. Well 40. <u>4</u>
504	do	do	1966	240	7	240	Kea	2,523	224.5	Aug. 23, 1967	S,E	D,S	
* 505	do	do	--	286	6	--	Kea	--	274.7	do	C,W	S	
* 506	do	do	1952	--	6	--	Kea	--	--	--	C,W	S	
508	do	do	--	400+	--	--	Kea	--	--	--	C,W	S	
509	do	do	1957	400	7	--	Kea	--	--	--	C,W	N	Abandoned well.
* 602	G.E. Ashe Estate, et al.	F.J. Ridley	--	425+	6	10	Kea,Kt	--	321.7	Sept. 28, 1966	C,W	S	
703	University of Texas	Mrs. A.C. Hinde	1934	430	8	5	Kea	--	340	1940	C,W	S	Well 50. <u>4</u>
* 704	Sol Mayer Estate	Edwin S. Mayer, Jr.	--	395	--	--	Kea,Kt	2,551	242.1	July 29, 1968	C,W	S	
* 705	do	do	--	450	4-6	--	Kea,Kt	2,616	299.5	July 9, 1968	C,W	S	Reported yield 9 gpm.
* 706	Mrs. A.C. Hinde	--	1960	400	5	--	Kea	--	300 +	1960	S,E	D,S	
* 707	do	--	1926	330	8	5	Kea	2,640	325 311.9	Oct. 26, 1940 1966	C,W	S	Well 53. <u>4</u>
802	Sol Mayer Estate	Edwin S. Mayer, Jr.	--	--	--	--	Kea,Kt	2,629	--	--	C,W	S	
* 804	N.J. Hughes	--	1927	360	6	--	Kea,Kt	2,625	328.4 306.0	Aug. 20, 1947 Aug. 12, 1968	S,E	P, Ind	Well 47. <u>4</u>
* 805	Sol Mayer Estate	Edwin S. Mayer, Jr.	--	130	6	--	Kea	2,639	45.5	July 29, 1967	C,W	S	
* 806	J.B. Westfall	--	1915	303	--	--	Kea	2,599	270.8	Aug. 15, 1968	C,W	D	
* 807	Sol Mayer Estate	Edwin S. Mayer, Jr.	--	409	--	--	Kea,Kt	2,429	297.0	July 26, 1968	S,E	D,S	
* 808	do	do	--	--	--	--	Kea,Kt	2,652	--	--	C,W	S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 44-55-809	N.J. Hughes	--	1926	425	8	120	Kea,Kt	--	--	--	T,E	P	Well 48. <u>4</u>
* 810	Texas Highway Department	--	1940	398	8	398	Kea,Kt	2,573	263.3	July 5, 1940	S,E	Ind	Well 46. <u>4</u>
* 903	Sol Mayer Estate	Edwin S. Mayer, Jr.	1934	425	5	--	Kea,Kt	2,585	300 + 304.1	May 24, 1940 July 29, 1968	C,W	S	Well 44. <u>4</u>
* 904	E.H. Linthicum	--	1945	160	7	--	Kea	2,526	37.4	Aug. 24, 1967	C,W	S	
* 905	do	--	--	400	8	100	Kea	--	117.9	July 5, 1940	N	N	Well 45. <u>4</u>
906	do	--	1940	400	--	--	Kea	--	--	--	S,E	N	Reported yield 60 gpm. Unused irrigation well.
56-101	Scott Sugg	Bill Scott	1935	374	--	--	Kea	--	--	--	C,W	S	
201	J.R. Scott	do	--	400	6	10	Kea	2,526	257.8	Oct. 12, 1966	C,W	S	
202	Ela C. Sugg	do	--	352	6	10	Kea	--	--	--	C,W	S	
203	J.R. Scott	do	1934	391	6	10	Kea	--	290 316.3	Oct. 12, 1940 1966	C,W	S	Well 69. <u>4</u>
* 301	Ela C. Sugg	do	1944	480	6	10	Kea,Kt	--	421.9	do	C,W	S	
302	A.A. Sugg, Jr., et al.	do	--	350+	6	10	Kea,Kt	--	--	--	C,W	S	
402	G.E. Ashe Estate, et al.	F.J. Ridley	1935	525-550	6	10	Kea,Kt	2,718	422.5	Sept. 28, 1966	C,W	S	
403	do	do	1947	525-550	6	10	Kea,Kt	2,719	418.9	do	C,W	S	
* 404	do	do	1943	550	6	10	Kea,Kt	--	394.4	do	C,W	S	
405	do	do	1943	530	6	10	Kea,Kt	--	--	--	C,W	S	
501	do	do	--	420	6	10	Kea,Kt	--	--	--	C,W	S	
502	do	do	1944	440	6	10	Kea,Kt	2,655	376.2	Sept. 28, 1966	C,W	S	
503	H.M. Noelke	--	1941	50	--	--	Kea	--	39.9	Oct. 13, 1966	C,W	S	
504	do	--	1952	502	5 1/2	5	Kea,Kt	--	--	--	C,W	S	
601	do	--	1926	60?	--	--	Kea	--	20.3	Oct. 13, 1966	N	N	Abandoned well.
* 602	do	--	1900	26	--	--	Kea	2,541	22.1 9.6	July 6, 1940 Oct. 13, 1966	C,W	S	Well 70. <u>4</u>
* 603	do	--	1934	330	--	--	Kea	--	148	1940	C,W	D,S	Well 71. <u>4</u>

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COMPLETED	DEPTH OF WELL (FT)	CASING		WATER BEARING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAMETER (IN)	DEPTH (FT)			BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			
* 44-56-701	G.E. Ashe Estate et al.	F.J. Ridley	1924	340	6	200	Kea,Kt	2,599	299 + 310.8	May 24, 1940 Sept. 28, 1966	C,W	D,S	Well 66. <u>4</u> / _j
702	do	do	1920	150	6	10	Kea,Kt	--	17.7	do	C,W	D,S	
703	do	do	--	420	6	10	Kea,Kt	--	--	--	C,W	S	
801	do	do	1945	400+	6	10	Kea,Kt	2,545	306.2	Sept. 28, 1966	C,W	S	
* 901	H.M. Noelke	--	1917	400	5 1/2	262-400	Kea	--	163.5	July 3, 1940	C,W	D,S	Well deepened from 300 to 400 feet in 1956. Well 65. <u>4</u> / _j
* 902	do	--	1900	30	--	--	Kea	--	23.0 26.5	do Oct. 13, 1966	C,W	D,S	Well 64. <u>4</u> / _j
903	Murray Petroleum	H.M. Noelke	1959	448	7	448	Kea	2,579	316.4	do	N	N	Drilled as oil test. Total depth 1,574 feet and plugged back to 448 feet. Casing perforated 390-355 feet. Formerly supplied water for oil well drilling operations.
62-301	University of Texas	F.M. Elkins	1951	60	6	8	Kea	2,563	34.0	Mar. 16, 1966	C,W	D,S	
* 302	do	do	1959	400	6	8	Kea	--	362.8	do	C,W	S	
303	do	do	1950	412	6	8	Kea	2,591	333.5	do	C,W	S	
* 63-102	do	do	--	160	6	10	Kea	2,613	66.6 130.7	July 2, 1940 Mar. 16, 1966	C,W	S	Well 51. <u>4</u> / _j
103	do	do	1950	400	6 51	10 275-400	Kea	--	387.2	do	C,W	S	
* 204	Mrs. A.C. Hinde	--	1934	461	--	--	Kea	--	300 334.1	1940 Oct. 26, 1966	C,W	S	Well 49. <u>4</u> / _j
206	University of Texas	F.M. Elkins	1930	400	6	8	Kea	--	304.3	Mar. 16, 1966	C,W	S	
207	do	do	1945	450	6	8	Kea	--	361.4	do	C,W	S	
208	E.H. Linthicum	--	1955	360	5	--	Kea	2,594	263.7	Aug. 24, 1967	C,W	S	
* 303	University of Texas	E.H. Linthicum	1940	525	--	--	Kea	--	390	1940	C,W	S	Well 59. <u>4</u> / _j
304	E.H. Linthicum	--	1957	--	--	--	Kea	--	--	--	S,E	D,S	

See footnotes at end of table.

Table 1.--Records of Wells and Springs in Irion County--Continued

WELL	OWNER	LESSEE OR TENANT	DATE COM- PLET- ED	DEPTH OF WELL (FT)	CASING		WATER - BEAR - ING UNITS	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	REMARKS
					DIAM- ETER (IN)	DEPTH (FT)			BELOW LAND - SURFACE DATUM (FT)	DATE OF MEASUREMENT			
44-63-305	University of Texas	E.H. Linthicum	1940	525	5	--	Kea	2,577	--	--	C,W	S	
306	do	do	1950's	360	5 1/2	--	Kea	--	--	--	C,W	S	
64-101	E.H. Linthicum	--	1942	370	--	--	Kea	2,530 ^{1/}	253.4	Aug. 24, 1967	C,W	S	
* 102	J.D. Gibson, et al.	Edwin S. Mayer, Jr.	--	255	--	--	Kea	2,493	233.2	July 26, 1968	C,W	S	
201	Mrs. Edna McCown	do	1960's	221	7	--	Kea	2,451	190.0	do	C,W	S	Reported yield 2 to 3 gpm.
* 202	Mrs. Mary Elkins	do	--	229	6	--	Kea	2,469	213.1	do	S,E	D,S	Reported yield 8 to 12 gpm.
* 203	Mrs. Edna McCown	do	--	--	--	--	Kea	2,520	258.7	do	C,W	S	
* 302	Mrs. Grace Warren	do	--	--	6	--	Kea	2,445	190.5	do	C,W	S	

* For chemical analysis of water, see Table 2.

^{1/} Altitude of land surface determined from topographic map.

^{2/} Altitude of land surface determined from surface elevation of nearby oil test.

^{3/} Altitude of land surface determined from oil company seismograph control map.

^{4/} Texas Board of Water Engineers duplicated report, *Irion County Records of Wells and Springs, Drillers' Logs, Water Analyses, and Map Showing Locations of Wells and Springs, 1941.*

Table 2.--Chemical Analyses of Water from Wells and Springs in Irion County

Analyses are grouped in this table by water-bearing unit. The analyses were performed by the Texas State Department of Health except as indicated by footnote. The results are in milligrams per liter except percent sodium, specific conductance, pH, and sodium-adsorption ratio.

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DIS-SOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)
43-33-302	Sue Noelke Houser	108+	Aug. 9, 1968	13	71	26	8	312	14	13	0.4	8.5	307	284	5.5	532	7.5	0.20
41-603	Idabel Van Keuren	221	July 23, 1968	22	71	27	25	295	32	39	.7	10.0	372	289	16.0	635	7.6	.65
802	A.A. Sugg, Jr., et al.	260	July 25, 1968	1	131	25	49	134	245	126	.5	2.0	650	431	19.7	1,032	7.5	.89
903	Idabel Van Keuren	200	July 23, 1968	20	67	32	22	311	38	33	.7	3.5	370	300	13.8	625	7.6	.55
904	A.A. Sugg, Jr., et al.	290	July 25, 1968	15	75	44	25	357	78	37	.9	< .4	451	369	12.9	749	7.8	.57
42-102	do	236	July 22, 1968	21	77	21	19	292	29	31	1.1	5.5	349	279	12.9	588	7.4	.55
3/ 42-820	Claude L. Tankersley	Spring	May 29, 1940	--	75	22	* 8	305	16	16	.4	< 20	296	279	5.9	--	--	.21
820	do	Spring	Aug. 16, 1968	14	80	18	10	296	13	19	.5	15.0	316	276	7.6	497	7.3	.27
49-101	Street Whitley	60	Sept. 27, 1966	18	119	10	20	325	23	32	.4	58.0	440	340	11.5	723	7.1	.48
701	Ela C. Sugg	291	Oct. 13, 1966	19	86	28	53	278	103	65	.9	9.0	500	331	25.8	826	7.8	1.27
902	Marie Noelke Baker	175	Oct. 14, 1966	19	79	18	27	282	44	30	.7	9.0	366	273	17.8	620	7.6	.71
3/ 50-104	Mrs. Ada Morehead	74	July 5, 1940	--	76	18	* 28	281	43	37	--	< 20	340	266	18.1	--	--	.72
104	do	69	Aug. 14, 1968	19	105	21	131	316	51	227	.6	6.5	720	350	44.8	1,250	7.3	3.04
3/ 201	Reginald Atkinson	Spring	May 21, 1940	--	71	21	* 16	238	51	30	--	< 20	314	263	11.7	--	--	.43
4/ 201	do	Spring	Apr. 22, 1947	--	70	21	* 49	296	62	40	--	--	434	261	31.4	664	--	1.32
3/ 202	Boyce E. Tankersley	12	May 24, 1940	--	90	17	* 9	281	41	27	.4	< 20	330	296	6.2	--	--	.23
202	do	11	Aug. 17, 1967	17	89	18	21	307	30	38	.5	7.0	372	298	13.5	639	7.3	.54
3/ 601	Myrtle, May, and Lucy Williams	260	June 27, 1940	--	141	76	* 425	329	627	470	1.5	< 20	1,903	667	58.2	--	--	7.14
601	do	261	Aug. 12, 1968	9	125	71	403	327	590	455	1.9	< .4	1,820	610	59.1	2,700	7.5	7.11
51-403	Mrs. Lillian S. Winterbotham	Spring	Sept. 1, 1967	12	77	16	16	285	21	23	.5	15.0	320	261	11.5	545	7.9	.42
57-103	Mrs. Emma Gibson	175	July 26, 1968	18	80	17	17	303	28	18	.6	< .4	328	267	11.9	550	7.7	.52

Edwards and Associated Limestones

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)	
Edwards and Associated Limestones																			
43-57-104	Mrs. Emma Gibson	175+	July 26, 1968	16	59	36	46	278	98	49	1.1	< 0.4	442	296	25.2	735	7.5	1.16	
4/ 58-302	Reginald Atkinson	145	July 12, 1961	15	68	14	* 15	230	16	24	.5	23.0	288	227	12.0	502	6.9	.40	
302	do	145	July 21, 1967	15	67	17	13	251	18	21	.5	13.5	288	238	10.5	494	7.8	.36	
303	Myrtle, May, and Lucy Williams	135	Aug. 28, 1967	12	72	16	9	278	13	14	.5	12.0	285	248	7.3	490	7.6	.25	
304	Reginald Atkinson	140	July 21, 1967	20	97	17	26	337	29	31	.5	16.0	403	311	15.5	669	7.9	.65	
3/ 305	do	125	June 27, 1940	--	--	--	--	275	16	56	--	< 20	335	--	--	--	--	--	
3/ 308	Myrtle, May, and Lucy Williams	120	do	--	47	20	* 17	220	18	21	--	< 20	239	197	15.6	--	--	.52	
3/ 310	Boyce E. Tankersley	125	do	--	--	--	--	--	14	36	--	< 20	--	--	--	--	--	--	
310	do	325	Aug. 17, 1967	12	69	23	30	279	36	38	.7	8.5	355	267	19.5	612	7.9	.79	
59-103	Myrtle, May, and Lucy Williams	240	Aug. 28, 1967	11	33	25	63	276	43	34	1.0	2.5	349	184	42.5	604	7.8	2.01	
104	Mrs. R.S. Williams	220	Sept. 1, 1967	13	68	18	12	266	15	17	.4	8.5	283	245	9.6	485	7.8	.33	
44-39-203	Calvin H. Sugg	291	Sept. 20, 1967	17	45	28	18	238	24	23	2.3	8.5	283	226	14.7	490	7.3	.52	
47-502	Texas Scottish Rite Hospital	90	Mar. 22, 1966	22	91	13	8	323	12	9	.3	6.0	320	280	5.6	542	7.4	.20	
3/ 804	Ela C. Sugg	200	July 5, 1940	--	86	56	*347	354	391	355	--	< 20	1,409	444	62.9	--	--	7.16	
804	do	200	Oct. 11, 1966	10	74	58	333	353	409	302	2.9	< .4	1,360	426	62.9	2,160	7.7	7.02	
3/ 901	Mrs. Bertha B. Becton	300	May 27, 1940	--	109	65	*351	348	557	310	--	< 20	1,563	540	58.6	--	--	6.57	
901	do	300	Oct. 11, 1966	10	84	66	324	340	455	292	2.7	< .4	1,400	481	59.5	2,180	7.9	6.44	
3/ 904	J.R. Scott	309	May 27, 1940	--	62	32	*132	317	164	100	--	< 20	646	285	50.1	--	--	3.39	
48-202	Ela C. Sugg	--	Oct. 21, 1966	10	64	20	48	307	44	32	1.6	3.0	374	242	30.0	650	7.8	1.33	
3/ 401	Emerson Cox	160	July 8, 1940	--	68	38	*115	323	149	114	--	< 20	643	329	43.4	--	--	2.75	
401	do	160	Oct. 19, 1966	12	74	45	150	345	177	139	2.3	19.0	790	372	46.8	1,330	8.0	3.39	
402	Ela C. Sugg	300	Oct. 25, 1966	9	58	48	156	322	238	103	2.5	< .4	770	345	49.6	1,250	7.9	3.65	
3/ 55-201	do	240	July 5, 1940	--	119	44	*147	317	305	150	--	< 20	929	477	40.1	--	--	2.92	

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)
44-55-201	Ela C. Sugg	240	Oct. 11, 1966	21	117	57	141	285	331	161	1.9	11.0	980	530	36.6	1,500	7.6	2.66
202	do	260	do	17	87	58	98	290	278	94	1.9	< .4	780	456	31.8	1,170	7.3	1.99
305	J.R. Scott	352	Oct. 12, 1966	18	86	42	90	296	180	101	1.1	3.5	670	389	33.4	1,084	7.6	1.98
4/ 501	Mrs. Elta Murphy	240	July 17, 1953	28	115	8	* 35	354	39	39	.4	11.0	464	320	19.1	--	7.5	.85
3/ 502	do	310	July 5, 1940	--	114	88	*361	329	625	360	1.6	< 20	1,712	650	54.8	--	--	6.18
505	do	286	Aug. 23, 1967	6	76	85	331	257	560	310	2.2	< .4	1,500	540	57.2	2,300	7.9	6.20
506	do	--	do	18	107	37	83	294	204	100	1.2	11.0	710	420	30.1	1,120	7.7	1.77
706	Mrs. A.C. Hinde	400	Oct. 26, 1966	18	76	31	54	290	78	72	1.1	7.0	480	318	27.1	825	7.8	1.23
3/ 707	do	330	May 27, 1940	--	79	22	* 32	275	63	49	--	< 20	380	289	19.4	--	--	.82
805	Sol Mayer Estate	130	July 29, 1968	21	89	41	127	270	154	184	2.9	8.5	760	391	41.4	1,220	7.9	2.79
806	J.B. Westfall	303	Aug. 15, 1968	20	72	31	47	295	75	65	1.1	3.5	460	310	24.7	774	7.4	1.24
904	E.H. Linthicum	160	Aug. 24, 1967	11	109	9	12	360	5	22	.5	1.5	348	309	7.6	605	7.5	.29
3/ 905	do	350	July 5, 1940	--	53	29	* 93	305	98	70	1.8	< 20	495	253	44.5	--	--	2.55
3/ 56-602	H.M. Noeike	60	Aug. 6, 1940	--	67	3.4	* 19	226	12	17	.4	< 20	229	182	18.6	--	--	.61
3/ 603	do	250	do	--	60	20	* 7	256	12	17	.4	< 20	242	233	6.0	--	--	.20
603	do	330	Oct. 13, 1966	16	42	26	12	243	18	14	.6	1.5	250	214	10.7	440	8.0	.35
3/ 901	do	300	July 3, 1940	--	73	36	*104	293	206	72	.8	< 20	636	332	40.6	--	--	2.49
901	do	400	Oct. 13, 1966	15	97	34	122	340	206	108	1.2	3.0	750	384	40.8	1,190	7.5	2.70
3/ 902	do	40	July 3, 1940	--	102	6.1	* 20	323	< 10	34	.4	< 20	329	279	13.4	--	--	.52
62-302	University of Texas	400	Mar. 16, 1966	12	69	45	50	296	134	62	2.0	< .4	520	358	23.3	855	7.9	1.15
3/ 63-102	do	100	July 2, 1940	--	80	15	* 79	238	55	119	--	< 20	478	259	39.6	--	--	2.12
102	do	160	Mar. 16, 1966	23	76	33	68	261	104	101	2.0	4.0	540	324	31.2	916	7.7	1.63
204	Mrs. A.C. Hinde	461	May 27, 1940	--	88	44	44	390	88	60	.8	< 20	517	402	19.2	--	--	.96
303	University of Texas	525	Aug. 25, 1967	12	67	40	46	293	106	58	1.6	< .4	475	333	22.9	805	8.0	1.09
64-102	J.D. Gibson, et al.	255	July 26, 1968	17	72	32	36	298	70	53	.9	< .4	428	313	20.2	720	7.5	.89

Edwards and Associated Limestones

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)
Edwards and Associated Limestones																		
44-64-202	Mrs. Mary Elkins	229	July 26, 1968	17	76	28	37	306	71	44	0.8	2.5	427	307	20.8	708	7.5	0.92
203	Mrs. Edna McCown	--	do	10	63	40	46	243	153	47	2.8	< .4	481	324	23.8	790	7.8	1.12
302	Mrs. Grace Warren	--	do	13	63	40	93	292	171	84	1.2	< .4	610	321	38.7	980	7.7	2.26
Edwards and Associated Limestones-Trinity Sand																		
43-25-701	Leasel A. Harris Estate	115	Jan. 26, 1968	16	60	22	19	265	24	22	.8	12.0	306	242	14.8	529	7.7	.54
26-905	Catherine Funk Wall	--	Aug. 15, 1968	15	66	24	10	306	14	11	.7	2.5	294	260	7.8	516	7.5	.28
907	do	--	do	17	100	27	17	360	21	52	.8	4.0	416	363	9.3	775	7.5	.38
33-102	Carol S. White Richey	199	Aug. 9, 1968	13	59	31	19	271	41	30	1.5	2.5	331	275	12.9	570	7.3	.49
301	John S. Cargile	120	Sept. 13, 1967	10	64	22	11	275	22	11	.9	10.0	285	252	8.7	496	7.7	.30
402	A.A. Sugg, Jr., et al.	190+	July 13, 1967	13	64	20	10	250	25	16	.8	13	285	242	8.2	486	7.6	.28
702	do	130	Aug. 7, 1967	18	51	28	8	271	15	10	.7	2.5	266	241	6.4	460	7.5	.21
34-101	John S. Cargile	120	Sept. 12, 1967	10	53	33	11	296	28	11	1.7	< .4	294	269	8.2	530	7.9	.29
41-301	A.A. Sugg, Jr., et al.	140	July 21, 1968	13	56	28	17	287	26	19	.8	2.0	303	256	12.6	520	7.8	.46
3/ 404	do	72	May 27, 1940	--	95	21	* 21	360	29	30	--	< 20	373	323	12.3	--	--	.51
801	do	321	July 17, 1967	11	83	35	91	322	141	104	1.0	< .4	620	350	36.0	1,030	7.5	2.11
901	do	310	July 25, 1968	9	75	46	160	325	247	156	1.6	< .4	860	378	47.9	1,360	8.0	3.57
902	do	217	July 23, 1968	23	62	30	26	292	38	38	.8	1.0	363	280	16.7	618	7.3	.67
42-401	do	73+	Feb. 28, 1968	19	70	23	29	272	29	49	.7	9.0	363	270	19.0	629	7.4	.77
404	do	185	do	13	58	30	5	304	11	9	.4	5.5	281	267	4.1	495	7.7	.14
3/ 703	G.C. Magruder, Jr.	150	July 23, 1940	--	69	29	* 9	268	31	42	--	< 20	312	293	6.2	--	--	.23
703	do	150	Oct. 25, 1966	12	75	33	14	388	4	19	.9	< .4	349	326	8.7	633	7.3	.34
3/ 705	Henry Lindley	190	July 23, 1940	--	96	53	*201	323	293	230	--	< 20	1,032	458	48.9	--	--	4.09
705	do	190	July 25, 1968	20	72	29	47	299	67	63	.6	14.0	460	301	25.4	762	7.6	1.25
4/ 802	Street Whitley	62	Sept. 25, 1941	--	89	30	* 8.5	334	40	28	--	12.0	392	346	5.0	643	--	.20
802	do	80	Aug. 8, 1968	24	111	33	35	415	52	58	.6	13.0	530	413	15.6	901	7.4	.76
805	O.D. Baze	185	July 18, 1968	9	140	67	193	354	449	219	1.3	< .4	1,250	630	40.1	1,860	7.4	3.35

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FILTRATE (F)	NITRATE (NO ₃)	DIS-SOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)
43-42-904	C.B. Brooks	128	Dec. 20, 1967	9	91	54	239	332	331	237	1.4	< 0.4	1,130	448	53.6	1,790	7.7	4.91
43-703	do	266	Dec. 19, 1967	19	74	38	125	281	19	262	1.1	< .4	680	340	44.5	1,240	7.5	3.00
49-103	Street Whitley	400	Sept. 27, 1966	19	72	22	21	285	37	28	.6	3.5	344	273	14.6	584	7.5	.56
104	H.M. Noelke	500	do	10	89	71	252	338	431	254	1.9	< .4	1,280	520	51.5	1,950	7.7	4.82
106	Mrs. J.R. Medlock	240	do	19	75	16	22	261	32	31	.4	4.5	328	255	15.7	1,557	7.7	.60
107	A.A. Sugg, Jr., et al.	430	July 18, 1967	20	61	37	28	312	47	39	1.0	< .4	387	306	16.6	666	7.5	.69
201	T.P. Lowdermilk	433	Sept. 30, 1966	11	64	55	116	322	231	119	1.8	< .4	760	388	39.5	1,210	7.7	2.57
301	H.B. Mayse	308	Aug. 14, 1968	17	60	29	11	287	23	17	.7	1.0	300	267	8.4	512	7.6	.30
302	do	200	do	15	84	48	128	306	231	149	1.4	< .4	810	407	40.5	1,290	7.6	2.75
401	Sam Chaney	406	Oct. 20, 1966	5	115	64	288	294	462	313	1.8	< .4	1,390	550	53.2	2,290	7.4	5.33
502	Leona Wilson	240	Sept. 30, 1966	20	52	31	20	279	22	24	.7	4.5	316	256	14.4	536	7.6	.54
503	do	370	do	10	105	81	300	338	530	311	1.9	< .4	1,510	600	52.3	2,250	7.3	5.35
505	M.B. Noelke, Sr.	308	Oct. 19, 1966	18	100	25	68	283	172	70	.9	7.0	600	353	29.5	889	7.7	1.57
3/ 602	do	187	May 24, 1940	--	128	70	* 334	268	596	350	--	< 20	1,610	608	54.4	--	--	5.89
602	do	255	Oct. 14, 1966	10	98	94	309	349	520	342	1.8	< .4	1,550	630	51.6	2,400	7.3	5.35
703	do	412	Oct. 19, 1966	8	130	85	387	364	620	399	2.3	< .4	1,810	680	55.5	2,800	7.5	6.48
801	Mrs. Elta Murphy	160	Oct. 14, 1966	21	99	12	28	296	52	35	.4	10.0	403	299	16.9	672	7.6	.70
50-101	Mrs. Ada Morehead	147	Aug. 14, 1968	20	72	20	21	276	21	33	.7	13.5	338	263	14.6	562	7.2	.56
302	Mrs. Reva McMillian	269	do	20	64	28	18	298	24	27	.8	2.0	331	274	12.6	554	7.7	.48
3/ 501	H.M. Phillips	110	June 27, 1940	--	--	--	--	287	13	33	--	< 20	305	--	--	--	--	--
502	do	168	Oct. 9, 1967	12	84	54	189	310	292	219	1.6	3.0	1,010	432	48.7	1,650	7.5	3.95
505	do	359	do	16	86	21	23	284	42	45	.6	17.0	391	302	14.1	660	7.5	.57
602	Mrs. R.S. Williams	250	Sept. 1, 1967	12	70	21	11	289	15	16	.5	13.0	300	260	8.6	570	7.8	.32
701	Marie Noelke Baker	335	Oct. 14, 1966	11	43	33	43	267	54	40	.9	< .4	356	245	27.8	641	7.8	1.21
801	H.M. Phillips	333	Oct. 9, 1967	13	56	29	18	273	33	26	.7	4.0	314	259	13.1	545	7.6	.48
901	Mrs. Lillian S. Winterbotham	320	Sept. 5, 1967	16	76	16	15	282	16	23	.7	12.0	314	258	11.2	543	7.8	.40

Edwards and Associated Limestones-Trinity Sand

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)
Edwards and Associated Limestone-Trinity Sand																		
43-51-102	Mrs. Lillian S. Winterbotham	112	Sept. 1, 1967	15	69	26	47	289	14	87	0.6	8.0	408	282	26.6	740	7.9	1.22
701	Mrs. R.S. Williams	335	do	12	51	30	27	278	36	30	1.0	3.5	327	250	19.0	567	7.9	.74
702	do	259	do	15	66	22	25	270	30	39	.6	8.5	339	258	17.5	584	7.7	.68
801	Mrs. Lillian S. Winterbotham	365	Sept. 6, 1967	12	50	27	33	281	36	28	1.0	< .4	325	238	23.0	572	7.6	.92
3/ 57-106	M.B. Noelke, Sr.	185	July 2, 1940	--	80	18	* 24	293	33	38	--	< 20	337	276	15.9	--	--	.63
106	do	185	Oct. 20, 1966	18	71	16	20	259	33	21	.5	6.0	313	242	14.9	531	7.6	.55
58-202	Boyce E. Tankersley	--	Aug. 17, 1967	16	75	17	17	273	29	22	.6	12.0	323	259	12.4	545	7.6	.45
59-102	Mrs. R.S. Williams	400	Sept. 1, 1967	8	94	68	440	307	585	442	2.2	5.0	1,800	510	65.1	2,700	7.8	8.48
105	Myrtle, May, and Lucy Williams	445	Aug. 24, 1965	10	54	38	272	290	323	231	1.7	< .4	1,070	293	66.9	1,720	8.2	6.91
44-31-901	Calvin H. Sugg	126	Sept. 25, 1967	16	52	23	9	248	19	13	1.2	11.0	266	226	8.1	455	7.9	.27
39-101	do	139	Sept. 26, 1967	17	75	30	21	334	37	27	1.0	7.0	379	311	12.9	645	7.5	.52
402	do	76	Sept. 25, 1967	12	65	28	34	303	61	28	1.2	7.0	385	277	21.2	652	7.7	.90
902	Texas Scottish Rite Hospital	143	Mar. 22, 1966	16	70	30	69	322	107	45	1.7	6.0	500	299	33.3	830	7.6	1.72
40-201	Ela C. Sugg	162	Sept. 22, 1967	16	58	29	13	290	31	15	1.7	3.0	310	265	9.6	530	7.4	.34
301	A.A. Sugg, Jr., et al.	152	July 14, 1967	10	55	25	17	254	30	20	1.7	10.0	294	241	13.0	510	7.7	.46
504	Ela C. Sugg	159	Sept. 19, 1967	24	88	26	* 7	378	12	11	.8	4.0	359	326	4.5	605	7.6	.17
3/ 701	S.S. Evans	95	July 29, 1940	--	72	45	12	384	29	26	--	< 20	381	363	6.7	--	--	.27
47-101	Texas Scottish Rite Hospital	160	Mar. 22, 1966	15	61	39	54	251	117	63	2.1	16	490	313	27.2	813	7.8	1.33
3/ 301	do	165	July 8, 1940	--	--	--	--	299	15	41	--	< 20	330	--	--	--	--	--
3/ 302	S.T. Brister Estate	140	do	--	71	20	* 23	281	20	40	--	< 20	312	257	16.1	--	--	.62
3/ 304	Ela C. Sugg	160	do	--	67	29	* 27	287	26	58	.8	< 20	349	288	16.9	--	--	.69
403	Texas Scottish Rite Hospital	230	Mar. 21, 1966	11	59	32	27	237	69	38	2.0	19.0	374	278	43.2	648	7.8	.71
3/ 501	Ela C. Sugg	210	May 10, 1940	--	52	17	* 5	207	11	22	--	< 20	209	201	5.2	--	--	.16

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NI-TRATE (NO ₃)	DIS-SOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)
44-47-501	Ela C. Sugg	280	Oct. 11, 1966	25	73	22	17	305	22	20	0.5	12.0	342	274	11.8	565	7.5	0.44
4/ 603	J.R. Scott	210	July 20, 1960	12	58	36	* 132	302	177	93	2.4	13.0	672	292	50.0	1,100	7.0	3.40
603	do	350	Oct. 11, 1966	11	50	42	123	304	171	89	2.3	11.0	650	298	47.3	1,049	7.6	3.09
3/ 701	Texas Scottish Rite Hospital	250	May 27, 1940	--	72	37	* 173	329	219	150	--	< 20	813	333	53.1	--	--	4.13
3/ 706	do	265	do	--	70	42	* 161	293	217	160	2.1	< 20	796	346	50.2	--	--	3.76
706	do	265	March 22, 1966	10	69	42	238	326	277	224	3.4	.5	1,020	347	59.9	1,695	7.8	6.80
905	J.R. Scott	350	Oct. 12, 1966	11	60	45	191	331	250	149	2.3	< .4	870	335	55.4	1,370	7.8	4.55
3/ 48-301	Ela C. Sugg	150	July 29, 1940	--	467	172	* 363	293	133	1,620	.4	--	2,899	1,876	29.6	--	--	3.65
503	do	362	Oct. 21, 1966	9	65	40	127	323	182	103	2.0	3.5	690	325	45.9	1,145	7.7	3.06
601	Newman T. Busby	242	Oct. 25, 1966	22	54	39	46	257	72	65	1.6	5.0	430	295	25.5	794	8.2	1.17
3/ 603	do	102	July 29, 1940	--	54	24	* 9	268	13	14	--	< 20	246	235	7.7	--	--	.26
3/ 701	J.R. Scott	400	Aug. 7, 1940	--	61	34	* 183	342	221	123	2.0	< 20	792	291	50.5	--	--	3.49
704	do	410	Oct. 13, 1966	11	82	75	227	346	367	229	2.1	< .4	1,160	510	49.0	1,830	7.6	4.35
803	do	360	Oct. 12, 1966	10	93	79	295	332	462	302	2.3	< .4	1,410	560	53.6	2,160	7.5	5.44
902	A.A. Sugg, Jr., et al.	191	July 18, 1967	16	48	37	100	316	121	77	1.5	3.0	560	271	44.5	931	7.6	2.63
54-601	Mrs. Elta Murphy	400	Aug. 24, 1967	9	113	104	342	355	660	329	3.3	< .4	1,740	710	51.1	2,550	7.9	5.58
55-101	Texas Scottish Rite Hospital	518	Mar. 21, 1966	18	102	51	110	296	312	107	2.1	5.0	850	468	33.9	1,300	7.6	2.22
602	G.E. Ashe Estate, et al.	425+	Sept. 28, 1966	10	88	81	288	322	530	261	2.4	< .4	1,420	560	52.9	2,140	7.8	5.33
704	So1 Mayer Estate	395	July 29, 1968	7	98	72	263	320	487	259	2.7	< .4	1,350	540	51.2	2,040	8.0	4.90
705	do	450	do	2	48	52	320	111	484	321	2.7	< .4	1,290	332	67.7	2,030	7.2	.76
3/ 804	N.J. Hughes	510	May 24, 1940	--	75	23	* 44	268	63	66	.8	< 20	404	284	25.3	--	--	1.14
804	do	360	Aug. 12, 1968	10	64	31	55	275	93	51	1.2	< .4	440	286	29.7	755	8.0	1.43
807	So1 Mayer Estate	409	July 29, 1968	12	60	28	104	299	130	84	1.7	5.0	570	266	46.0	938	7.5	2.80
808	do	--	do	10	122	92	332	394	640	311	2.5	< .4	1,700	680	51.3	2,500	7.9	5.52
809	N.J. Hughes	386	July 8, 1960	22	78	31	42	294	72	63	1.0	7.3	461	322	22.0	760	6.9	1.00

Edwards and Associated Limestone-Trinity Sand

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25 °C)	pH	SODIUM ADSORPTION RATIO (SAR)	
<u>Edwards and Associated Limestone-Trinity Sand</u>																			
44-55-809	N.J. Hughes	425	Aug. 12, 1968	22	81	28	51	298	77	76	1.0	5.5	489	318	25.7	808	7.4	1.24	
3/	810	Texas Highway Department	398	June 10, 1940	--	58	40	* 59	299	84	73	< 20	462	310	29.3	--	--	1.46	
	810	do	398	Aug. 15, 1968	18	72	36	299	94	65	1.1	3.5	485	326	24.1	797	7.5	1.15	
3/	903	Sol Mayer Estate	425	May 24, 1940	--	46	44	* 163	256	244	130	< 20	755	297	54.5	--	--	4.12	
	903	do	425	July 29, 1968	10	74	36	153	318	229	131	< .4	790	335	49.9	1,270	8.1	3.64	
	56-301	Ela C. Sugg	480	Oct. 12, 1966	10	77	54	223	339	321	185	< .4	1,040	412	54.0	1,650	7.6	4.77	
	404	G.E. Ashe Estate, et al.	550	Sept. 28, 1966	17	82	56	144	296	247	175	1.0	870	435	41.8	1,400	7.5	2.99	
3/	701	do	340	May 24, 1940	--	80	26	* 65	244	148	64	< 20	504	306	31.5	--	--	1.50	
	701	do	340	Sept. 28, 1966	18	95	37	78	285	169	102	6.0	650	390	30.2	1,021	7.8	1.71	
<u>Trinity Sand</u>																			
43-27-701	J.W. Field	165	Oct. 3, 1967	9	51	36	33	333	36	22	1.1	< .4	352	274	20.9	620	7.7	.84	
	33-202	Mary McManus, et al.	119	Aug. 9, 1968	16	65	19	268	9	9	.5	13.0	270	243	5.1	459	7.5	.17	
	203	do	100+	do	15	74	18	282	14	15	.7	9.0	293	259	6.5	505	7.3	.22	
3/	705	A.A. Sugg, Jr., et al.	40	July 22, 1940	--	64	41	* 56	354	70	54	< 20	475	330	27.0	--	--	1.34	
3/	802	do	35	do	--	80	57	* 98	354	138	124	< 20	721	435	32.9	--	--	2.05	
	802	do	48	Aug. 4, 1967	12	56	55	321	77	37	37	1.9	12.0	445	287	29.5	744	7.8	1.42
	807	do	76	Aug. 3, 1967	18	83	35	12	399	20	17	.7	7.0	389	351	7.0	660	7.8	.28
	34-201	John S. Cargile	91	Sept. 12, 1967	15	66	31	7	316	12	12	.5	23.0	322	291	4.9	550	7.7	.18
	303	J.W. Field	90	May 15, 1940	--	97	58	31	439	15	63	.5	< 20	860	399	14.5	--	--	.68
	303	do	75	Oct. 5, 1967	21	138	56	54	432	77	136	.7	6.0	730	570	17.0	1,240	7.5	.99
	701	A.A. Sugg, Jr., et al.	52	July 12, 1967	18	85	30	8	395	10	7	.4	15.0	367	337	5.1	625	7.4	.20
	801	do	73	do	19	84	42	16	444	14	25	.7	< .4	419	383	8.3	2,301	7.3	.35
	901	Ernestine M. Mertz	100	Oct. 6, 1967	15	79	37	14	405	17	18	.7	3.0	383	351	8.0	664	7.9	.33
	904	do	143	do	10	58	40	41	375	65	22	1.1	< .4	421	311	22.5	718	7.8	1.02
	35-204	J.W. Field	115	Oct. 3, 1967	9	49	34	40	295	72	24	1.9	< .4	375	264	24.7	649	7.9	1.07
	41-101	Mrs. Della Burney	200	Feb. 28, 1968	12	84	40	90	304	147	121	1.0	3.5	650	375	34.4	1,080	7.6	2.02

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)	
Trinity Sand																			
43-41-201	A.A. Sugg, Jr., et al.	--	July 23, 1968	14	96	21	9	345	13	24	0.2	13.0	360	325	5.8	626	7.6	0.22	
	do	65	Aug. 3, 1967	17	74	24	12	333	12	14	.5	5.5	323	285	8.1	555	7.5	.30	
3/	502	do	110	May 22, 1940	--	92	* 4	348	10	20	--	< 20	324	319	2.5	--	--	.10	
	502	do	98	July 14, 1967	20	85	11	371	10	13	.5	5.5	353	314	6.8	600	7.5	.26	
	504	do	139	July 23, 1968	13	51	40	270	24	28	.7	8.5	319	211	29.5	538	7.6	1.21	
	42-101	do	240	July 22, 1968	16	59	15	276	15	16	.6	4.0	284	237	11.9	480	7.8	.42	
	201	Howard Parks	70	Aug. 7, 1967	15	69	20	293	12	13	.5	6.0	289	256	6.9	497	7.5	.24	
	402	A.A. Sugg, Jr., et al.	150	Feb. 28, 1968	12	58	13	284	24	15	.6	2.5	292	253	9.8	507	7.8	.35	
3/	704	Henry Lindley	200	June 6, 1940	--	48	* 32	287	29	41	--	< 20	324	255	21.3	--	--	.87	
	704	do	220	July 24, 1968	23	54	29	276	35	39	.8	4.0	351	254	20.7	590	7.8	.83	
4/	803	George Parks	150	Aug. 20, 1947	5	100	* 179	330	307	182	1.4	.8	1,010	472	45.2	1,620	7.8	3.58	
	803	do	180	July 18, 1968	12	97	175	276	340	189	2.2	< .4	1,000	446	46.0	1,570	7.2	3.60	
	806	S.S. Evans	150	Oct. 3, 1966	10	70	123	388	155	100	1.6	< .4	690	338	44.2	1,105	7.5	2.92	
3/	817	Mertzon Independent School District	165	June 21, 1940	--	97	* 220	329	300	250	--	< 20	1,081	457	51.2	--	--	4.48	
	43-705	C.B. Brooks	135	Dec. 19, 1967	9	78	342	362	338	327	1.7	5.0	1,320	370	61.5	2,140	7.8	7.73	
3/	50-203	S.S. Evans	110	July 23, 1940	--	96	* 141	342	199	170	--	< 20	822	423	41.9	--	--	2.98	
3/	208	Boyce E. Tankersley	100	June 17, 1940	--	78	* 198	342	292	180	1.5	< 20	971	413	51.1	--	--	4.02	
3/	209	do	90	July 23, 1940	--	--	--	281	199	130	--	< 20	715	--	--	--	--	--	
	209	do	103	Aug. 17, 1967	8	89	159	315	266	160	1.7	< .4	880	403	46.2	1,410	8.2	3.01	
	401	Marie Noelke Baker	200+	Oct. 14, 1966	10	69	39	338	105	78	1.0	5.0	560	332	34.9	951	7.5	1.90	
	51-404	Mrs. Lillian S. Winterbotham	235	Sept. 5, 1967	12	77	16	284	19	24	.4	13.0	318	263	11.8	553	7.6	.43	
	44-39-401	Texas Scottish Rite Hospital	--	Mar. 22, 1966	15	122	75	188	287	185	2.1	7.0	1,220	610	40.0	1,790	7.4	3.29	
	601	Calvin H. Sugg	93	Sept. 20, 1967	22	74	43	426	59	37	1.4	4.0	494	372	19.9	822	7.9	.96	
	701	Texas Scottish Rite Hospital	95	Mar. 22, 1966	15	121	90	251	389	192	2.1	8.0	1,030	670	22.9	1,640	7.5	1.54	

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)	
<u>Trinity Sand</u>																			
44-40-402	Raymond Clark	125	Oct. 3, 1966	39	59	44	89	370	97	77	2.5	6.0	600	329	37.0	935	7.7	2.13	
601	A.A. Sugg, Jr., et al.	152	July 14, 1967	8	55	22	29	268	39	17	1.5	12.0	316	228	21.7	544	7.4	.83	
802	Ela C. Sugg	109	Sept. 20, 1967	17	124	59	75	389	105	179	.8	19.0	770	550	22.8	1,350	7.8	1.39	
803	J.R. Scott	74	do	17	59	34	11	315	23	18	.8	3.5	321	287	7.6	561	7.5	.28	
<u>Trinity Sand--Santa Rosa Sandstone</u>																			
3/ 43-34-702	A.A. Sugg, Jr., et al.	40	May 21, 1940	--	37	49	* 61	342	68	55	--	< 20	438	295	31.0	--	--	1.55	
3/ 702	do	95	June 25, 1940	--	208	126	* 210	378	713	310	.9	< 20	1,758	1,038	30.6	--	--	2.47	
702	do	56	July 22, 1968	22	81	53	42	436	64	60	.8	< .4	540	420	18.0	890	7.8	.91	
41-302	do	129	do	16	75	21	15	306	19	26	.5	3.5	326	275	10.6	560	7.6	.39	
42-103	do	270	do	14	59	26	9	281	18	16	.8	3.5	285	254	7.1	500	7.3	.24	
810	J.T. Robinson	120	Aug. 15, 1967	8	157	82	230	328	560	281	2.4	< .4	1,480	730	40.6	2,200	8.0	3.71	
49-605	Brooks Gas Corporation	310	Oct. 20, 1966	9	153	102	467	338	720	560	2.4	< .4	2,180	800	55.9	3,350	7.3	7.17	
50-402	Sinclair Oil and Gas Company	265	Aug. 14, 1968	20	87	24	153	284	37	275	.6	5.5	740	316	51.3	1,340	7.5	3.68	
407	Atlantic-Richfield Refining Company	300	Aug. 12, 1968	10	128	81	420	348	620	475	2.0	< .4	1,920	650	58.8	2,820	7.4	7.28	
<u>Alluvium</u>																			
26-703	John S. Cargile	45	Sept. 11, 1967	18	72	32	19	361	23	20	1.1	5.5	368	314	11.4	628	7.8	.46	
34-203	do	39	do	20	72	32	16	361	21	16	1.0	4.0	360	314	9.9	620	7.7	.39	
35-501	Joe B. Mayer	65	Sept. 7, 1967	18	64	27	32	332	26	32	.6	< .4	363	270	20.5	629	7.5	.85	
3/ 42-405	A.A. Sugg, Jr., et al.	Spring	July 18, 1940	--	78	26	* 11	305	17	40	.6	< 20	323	301	7.3	--	--	.28	
405	do	Spring	Aug. 16, 1968	18	56	19	19	228	25	33	.6	1.0	284	219	16.1	481	7.4	.57	
502	M.H. Carr	44	Aug. 29, 1967	25	129	52	80	357	141	181	.8	14.0	800	540	24.4	1,310	7.5	1.49	
51-501	Hubert Jones	33	Aug. 28, 1967	13	91	18	14	329	13	27	.4	12.0	350	300	9.4	610	7.6	.36	
3/ 44-40-904	John Sheen	34	July 29, 1940	--	104	32	* 22	451	20	19	.6	22	442	390	10.9	--	--	.49	

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NI-TRATE (NO ₃)	DIS-SOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)	
Alluvium--Trinity Sand																			
43-26-701	John S. Cargile	80	Sept. 13, 1967	17	80	33	18	411	13	11	0.9	< 0.4	375	334	10.3	646	7.7	0.42	
33-601	O.C. Schlinke	93	Aug. 9, 1968	22	81	36	20	392	27	20	.8	8.5	409	350	11.1	682	7.4	.47	
34-402	do	55	do	20	72	41	31	412	36	26	.9	1.0	431	351	15.9	725	7.8	.72	
603	John S. Cargile	52	Sept. 8, 1967	25	145	108	129	421	208	351	1.1	27.0	1,200	810	25.8	2,000	7.6	1.97	
42-604	Howard Parks	65	Aug. 7, 1967	23	95	29	35	354	57	56	1.0	.4	470	358	17.4	785	7.2	.80	
608	Carlotta Hartman	89	July 19, 1968	10	171	83	331	327	700	359	2.1	.4	1,820	770	48.4	2,590	7.5	5.20	
821	Boyd Baze	54	Aug. 8, 1968	21	115	50	115	490	141	138	.7	13.0	840	493	33.7	1,340	7.4	2.26	
44-38-303	Calvin H. Sugg	108	Sept. 26, 1967	18	91	29	18	375	46	22	.9	12.0	421	349	10.1	690	7.6	.42	
40-901	John Sheen	121	Aug. 14, 1967	21	112	48	38	420	32	121	1.4	3.0	580	478	14.6	1,028	7.4	.75	
Alluvium--Trinity Sand--Santa Rosa Sandstone																			
43-34-403	Katherine Thompson, et al.	121	Sept. 15, 1967	15	500	173	70	184	1,780	66	2.1	.4	2,700	1,970	7.2	2,880	7.4	.69	
42-804	Boyd Baze	87	Aug. 8, 1968	27	125	53	137	510	178	163	.7	18.0	950	530	36.6	1,490	7.5	2.60	
Alluvium--Permian Rocks																			
3/ 43-35-401	J.W. Field	65	June 25, 1940	--	125	59	* 61	403	18	240	--	< 20	706	557	19.3	--	--	1.13	
401	do	90	Oct. 5, 1967	21	141	75	75	317	70	324	.9	20.0	880	660	19.8	1,620	7.6	1.27	
402	M.C. Shook	40	Oct. 25, 1966	17	114	49	177	361	115	320	.4	8.0	980	486	44.2	1,710	7.5	3.50	
3/ 404	A.J. Haney	72	June 25, 1940	--	85	50	* 25	378	16	100	--	< 20	466	416	11.5	--	--	.53	
406	J.W. Field	108	Oct. 5, 1967	18	119	91	174	405	97	432	1.0	3.0	1,130	670	36.1	2,040	7.6	2.92	
42-605	Mrs. D.E. Hughes	70	July 19, 1968	25	96	40	112	320	213	128	.8	5.0	780	407	37.4	1,170	7.9	2.41	
607	Fred Grey	40	Dec. 18, 1967	33	202	75	234	453	449	342	.9	30.0	1,590	850	37.4	2,390	7.5	3.49	
609	Mrs. D.E. Hughes	52	July 23, 1968	31	139	51	122	428	157	233	.8	.4	940	560	32.2	1,520	7.9	2.25	
807	Irion County	204	Aug. 16, 1967	21	98	21	52	315	79	66	.7	10.0	500	330	25.5	831	7.4	1.24	
43-403	Katherine Trigg	139	July 19, 1968	11	77	36	142	328	162	160	.9	2.5	750	340	47.7	1,250	7.6	3.36	
404	Fred Grey	100	July 19, 1968	13	127	68	350	332	384	510	2.0	.4	1,620	600	56.0	2,540	7.7	6.22	
Santa Rosa Sandstone																			
43-41-303	A.A. Sugg, Jr., et al.	80	July 22, 1968	21	80	33	30	379	29	38	.6	2.5	421	335	16.2	715	7.9	.71	

See footnotes at end of table.

Table 2.--Chemical Analyses of Water From Wells and Springs in Irion County--Continued

WELL	OWNER	DEPTH OF WELL	DATE OF COLLECTION	SILICA (SiO ₂)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO ₃)	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO ₃	PERCENT SODIUM	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH	SODIUM ADSORPTION RATIO (SAR)	
<u>Santa Rosa Sandstone-Permian Rocks</u>																			
43-33-801	A.A. Sugg, Jr., et al.	158	July 13, 1967	16	329	118	111	278	1,000	166	1.7	14.0	1,890	1,310	15.6	2,470	7.3	1.37	
<u>Permian Rocks</u>																			
43-42-301	Howard Parks	113	Aug. 7, 1967	12	310	154	276	265	1,240	346	1.8	< 0.4	2,470	1,410	30.0	3,150	7.5	3.20	
2/ 601	do	202	Sept. 26, 1960	--	610	201	* 665	253	2,298	851	--	--	4,878	2,355	57.2	--	--	6.57	
601	do	202	Aug. 7, 1967	12	640	190	690	234	2,270	880	3.5	< .4	4,800	2,380	38.8	5,740	7.2	6.19	
43-402	Katherine Trigg	87	July 19, 1968	9	510	310	1,530	115	1,760	2,900	2.5	< .4	7,080	2,550	56.7	9,140	7.3	13.21	

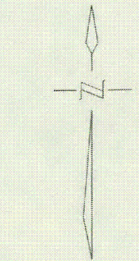
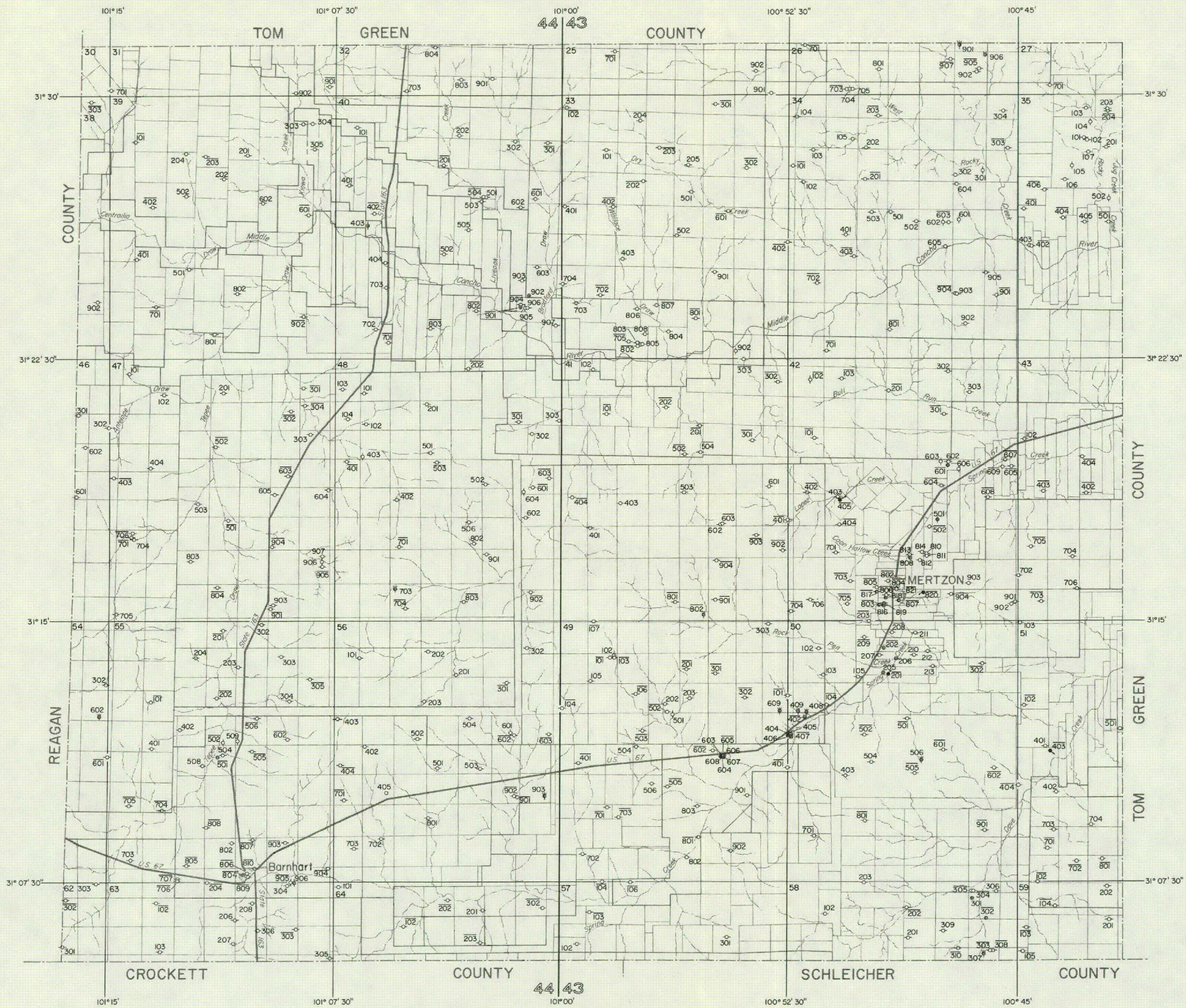
1/ Depth of well preceding each analysis is that depth reported at the time the water sample was collected. For some wells, different depths are shown for different dates. The difference in depth in most instances is due to caving or silting of the well, deepening or redrilling, and in a few instances difference in the depth reported to the data collector.

2/ Analysis by Texas A&M University.

3/ Analysis by Works Progress Administration.

4/ Analysis by U.S. Geological Survey.

* Concentration includes both sodium (Na) and potassium (K).



EXPLANATION

- | IN USE | UNUSED OR DESTROYED |
|-----------------------------|---------------------|
| ○ | ◊ |
| Domestic or livestock wells | ◊ |
| ▼ | ◊ |
| Industrial wells | ◊ |
| ● | ◊ |
| Irrigation wells | ◊ |
| ◆ | ◊ |
| Public supply wells | ◊ |
| ● | ◊ |
| Spring | ◊ |
| ● | ◊ |
| Test hole | ◊ |

Line above last three digits of well number indicates chemical analysis of water given in Table 2.

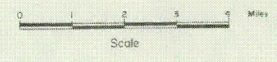


Figure 3
Location of Wells and Springs in Irion County

16989

①

354

