#### STATE OF ARKANSAS

### ARKANSAS GEOLOGICAL COMMISSION Norman F. Williams, Director

#### WATER RESOURCES CIRCULAR 15

# EXTENT AND SOURCES OF SALTWATER INTRUSION INTO THE ALLUVIAL AQUIFER NEAR BRINKLEY, ARKANSAS, 1984

BY

E. E. Morris, U. S. Geological Survey, and W. V. Bush, Arkansas Geological Commission



Prepared in cooperation with the U.S. Geological Survey

Little Rock, Arkansas 1986

#### STATE OF ARKANSAS

# ARKANSAS GEOLOGICAL COMMISSION Norman F. Williams, Director

#### WATER RESOURCES CIRCULAR 15

# EXTENT AND SOURCES OF SALTWATER INTRUSION INTO THE ALLUVIAL AQUIFER NEAR BRINKLEY, ARKANSAS, 1984

BY

E. E. Morris, U. S. Geological Survey, and W. V. Bush, Arkansas Geological Commission

Prepared in cooperation with the U.S. Geological Survey

Little Rock, Arkansas 1986

# STATE OF ARKANSAS

Bill Clinton, Governor

## ARKANSAS GEOLOGICAL COMMISSION

Norman F. Williams, State Geologist

## COMMISSIONERS

C. S. Williams, Chairman Mena
David Baumgardner Little Rock
John Gray El Dorado
John Moritz Bauxite
Dorsey Ryan Ft. Smith
W. W. Smith Black Rock
Dr. David Vosburg State University

#### CONTENTS

	Page
Abstract	1
Introduction	2
Purpose and scope	2
Methods of investigation	2
Previous investigations	2
Description of the area	3
Well-numbering system	3
	3
Acknowledgments	
Hydrogeologic setting	8
Quaternary deposits	8
Jackson Group	8
Claiborne Group	10
Wilcox Group	10
Midway Group	11
Upper Cretaceous sediments	11
History of saltwater intrusion	11
Source of contamination	14
Possible avenues of contamination from deeper formations	21
Leakage through the Jackson Group	21
	24
Faulting	24
Gas test wells	
Water use and declining water levels	24
Consequences of saltwater use	26
Summary and conclusions	31
References	33
Attachment A, water-quality data for wells in the vicinity of	
Brinkley, Arkansas	36
ILLUSTRATIONS	
	Page
Figure 1. Map showing location of study area	4
<ol><li>Map showing location of water-quality wells and oil</li></ol>	
and gas test wells	5
3. Diagram showing determination of local well number	7
4. Graph showing chloride concentration versus time for	
water from well no. 177 in the alluvial aquifer	12
<ol><li>Map showing chloride concentration of water in the</li></ol>	
alluvial aquifer in the vicinity of Brinkley,	
Arkansas, 1974-85	15
6. Graph showing chloride concentration versus depth of well	
for water from three wells in the alluvial aquifer less	
than 40 feet apart	17
7. Graph showing chloride concentration for water from two	17
· · · · · · · · · · · · · · · · · · ·	
wells in the alluvial aquifer in close proximity but	
at different depths, July 27-28, 1975	17

# ILLUSTRATIONS (continued)

			Page
	8.	Sketch showing the effect of withdrawal depth on chloride concentrations for water from two wells 20 feet apart	18
	9.		00
10.	-12.	vicinity of Brinkley, Arkansas	20
10	-12•	10. Bromide versus chloride concentrations of water from	
		wells in the vicinity of Brinkley, Arkansas  11. Iodide versus chloride concentrations of water from	22
		wells in the vicinity of Brinkley, Arkansas  12. Boron versus chloride concentrations of water from	22
		wells in the vicinity of Brinkley, Arkansas	23
	13.	Map showing potentiometric surface for the alluvial aquifer, spring 1984	27
	14.	Diagram showing modified irrigation classification	30
		TABLES	
		IADLES	
			Page
Table	1.	Generalized geologic column in the vicinity of Brinkley,	
	2	Arkansas	9
	2.	Analysis of a water sample from well in the Sparta aquifer collected in 1904	13
	3.	Description of oil and gas test wells	25

#### CONVERSION FACTORS

For use of readers who prefer to use metric units, conversion factors for terms used in this report are listed below:

Multiply	<u>By</u>	To obtain
foot (ft)	0.3048	meter (m)
gallon per minute (gal/min)	0.0630	liter per second (L/s)
million gallon per day (Mgal/d)	0.0438	cubic meter per second (m <sup>3</sup> /s)
square mile (mi <sup>2</sup> )	2.590	square kilometer (km²)

Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}F = (1.8)(^{\circ}C) + 32$$

National Geodetic Vertical Datum of 1929 (NGVD of 1929): A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, called NGVD of 1929, is referred to as sea level in this report.

EXTENT AND SOURCE OF SALTWATER INTRUSION INTO THE ALLUVIAL AQUIFER

NEAR BRINKLEY, ARKANSAS, 1984

by E. E. Morris and W. V. Bush

#### ABSTRACT

An appproximate area of 56 square miles of the alluvial aquifer has been contaminated by saltwater (chloride concentration equal to or greater than 50 milligrams per liter) intruded from underlying aquifers. The contamination was mapped from water quality data for 217 wells. Saltwater problems appear to have spread rapidly in the alluvial aquifer since the late 1940's. Chemical comparisons indicate that the alluvial aquifer was contaminated by water from the Sparta aquifer which in turn was contaminated by the underlying Nacatoch aquifer.

The possibility of intrusion into the alluvial aquifer through abandoned oil and gas test wells was investigated but no evidence could be found to support this possibility. Upward movement into the alluvial aquifer from the underlying Sparta aquifer through the thinned or absent Jackson confining unit appears to be the principal reason for saltwater in the alluvial aquifer. Increased withdrawals of water from the alluvial aquifer for irrigation and public supply appear to have contributed to this upward movement.

#### INTRODUCTION

#### Purpose and Scope

This study, in cooperation with the Arkansas Geological Commission, was conducted to determine the areal extent of saltwater intrusion into the alluvial aquifer in the vicinity of Brinkley, Arkansas. In this report that part of the aquifer where water contains chloride concentrations greater than 50 mg/L is considered affected by saltwater intrusion. As a secondary objective, an attempt was made to determine the source(s) and mechanism(s) of saltwater intrusion into the aquifer. This required that a description of the hydrology of deeper formations be included in the study. Particular attention was given to the hydrology of the Sparta Sand and the intrusion of saltwater into this formation.

#### Methods of Investigation

The extent and magnitude of saltwater in the alluvial aquifer were largely determined through the collection and analysis of aquifer water-quality data. During the period 1946-84, water samples were collected from 205 wells which tap the alluvial aquifer, 8 wells penetrating the Sparta aquifer, 2 wells which penetrate the Cockfield aquifer, and 1 well each in the Memphis aquifer and Nacatoch aquifer. The analyses of these samples are shown in attachment A, referenced by well number. The majority of samples were collected during the period 1974-84. In addition to the collection of water-quality samples, numerous water-level measurements were made during these same periods.

Both the collection of water-quality samples and the measurement of water levels were completed according to guidelines set forth in the following manuals: Skougstad and others (1979), U.S. Geological Survey (1977), and Wood (1976).

#### Previous Investigations

Numerous State and Federal reports discuss the hydrology of the study area either directly or indirectly. Several reports discuss saltwater intrusion in the study area. The earliest known mention of a possible intrusion problem was by Stephenson and Crider (1916). They reported that a water sample collected from a well in the Claiborne Group (Sparta Sand) at Brinkley in 1904 contained a chloride concentration of 916 milligrams per liter (mg/L). Other reports mentioning the occurrence of saltwater in wells in the study area include Halberg and Reed (1964), Boswell and others (1968), Hosman and others (1968) and Broom and Lyford (1981).

#### Description of the Area

The study area (fig. 1) encompasses approximately 322 square miles (mi<sup>2</sup>) and includes parts of Monroe, St. Francis, and Woodruff Counties. The area is located within the Mississippi alluvial plain. The plain, with little surface relief except at boundaries of stream flood plains and terraces, slopes southward. Surface altitudes range from a high of 215 feet above sea level, 7 miles north of Brinkley, to a low of 145 feet near White River at Clarendon. The principal streams in the area are Bayou Deview (a tributary to Cache River) and Cache River (a tributary to White River). Secondary drainage consists of swampy, low gradient streams.

Land use in the area is primarily agricultural. Most crops are irrigated by ground water. Some light industry that uses a small amount of ground water is located at Brinkley and at Clarendon, the county seat.

#### Well-Numbering System

Each well for which water-quality data are available in the study area is listed by aquifer and by local well number in attachment A of this report. These wells were also assigned a well number unique to this report. These unique well numbers and their locations are shown in figure 2. A well may also be located by the local well number. The local well number is based upon the location of the well according to the Federal land survey used in The component parts of a local well number include the township number, the range number, the section number, and three letters which indicate, respectively, the quarter section, the quarter-quarter section, and the quarter-quarter-quarter section in which the well is located. The letters are assigned counter clockwise, beginning with "A" in the northeast quarter or quarter-quarter or quarter-quarter section in which the well is located. For example, well 04N02WllBCCl6 (fig. 3) is located in Township 4 North, Range 2 West, and in the southwest quarter of the southwest quarter of the northwest quarter of section 11. This well is the 16th well in this quarter-quarter-quarter section (10 acre tract) of section 11 at which data were collected.

#### Acknowledgments

The authors wish to thank Mr. Buck Files and Mr. Wayne Roediger for permission to drill test wells on their farms. Thanks are extended to the many farmers in the Brinkley area who provided assistance in sampling of their irrigation and domestic wells. Thanks are extended to Joe Edds and John Yanchosek, hydrologic technicians for the Arkansas District, U.S. Geological Survey, for the many days spent collecting, analyzing and storing data.

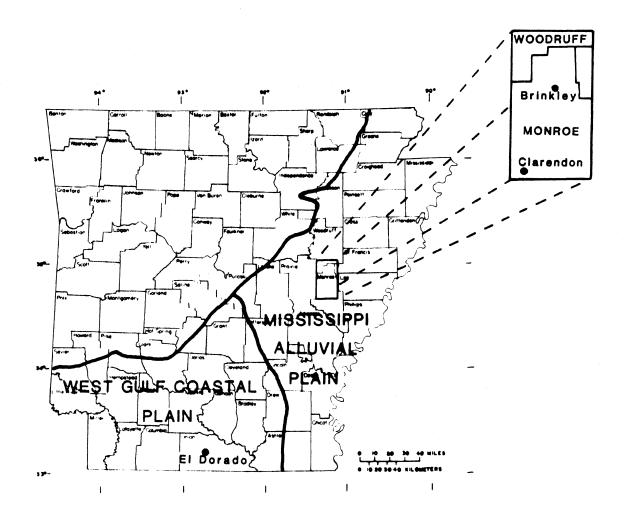


Figure 1.--Location of study area.

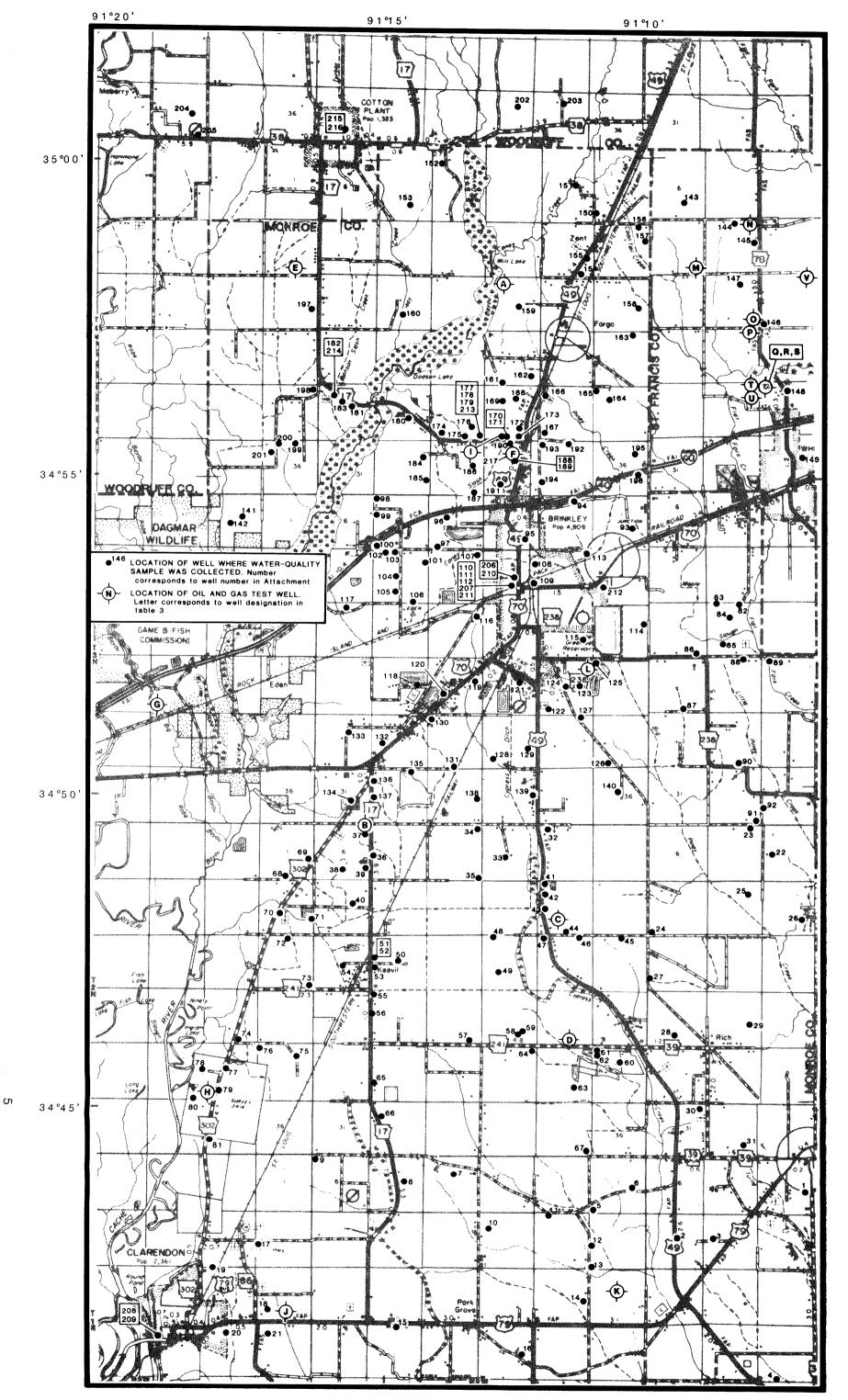


Figure 2.--Location of water-quality observation wells and oil and gas test wells.

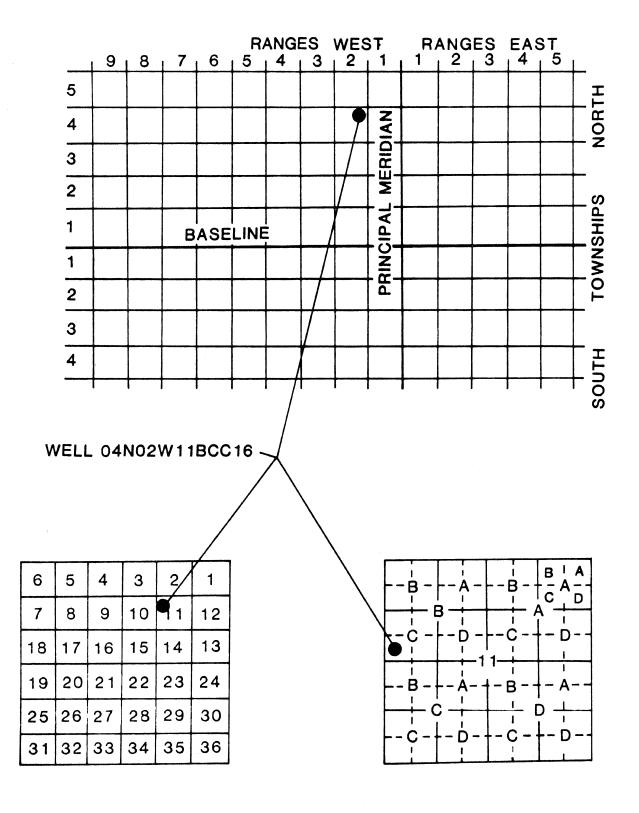


Figure 3.--Determination of local well number.

#### HYDROGEOLOGIC SETTING

A generalized geologic column representing sediments in the study area is shown in table 1. Quaternary alluvial and terrace deposits cover the entire surface of the study area to an average depth of 125 feet and contain the alluvial aquifer which is the most important aquifer in the area. Underlying the alluvial deposits are approximately 2,800 feet of Tertiary through Upper Cretaceous sediments, which, in turn are underlain by Paleozoic sedimentary rocks. The strata below the alluvial deposits dip to the southeast at less than 1° and most of the units thicken in the same direction.

The lack of adequate subsurface control prevented the mapping of any significant structural features that might contribute to the movement of saltwater. Just north of the study area in sections 7 and 18, T. 5 N., R. 2 W, in Woodruff County, Caplan (1954) indicated the possibility of either a normal fault, downthrown to the north and trending northwest-southeast, or of a small graben. This fault, or graben, does not appear to have any effect on the saltwater problem, but does indicate the possibility of additional faulting in the study area.

#### Quaternary Deposits

Quaternary deposits include terrace deposits of Pleistocene age and more recent alluvial deposits of Holocene age (table 1). Quaternary alluvial and terrace deposits range in thickness from about 100 to 160 feet, and average approximately 125 feet. The uppermost deposits form a silty or fine sandy clay cap. This clay cap is typically about 20 feet thick, but may thin to 10 feet or less and, in some low lying areas, may be absent. These deposits grade downward into fine-grained to coarse sand, which in turn grades into approximately 30 feet of sand and gravel at the base of the Quaternary deposits. Thin, lenticular layers of silty clay are scattered throughout the sediments, but do not appear to serve as confining beds. The coarser materials of the Quaternary deposits which generally underlie the clay cap constitute the alluvial aquifer. The alluvial aquifer is the most important aquifer in the study area and provides large quantities of water for irrigation and public supply.

#### Jackson Group

Sediments of the Tertiary Jackson Group undifferentiated underlie most of the study area (table 1). Thickness of this unit averages about 30 feet, but may range from near zero to a maximum of about 50 feet. Accurate determinations of unit extent and thickness are difficult to determine because of the limited amount of subsurface data. In the study area the lithology of the Jackson Group consists almost entirely of clay, silty clay, and minor amounts of silt and very fine sand. Where present, it acts as a confining bed between the alluvial aquifer and the Sparta aquifer.

Table 1.--Generalized geologic column in the vicinity of Arinkley, Arkansas

Erathem	System	Series	Group	Pormation	Maximum thickness (feet)	Lithologic description
	Quaternary	Holocene Pleistocene		Alluvial deposits Terrace deposits	160	Clay, silt, sand and gravel. Includes alluvial aquifer.
			Jackson	Undifferentiated	93	Mostly clay with some fine sand and salt. Includes Jackson confining bed.
				Cockfleld and Cook Mountain Permations	250	Interbedded sand, silt, and clav. Sandier near the top. Includes Cockfield aquifer.
Cenozofe	Tertiary	Eocene	Claiborne	Sperte Sand	400	Sand, clay, and silt, interhedded.  Fine to medium sand in upper part  with fine to coarse sand in the lower part, separated by a clay. Includes Sparta aquifer.
				Cane River Porma- tion and Carrizo Sand	750	Clay, sand, and silt. Mostly sand mear the hase. Entire section gets sandler to the north, combining with the Sparta Sand to form the Hemphis Sand. Includes Cane To the north the Sparta, Caue River, and Carrizo aquifer. and Carrizo aquifer, and Carrizo aquifers aquifers form the Hemphis aquifer.
			Wilcox	Undifferentiated	009	Interbedded sand and clay. Includes Wilcox auufer.
		Paleocene	Hidway	Undifferentiated	005	Clay with some silt and lime.
Mesozoic	Cretaceous	Upper		Undifferentiated	0 <b>06</b>	Marl, sand, chalk and clay. Includes Nacatoch Sand.
Paleozoic		Un	Undifferentiated	ited		Sandstone and shale.

#### Claiborne Group

The Tertiary Claiborne Group underlies the Jackson Group and attains an average thickness of 950 feet in the study area (table 1). In southern Arkansas the Claiborne Group has been subdivided into five formations. These formations listed from top to bottom include: the Cockfield Formation, Cook Mountain Formation, Sparta Sand, Cane River Formation, and Carrizo Sand. In the study area, the boundaries of these units are difficult to determine because of lack of subsurface data and rapid changes in lithology within the Claiborne Group.

The upper part of the Claiborne Group is composed of fine to medium sand, clay, silt, and lignitic clays which are assigned to the Cockfield and Cook Mountain Formations. The uppermost part is mostly sand of the Cockfield Formation and is locally referred to as the Cockfield aquifer. In some locations this sand may be absent, or clays of the underlying Cook Mountain Formation may contain interbedded and lenticular sand.

The Sparta Sand lies below the upper part of the Claiborne Group. It may be separated into an upper and a lower part. The base of the lower part is difficult to determine locally because of lithologic similarities to underlying sediments of the Cane River Formation. However, the lower part of the Sparta Sand, which includes some interbedded clay, appears to be about 160 feet thick in well no. 212 (fig. 2). The upper part of the Sparta Sand is about 100 feet thick. Separating the two parts is about 130 feet of interbedded sandy clay. The effectiveness of this middle clay unit as a confining bed is variable and depends largely on the local distribution and thickness of clay. The spatial and vertical limits of the Sparta Sand also locally define the Sparta aquifer.

Below the Sparta Sand lie sediments assigned to the Cane River Formation and the Carrizo Sand. These units consist predominantly of sand interbedded with thin layers of clay and silt. Where they can be differentiated, the boundaries of the Cane River aquifer and the Carrizo Sand aquifer are locally defined as the limits of the respective formations.

Just north of Brinkley, at the approximate boundary between Tps. 3 and 4 N., the percentage of sand in the Cane River Formation increases. At this point the combined thickness of the Sparta Sand, Cane River Formation, and Carrizo Sand forms the Memphis Sand and is locally designated the Memphis aquifer (Broom and Lyford, 1981).

#### Wilcox Group

Sediments of the Tertiary Wilcox Group, which underlie the Claiborne Group, average about 450 feet in thickness and have not been subdivided in the study area (table 1). Lithologically, the Wilcox Group consists of complexly interlayered and lenticular sands, silts, and clays. The sands and coarser materials locally constitute the Wilcox aquifer and are probably hydraulically connected to the sands in the lower part of the overlying Claiborne Group. In the study area the water in the Wilcox aquifer is saline. However, in the Memphis area the Wilcox aquifer contains freshwater and is referred to as the "1,400 foot sand" aquifer.

#### Midway Group

The Midway Group, which underlies the Wilcox Group, is Tertiary in age and has not been subdivided in this report (table 1). Its average thickness is about 500 feet in the study area. The Midway Group consists predominantly of clay and contains silt in the upper part. The clay of the Midway Group is considered an excellent confining bed capable of restricting any upward movement of fluids from deeper formations.

#### Upper Cretaceous Sediments

Approximately 600 feet of Upper Cretaceous sediments consisting primarily of marl, sand, clay, and chalk, occur between the base of the Midway Group and the top of the Paleozoic sequence (table 1). Where adequate subsurface data are available, the Upper Cretaceous sediments, from top to bottom, can be subdivided into the Arkadelphia Marl, Nacatoch Sand, Saratoga Chalk, Marlbrook Marl, Annona Chalk, Ozan Formation, Brownstone Marl, and Tokio Formation.

All of the water within Cretaceous sediments is saline. The Nacatoch aquifer is locally defined as the predominantly sandy units of the Nacatoch Sand and is considered a potential source of saltwater contamination of overlying units. The top of the Nacatoch Sand ranges in depth from about altitude -1,200 feet in the northwest corner of the area to about altitude -2,650 feet in the southeast corner (Petersen and others, 1985).

#### HISTORY OF SALTWATER INTRUSION

Saltwater intrusion into the alluvial aquifer was first documented in 1946 when a water sample from well no. 111 was found to have a chloride concentration of 150 mg/L. The area of saltwater intrusion appears to have spread rapidly after this time. A water sample from well no. 177, a well in the alluvial aquifer located just northwest of Brinkley, contained a chloride concentration of 22 mg/L on October 6, 1949. The chloride concentration of water samples from this well increased rapidly over the next 20 years to 800 mg/L (fig. 4). This well is now located at the center of a major concentration of saltwater in the alluvial aquifer.

Saltwater occurrence in the underlying Sparta aquifer was documented much earlier than in the alluvial aquifer. Stephenson and Crider (1916) reported a concentration of 916 milligrams per liter (mg/L) chloride in a water sample from the Sparta aquifer in 1904 (table 2). The well sampled was reported to be used as a public supply for the city of Brinkley.

An approximately  $56 \text{ mi}^2$  area of saltwater (equal to or exceeding 50 mg/L chloride concentration) occurs in the alluvial aquifer as illustrated in figure 5. The lines of chloride concentration shown are based on the maximum chloride concentration for each well for the period of record. Intervals used are 50, 100 and 200 mg/L. Two areas of high chloride concentration are shown. One area is located approximately 1 mile north of the Brinkley city limits where chloride concentrations in water from the alluvial aquifer are as high as 960 mg/L. The second area is located approximately 5.5 miles south of the Brinkley city limits where concentrations reach a maximum of 460 mg/L.

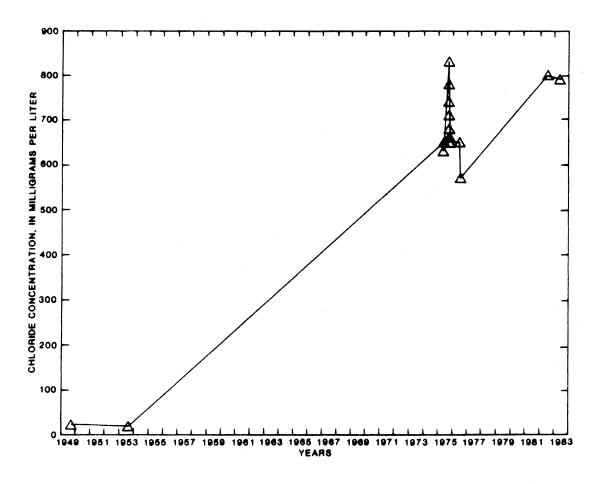


Figure 4.--Chloride concentration versus time for water from well no. 177 in the alluvial aquifer.

Table 2.--Analysis of a water sample from Sparta aquifer collected in 1904 (Stephenson and Crider, 1916)

[Parts per million]

	Name of principal	bearing stratum	Focene					
			-		Total hardness as CaCO3	88		
	Depth of principal	2 %	497-563		Total dissolved solids	1,938		-
	Denth of	well (feet)	\$65				Quality for irriga-	Poor
		5	Sept, 1904		Volatile and organic	88	Quality for domestic use	3
	Date of	colle	Sept,		Chlorine (Cl)	916		Pag P
		Analyst	C. W. Jones		Sulphate radical (SO <sub>4</sub> )	2.3	Quality for boiler use	Very had
		₹	<del> </del>		Bicar- bonate Su radical ra (HCO3) (3	246	Chemical char- acter	Na-C1
		Owne r	Parrell Light, Heat & Water Co.		Car- Bi bonate bo radical ra (CO3) (H		Mineral content	H1gh
			Parrell Light & Water Co.		Sodium and po- h tassium ri (Na+K)	64	Prob- ability of corro- sionbc	NC
		- Range			Mag- nestum (Mg.)	6.2	Probable foaming ingredi- entsb	1,800
		n Town-			Calcium (Ca)	25	Probable scale- P forming fingredi- ingredi- i	100
	Location	Section			Tron Ca	9°0°	Prol sc. forr ingi	
-		Town	Brinkley		S111ca (S10 <sub>2</sub> )	e 61	·	•
		No.	42	_	· · · · · · · · · · · · · · · · · · ·		1	

<sup>a</sup> Aluminum (Al), 0.2 part; phosphate radical (PO<sub>4</sub>), 1.5 parts. b Computed. c NC = noncorrosive.

As shown on figure 5, the area of saltwater intrusion is not evenly distributed but rather has a meandering character. This meandering may be due to the irregular distribution of clays of the Jackson Group below the the base of the alluvial aquifer.

Chloride data collected after 1974 were considered to best represent present chloride concentrations and previously collected data were not used. In addition, the depth of wells in the alluvial aquifer was not considered when drawing lines of equal chloride concentration.

Observed variation in chloride concentrations with well depth is illustrated in figure 6. Chloride concentrations in three wells of ranging depth increased with depth (and depth of well intake). The three wells are less than 40 feet apart. The amount and distribution of pumping prior to sampling are not known.

An observed variation in chloride concentration with depth of well and time of pumping is shown in figure 7. The two wells shown are about 20 feet apart and had not been pumped for several days prior to sampling. Samples from well no. 178 (85 feet deep) show an increase in chloride concentration with time following the beginning of pumping. This increase would be expected as deeper saltwater begins to reach the well. However, water samples from well no. 177 (130 feet deep) show decreasing chloride concentrations as the well is pumped.

A possible explanation for this anomalous change in chloride is illustrated in figure 8. Pumping of well no. 178, the shallow well, creates an upward component of flow which brings saltier water from below into the well; hence the observed increase in chloride concentration with respect to time. In contrast, pumping of well no. 177, the deep well, creates generally downward components of flow which induce fresher water from above into the well intake. As a result of this flow pattern, the chloride concentration of water in the deep well decreases with time.

#### SOURCE OF CONTAMINATION

The saltwater contaminating the alluvial aquifer may originate from one or more of the following sources:

- 1. a zone of ground-water stagnation in the aquifer,
- irrigation practices, and
- 3. upward movement of saltwater from deeper formations in response to pumping.

However, before discussing these sources it should first be established that the alluvial aquifer, when first formed, did not contain significant quantities of saltwater. Boswell and others (1968) state that "the Quaternary alluvium of the Mississippi River valley is the product of large-scale erosion and deposition during the Pleistocene and Holocene Epochs. Several periods of glaciation in Canada and the northern United States and subsequent seasonal melting released large volumes of water, resulting in several cycles of erosion and alluviation." Since glaciers were the source of most of this water, water originally contained within the alluvial aquifer was probably fresh.

A zone of stagnation could be present in the alluvial aquifer. Such a zone, as described by Winter (1976), could be local in nature and would be created by regional and/or local ground-water flow patterns in which a particular area has restricted horizontal and/or vertical flow. The static nature of flow would allow water in the stagnation zone to dissolve available minerals from the surrounding aquifer material over a long period of time.

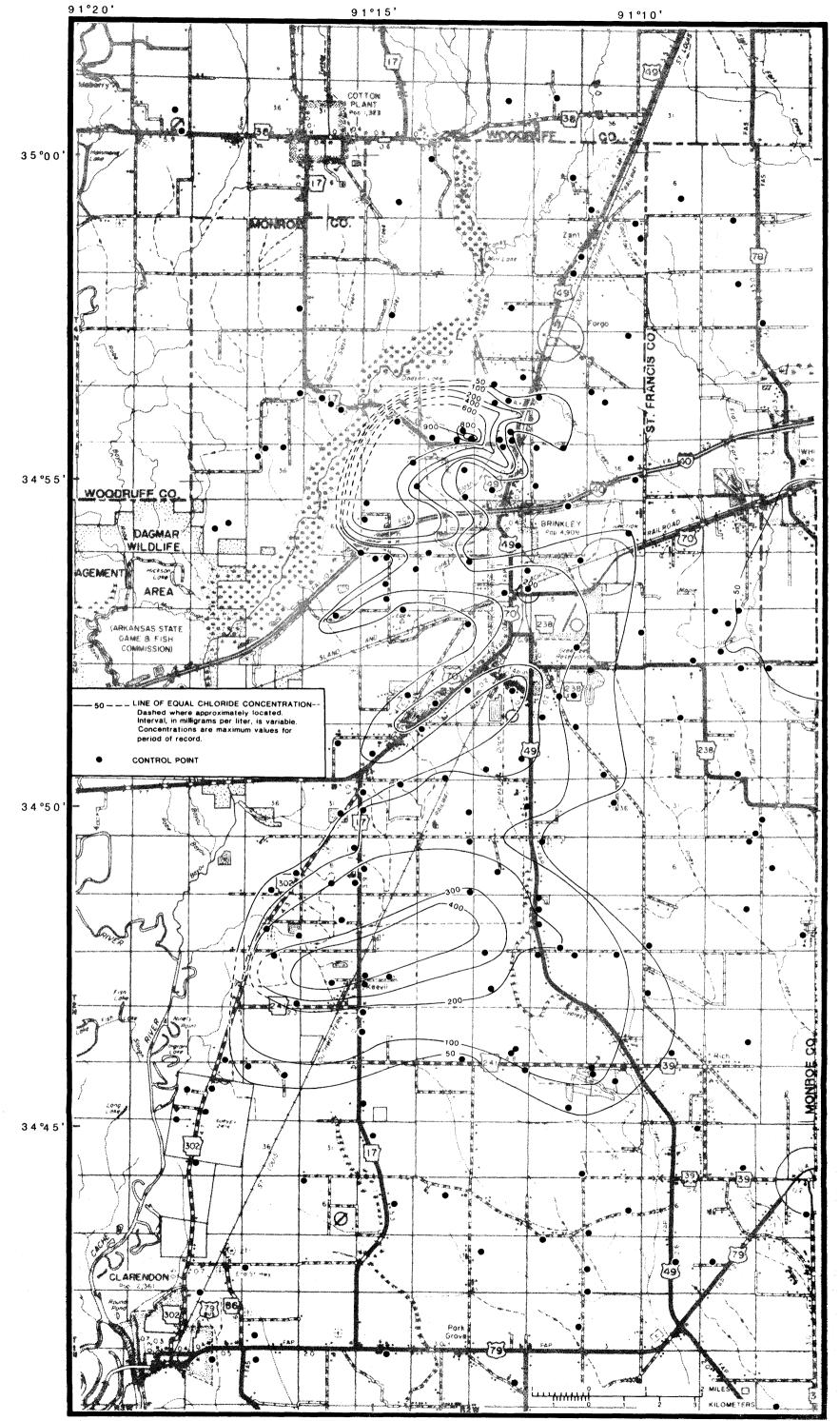


Figure 5.—Chloride concentration of water in the alluvial aquifer in the vicinity of Brinkley, Arkansas, 1974-85.

15

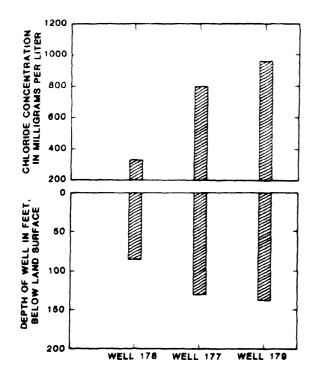


Figure 6.--Chloride concentration versus depth of well for water from three wells in the alluvial aquifer less than 40 feet apart.

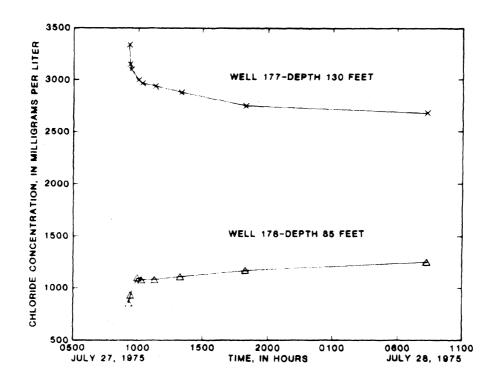


Figure 7.--Chloride concentration for water from two wells in the alluvial aquifer in close proximity but at different depths, July 27-28, 1975.

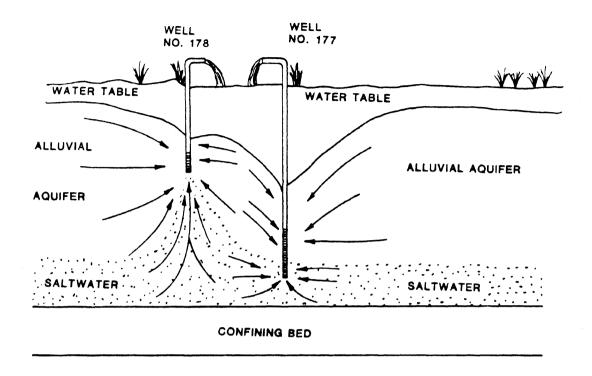


Figure 8.--The effect of withdrawal depth on chloride concentrations of water from two pumping wells 20 feet apart.

This stagnation could significantly increase the amount of dissolved minerals contained in water within the zone. However, geologic evidence does not support the presence of boron, iodide, bromide and other constituents in the aquifer materials in quantities sufficient to raise the concentration of these constituents to their present levels (see analyses in appendix A).

Irrigation practices might increase the dissolved-solids content of ground water. Salts in the water removed from the aquifer for irrigation can be concentrated by evaporation or leaching before reentering the aquifer. To contaminate the aquifer to the extent shown on figure 5 would require a large amount of return flow after evaporation and/or a significant amount of salt to be present in the soil.

Holland and Ludwig (1981) state that as a general rule only 25 percent of ground water removed for rice irrigation returns to the aquifer. Using Holland and Ludwig's (1981) figure of 125.6 Mgal/d of ground-water withdrawal for irrigation, a 25 percent return rate would equal 31.4 Mgal/d. Therefore, approximately 11 billion gallons of irrigation water are returned annually to the aquifer. This would not exceed 2.5 percent of the total water present in the alluvial aquifer in Monroe County (D. J. Ackerman, U.S. Geological Survey, written commun., 1985). In addition, with initial chloride concentrations as low as 0.3 mg/L, significant contamination resulting from the process of irrigation water evaporation and subsequent concentration of dissolved solids seems doubtful. The possibility of leaching of sodium and chloride from the soil as irrigation water percolates through it also appears to be a remote possibility. The majority of soils in the area are of the calcium magnesium bicarbonate type (Maxwell and others, 1978) and have low concentrations of both sodium and chloride.

Deeper formations are the most likely source of saltwater in the study area. Although only limited water-quality data are available from deep strata, an oil and gas test well open to the Nacatoch aquifer at a depth of 2,240 feet below land surface (well no. 217) was sampled in 1950. This well was sealed off after sampling because of complaints of surface contamination. At the time of sampling the well was artesian, flowing at a rate of 2-3 gallons per minute (gal/min); gas bubbles were evident in the discharge and the water was yellow-black.

Evidence that water from the Nacatoch aquifer or a formation with a similar chemical composition is contaminating shallower formations is shown in the Piper quadralinear diagram of figure 9. Two analyses of water from the Nacatoch aquifer near El Dorado, Arkansas (fig. 1) are included for comparative purposes. The chemical composition of water from each well with respect to the combination of ions shown on figure 9 is plotted on the Piper diagram. The diagram is used to determine whether a particular well-water chemistry may be the result of a simple mixture of two separate well waters. A mixture of two waters should plot on a straight line between the plotted points of the individual well waters barring any effects of ion complexes and activity coefficients. Judging by the dashed line drawn in figure 9, water from the Nacatoch aquifer has mixed with water from the alluvial aquifer.

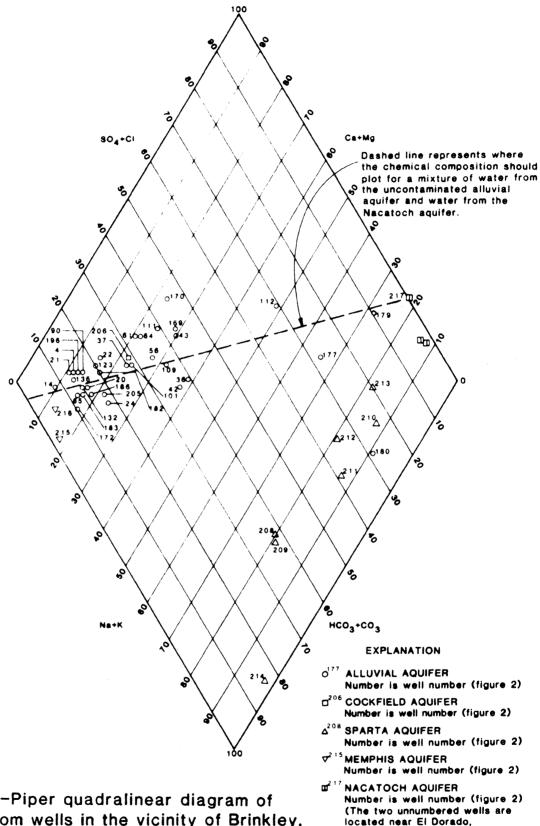


Figure 9.--Piper quadralinear diagram of water from wells in the vicinity of Brinkley, Arkansas.

located near El Dorado, Arkansas)

Another method of determining the source of contamination of the alluvial aquifer is to plot concentrations of selected constituents against related chloride concentrations found in both the alluvial aquifer and deeper formations. If the relation between the uncontaminated alluvial aquifer, contaminated alluvial aquifer, and Nacatoch aquifer plot on a straight line, then support is given to the possibility of contamination of the alluvium by the Nacatoch aquifer or another aquifer with a similar chemical composition. Those constituents which occur in water samples from the Nacatoch aquifer in significant concentrations but occur in water samples from the alluvial and Sparta aquifers in much lower concentrations include bromide, iodide and boron.

Figure 10 shows a log-log relation of bromide to chloride concentrations. This relation and others to be discussed are based on analyses of water samples from the Nacatoch aquifer near the El Dorado, Arkansas area because no analyses for bromide, iodide or boron were available for well no. 217, the only well tapping the Nacatoch aquifer in the study area. As figure 10 shows, the relation of bromide to chloride concentrations in water samples from the alluvial, Sparta and Nacatoch aquifers plot on a straight line. Figure 11 exhibits this same correlation for iodide to chloride concentrations. Figure 12, a plot of boron to chloride concentrations, shows a good correlation between the alluvial and Nacatoch aquifer. However, the correlation between the Sparta and Nacatoch aquifers is not as good. All of these relations point to a dilution of water from the Nacatoch aquifer as it migrates into the shallower Sparta and alluvial aquifers.

#### POSSIBLE AVENUES OF CONTAMINATION FROM DEEPER FORMATIONS

Saltwater intrusion into the alluvial aquifer can probably be attributed to upward migration from deeper aquifers. Sources of saline ground water occur beneath the alluvial aquifer. Cushing (1966) indicates that all water-bearing formations beneath the Sparta Sand in the southern part of the study area and below the Carrizo Sand in the northern part contain saltwater. As previously discussed, the Nacatoch aquifer was found to be flowing at the surface in 1950, thus providing the driving force for any upward movement from this aquifer. The specific mechanism through which the upward intrusion of this saline ground water occurs is probably the result of one or more of the following:

- l. Upward leakage from the contaminated Sparta aquifer into the alluvial aquifer where the Jackson Group (a confining unit) is thin or absent,
- 2. Upward leakage into the alluvial and Sparta aquifers directly or indirectly along a fault, and
- 3. Movement through abandoned oil and gas test holes in the study area.

#### Leakage Through the Jackson Group

The most likely avenue for the intrusion of saltwater into the alluvial aquifer is movement of saltwater from the Sparta aquifer through the Jackson Group where that confining unit has been thinned by erosion. The apparently meandering character of the saltwater band in the alluvial aquifer also suggests such channeling. However, site specific information showing the effectiveness of the Jackson Group as a confining unit are not available.

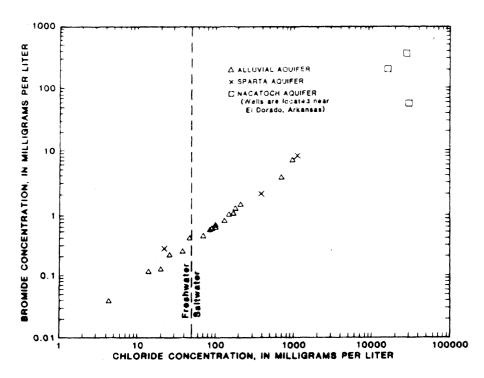


Figure 10.--Bromide versus chloride concentrations of water from wells in the vicinity of Brinkley, Arkansas.

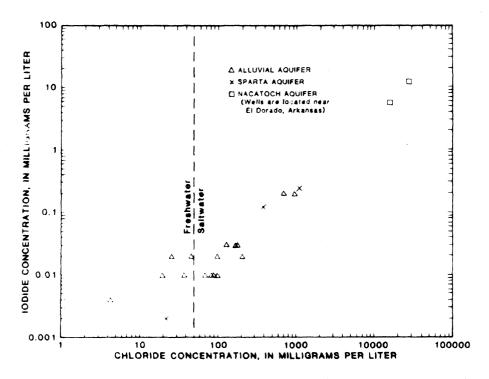


Figure 11.—lodide versus chloride concentrations of water from wells in the vicinity of Brinkley, Arkansas.

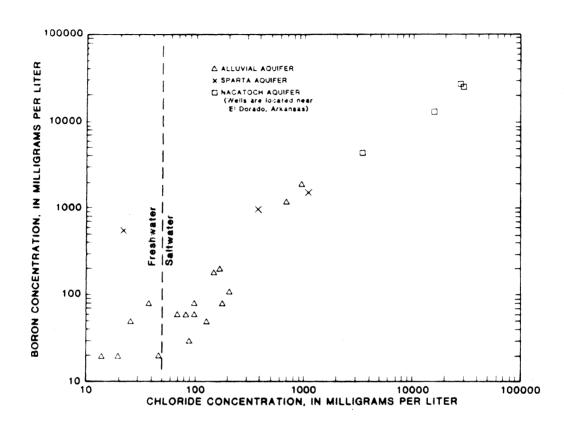


Figure 12.—Boron versus chloride concentrations of water from wells in the vicinity of Brinkley, Arkansas.

#### Faulting

The presence of a fault would help explain the upward intrusion of saltwater from the Nacatoch aquifer through several hundred feet of overlying material, into the alluvial aquifer. A fault just north of the study area is known, however, data were not sufficient to show that the fault extends into the study area. Assuming that any faulting took place, it should have affected both aquifers at the same time. The occurrence of saltwater in the Sparta aquifer is documented as early as 1904 while saltwater intrusion into the alluvial aquifer appears to have started in the late 1940's. This variation with time of intrusion make it unlikely that faulting is the cause of saltwater intrusion into the alluvial aquifer.

#### Gas Test Wells

A review of known abandoned oil and gas test well sites in this area revealed one site as a potential source of contamination. However, water-quality analyses of samples from two wells constructed in the alluvial aquifer (well nos. 170 and 171) adjacent to this test well location (well I on figure 2) yielded chloride concentrations of 90 and 130 mg/L, respectively, considerably less than the 960 mg/L which was determined from samples obtained from a nearby well (well no. 179). All known oil and gas test well locations are shown on figure 2. Available data for these wells are shown in table 3 (from Branner, 1937 and Dobie and Hughes, 1956). All of these wells were dry and are now abandoned. These wells generally were plugged and the upper casing removed. Therefore today there is little or no evidence of these wells on the surface.

There appears to be little or no correlation between the location of abandoned oil and gas test wells and the occurrence of saltwater contamination in the alluvial aquifer. However, since it appears that most of these wells would be flowing if cased to the land surface, leakage from a well casing cannot be ruled out as a possible future avenue of contamination. The most likely reason for leakage would be corrosion of the steel well casing by saltwater.

#### WATER USE AND DECLINING WATER LEVELS

The alluvial aquifer is a major source of irrigation water supply in the study area. In 1980, ground-water use in Monroe County, in which most of the study was done, was 165.21 million gallons per day (Mgal/d) from the alluvial aquifer (Holland and Ludwig, 1981); a 100 percent increase over 1975 use (Halberg, 1977). Withdrawals from the Sparta aquifer indicate a similar trend with the 1980 use of 1.67 Mgal/d being 100 percent greater than the corresponding 1975 use.

This increased use is reflected in a lowering of water levels in both aquifers. Since predevelopment the potentiometric surface of the alluvial aquifer has declined a maximum of 15 feet at Brinkley (D. J. Ackerman, U.S. Geological Survey, written commun., 1985 and Edds and Fitzpatrick, 1984a). The Sparta aquifer potentiometric surface has declined 28 feet since predevelopment (Reed, 1972 and Edds and Fitzpatrick, 1984b). The spring, 1984 potentiometric surface for the alluvial aquifer in the study area is shown on figure 13.

Table 3.--Description of oil and gas test wells

(Dobie and Hughes, 1956, Branner, 1937)

					-	between the same of the same o	Total	
Well				Location			depth	Flev.
ė	Permit no.	Owner	Lease	Description	Sec. Twp.	p. Rge.	(feet)	(feet)
		,						
< 1	7/8'9		McClain	C NE NG	15 4N	214	2527	200
<b>~</b>	Core hole	Seaboard Oil Co.	1 1	NE NE NE	9 2 3 8		2930	;
ပ	Core hole	Seaboard Oil Co.	-	SW NW SW	11 2N	2 M	3156	182
۵	Core hole	Seaboard 011 Co.	-	SW SW SE			3290	.
ω)	Core hole	Seaboard Oil Co.		as as as			2335	ļ
Œ,	986,6	Smith, J. P., 011 Co.	J. P. Smith-Sims	620 W 600' S NEC SW NE			2701	
9	8,225	Sohio Prod. C.	Dewell Gann				3164	170
Ŧ	9,675	Stratton Drilling Co.	Bessie Moore	680' S 330' E NWC SW	26 2N		3010	176
_	6,614	Burch, John G.,	Stinson, M. R.	330' N 330' W SEc SW	27 4N		2240	
ר	1	Clarendon Bowler Well	Jefferies	SWc SW SE			3008	17.5
		& Const. Co.						`
×	1	Prairie 0 & G Co.	Jeffery	****	13 1N	5.PM	3070	i
_	1,010	Traffic 0 Co.	Clark	150' N 150' W SEC NE NE	23 3N		2498	188.2
X	9,250	Petroleum Products	R. R. Tombaugh		N 7 C		2002	
		Corp.						
z	9,311	Barnwell, R. S.	R. R. Tombaugh	100' S 1980' W NEC	80 N.7	3	2671	214
0	9,054	Petroleum Products Co.	Engler Bros.	C SE SE SE	17 4N		2725	602
			(Caples)					
۵.	9,846	Garson-Sands	L. E. Porter	660' S 330' W NEC	20 4N	A	2754	210
~	6,138	Ark Natural Gas Co.	Swearingen	2100' N 970' E SEc	14 5N	1	3043	215
~	1	Jennings, J. W.	Whitted, F. T.	NA NA	28 4N		2745	224
		(Whitted F. T., Tr)						
S	ì	Jennings, J. W.	Whitted, F. T.	NA NA	28 4N	7	2325	212
		(Pace, P. B.)						!
۲	6,431	Fields, Jenkins 6	Wellford	265' N 165' W SEC NE NE	29 4N	3	625	
		Jones						
>	7,495	Hargraves, D. T., Jr.	J. T. Wellford	575' W 450' S NEC SE NE	29 4N	14	2265	210
:	, , , ,	Ir. (U.S. 011 Corp.)	,					
>	/ <b>,</b> /11	Hargraves, D. T., Jr., Tr. (U.S. Oil Corp.)	M. J. Peters	C NE NE NE	21 4N	3	2505	202

As water levels decline in the alluvial aquifer the opportunity for upward intrusion of saltwater from underlying sources increases. During the spring of 1983 the potentiometric surface of the Sparta aquifer was approximately equal to or greater than that of the alluvial aquifer in the northern one-half of the study area. In the remainder of the study area the potentiometric surface of the Sparta aquifer was lower than that of the alluvial aquifer (Edds and Fitzpatrick, 1984a and 1984b). The area where the potentiometric surface of the Sparta aquifer was equal to or greater than that of the alluvial aquifer is shown on figure 13.

#### CONSEQUENCES OF SALTWATER USE

Saltwater may contain a number of minerals which make it unsuitable for for use. Although chloride is used as a criterion for saltwater contamination it is not the only criterion used to judge the quality of ground water for domestic, industrial, or agricultural use. High sodium concentrations may produce adverse effects. Boron, which is often associated with high sodium chloride concentrations, may limit the use of ground waters.

Chloride is not considered a health problem in domestic water supply. However, because of imparting an objectionable taste to the water and possible corrosion of hot water pipes, a level of 250 mg/L chloride has been set by the U.S. Environmental Protection Agency (EPA) as a reasonable goal in National Secondary Drinking Water Regulations, 1979. The EPA (National Academy of Sciences, 1974) states that "in terms of permissible chloride concentration in irrigation water, values up to 20 milliequivalents per liter (708 mg/L) can be used, depending upon environmental conditions, crops, and irrigation management practices." The highest chloride concentration observed in water samples from the alluvial aquifer was 960 mg/L from well no. 179. The highest chloride concentration found in water samples from the Sparta aquifer was 1,100 mg/L from well no. 213.

Sodium is strongly associated with chloride in the saltwater in the Brinkley area. Sodium has been linked to high blood pressure in humans. The EPA (Natural Academy of Sciences, 1974) requires suppliers of water for community public water systems to analyze for sodium although no maximum contaminant level has been set. The National Academy of Sciences (1977) states that "a large proportion of the population, about 3%, is on sodium restricted diets...In many diets allowance is made for water to contain 100 mg/L of sodium." The highest sodium concentration observed in water samples from the alluvial aquifer was 550 mg/L from well no. 179. The highest sodium concentration observed in samples from the Sparta aquifer was 700 mg/L from well no. 213.

Whereas the adverse effect of sodium in drinking water may not be resolved, the adverse effect in irrigation water is clearly documented. Although some crops may be directly affected by high sodium concentrations in irrigation water the most detrimental affect of sodium is its ability to exchange with calcium and magnesium on soil particles, thereby altering the character of the soil. The sodium hazard to soils may be evaluated using the sodium-adsorption-ratio (SAR). This ratio is defined by the equation:

$$SAR = Na^{+} \sqrt{(Ca^{++} + Mg^{++})/2}$$

where  $Na^+$ ,  $Ca^{++}$ , and  $Mg^{++}$  represent the concentrations in milliequivalents per liter of the respective ions.

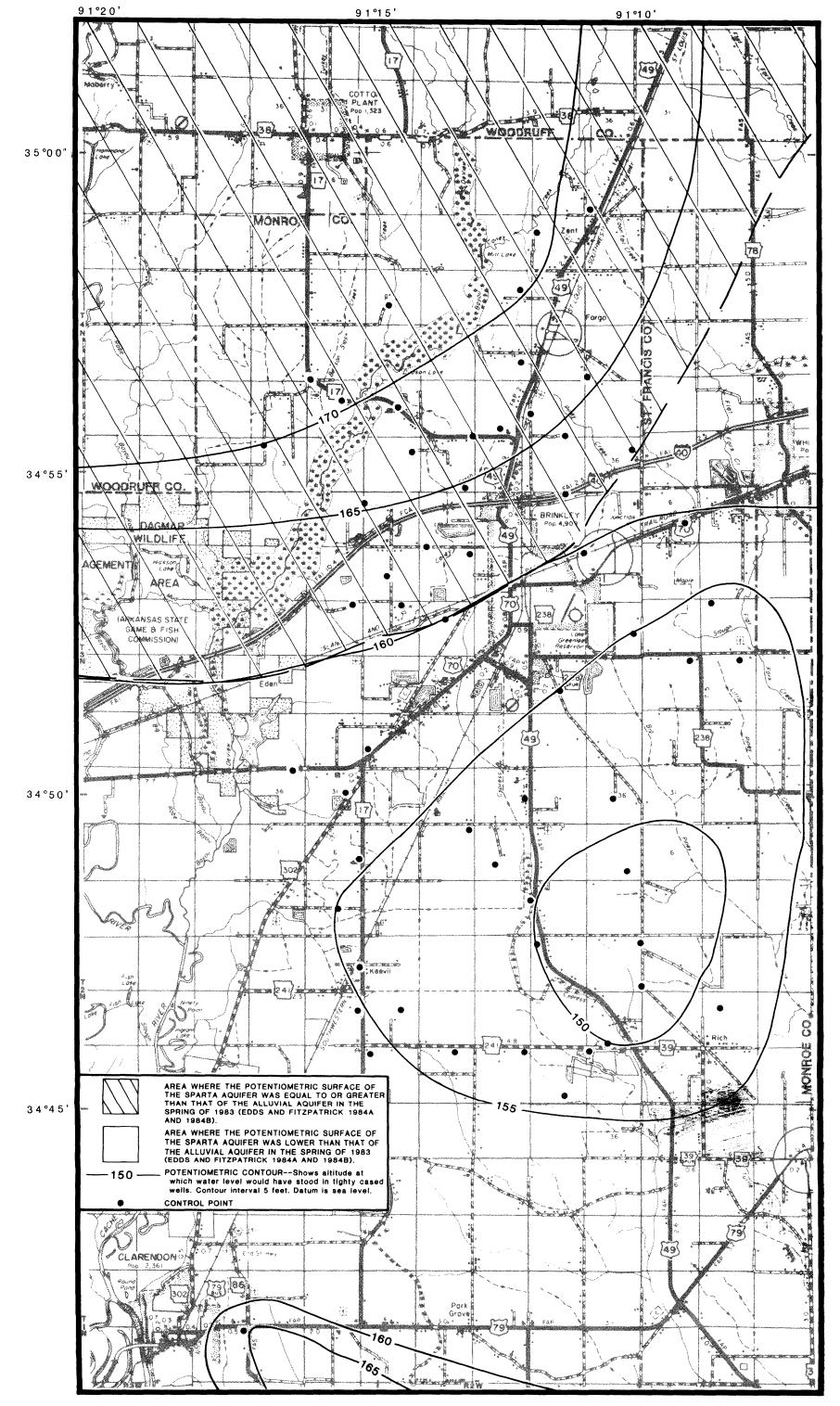


Figure 13.--Potentiometric surface for the alluvial aquifer, spring, 1984.

Another method of determining the suitability of ground water for irrigation is to measure the dissolved salts of the irrigation water. This may be done by measuring the electrical conductivity of the water and expressing the result in microsiemens per centimeter at 25° Celsius (specific conductance ( $\mu$ S/cm) in Attachment A). The U.S. Department of Agriculture (Richards, 1954) has devised a sodium hazard diagram for the classification of irrigation waters incorporating SAR and conductivity. A modification of this diagram is shown in figure 14 and includes all wells for which sufficient data were available to make calculations. Although not many wells have a high to very high classification at this time, the number fitting these classifications would be expected to increase as saltwater intrusion continues.

Boron is often associated with source waters that contribute to saltwater problems. Boron is essential to the normal growth of all plants, but the quantity required is very small (Richards, 1954). The U.S. Environmental Protection Agency (1976) has set a criterion of 750 micrograms per liter (UG/L as B in Attachment A). The maximum boron concentration observed in water from the alluvial aquifer was 1,900 micrograms per liter ( $\mu$ g/L) from well no. 179. The highest boron concentration observed in water from the Sparta aquifer was 1,500  $\mu$ g/L from well no. 213.

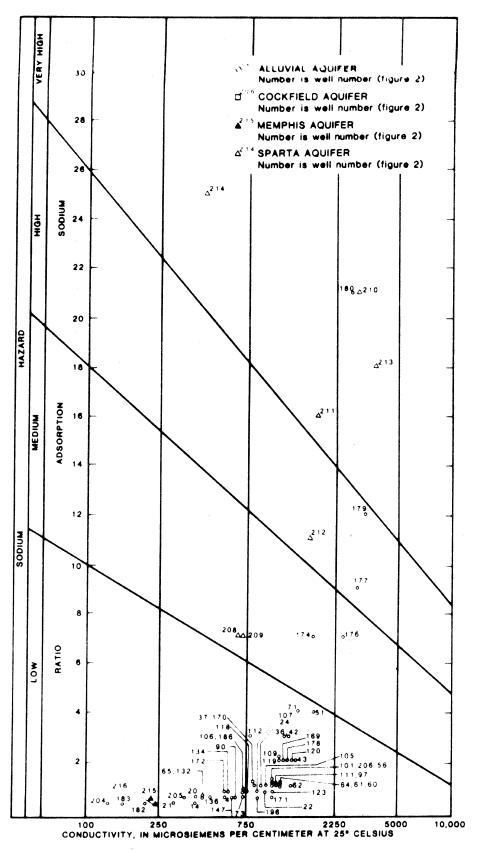


Figure 14.--Modified irrigation classification diagram (after Richards, 1954).

#### SUMMARY AND CONCLUSIONS

Saltwater problems are not new in the Brinkley area. The earliest record of saltwater problems in the alluvial aquifer is 1946. Early (1904) records indicate that a public supply well drilled in the Sparta aquifer contained saltwater (chloride concentration greater than or equal to 50 mg/L). After the late 1940's, saltwater problems appear to have spread rapidly in the alluvial aquifer. Water from an irrigation well in the alluvial aquifer just north of Brinkley had a chloride concentration of 22 mg/L in 1949. In 1982 water from this well had a chloride concentration of 800 mg/L and was in the center of the highest saltwater area found in the study. An area of approximately  $56 \, \text{mi}^2$  is currently affected by saltwater intrusion.

The cause of saltwater intrusion into the alluvial aquifer appears to be upward movement of saltwater from deeper aquifers. Comparisons of chemical analyses of water samples from the alluvial, Sparta, and Nacatoch aquifers indicate that the deeper Nacatoch aquifer is the source of saltwater intrusion. Three possible avenues of intrusion into the alluvial aquifer from the Nacatoch aquifer were explored:

- Upward leakage from the contaminated Sparta aquifer into the alluvial aquifer where the Jackson Group (a confining unit) is thinned or absent,
- 2. Upward leakage into the alluvial and Sparta aquifers directly or indirectly along a fault, and
- 3. Movement of water from the Nacatoch aquifer directly upward into the Sparta or alluvial aquifers through abandoned oil and gas test holes.

The most likely avenue for intrusion of saltwater into the alluvial aquifer is movement of water from the Sparta aquifer through the Jackson Group where that confining unit has been thinned by erosion. Data indicate that the chemical composition of water containing the highest known concentration of saltwater in the alluvial aquifer is similar to the composition of water obtained from the Sparta aquifer. This similarity supports the possibility of alluvial aquifer contamination by the Sparta aquifer.

Leakage of saltwater from the Nacatoch aquifer into the Sparta aquifer along a fault is a possibility. However, evidence does not support similar intrusion into the alluvial aquifer along a fault because of the variation in time of contamination of the two aquifers.

The possibility of saltwater intrusion from the Nacatoch aquifer into the alluvial or Sparta aquifers via abandoned oil and gas test wells cannot be ruled out as a future avenue of contamination. The potentiometric surface of the Nacatoch aquifer is high enough in the study area to force water into either the alluvial or Sparta aquifer through a breached well casing. However, an early (1904) record of saltwater occurrence in the Sparta aquifer probably rules out oil and gas test wells as a source of this contamination as no recorded drilling of oil and gas test wells occurred prior to this time.

If intrusion into the alluvial aquifer is indeed due to upward leakage from the Sparta aquifer, then contamination of the alluvial aquifer can be expected to become no more severe than conditions indicated by the poorest water quality in the Sparta aquifer. Where the water level in the Sparta aquifer is higher than the water level in the alluvial aquifer a fall in water level of the Sparta aquifer (or an increase in water level of the alluvial aquifer) in the area of saltwater contamination would reduce the intrusion from the Sparta aquifer. Likewise, opposite circumstances would increase the intrusion from the Sparta aquifer. Furthermore, intrusion into the Sparta aquifer from a deeper aquifer may not be taking place at this time. Contamination could have taken place along an open fault in the past and this fault could have filled in, removing the source of intrusion. In this case, water quality from both the Sparta and the alluvial aquifers would be expected to improve with continued pumping.

Additional monitoring of wells in the area would be beneficial to determine if saltwater concentrations are increasing and to monitor in which direction, if any, the saltwater is spreading. A ground-water model could help predict future areas of saltwater intrusion. Drilling of additional test wells into the Sparta aquifer could help determine if this aquifer is still being contaminated from below.

#### REFERENCES

- Bedinger, M. S., and Sniegocki, R. T., 1976, Summary appraisals of the Nation's ground-water resources--Arkansas-White-Red Region: U.S. Geological Survey Professional Paper 813-H, 31 p.
- Boswell, E. H., Cushing, E. M., and Hosman, R. L., 1968, Quaternary aquifers in the Mississippi Embayment, with a discussion of quality of the water by H. G. Jeffery: U.S. Geological Survey Professional Paper 448-E, 15 p.
- Boswell, E. H., Moore, G. K., MacCary, L. M., and others, 1965, Cretaceous aquifers in the Mississippi Embayment, with discussions of quality of the water by H. G. Jeffery: U.S. Geological Survey Professional Paper 448-C, 37 p.
- Branner, G. C. (compiler), 1937, List of Arkansas oil and gas wells: Arkansas Geological Survey Information Circular 10, 103 p.
- Broom, M. E., and Lyford, F. P., 1981, Alluvial aquifer of the Cache and St. Francis River hasins, northeast, Arkansas: Open-File Report 81-476, 48 p.
- Bryant, C. T., Ludwig, A. H., and Morris, E. E., 1985, Ground-water problems in Arkansas: U.S. Geological Survey Water-Resources Investigations Report 85-4010, 24 p.
- Caplan, W. M., 1954, Subsurface geology and related oil and gas possibilities of northeastern Arkansas: Arkansas Division of Geology Bulletin 20, 124 p.
- Cushing, E. M., 1966, Map showing altitude of the base of freshwater in Coastal Plain aquifers of the Mississippi Embayment: U.S. Geological Survey Hydrologic Investigations Atlas HA-221, 1 sheet.
- Cushing, E. M., Boswell, E. H. and Hosman, R. L., 1964, General geology of the Mississippi Embayment: U.S. Geological Survey Professional Paper 448-B, 28 p.
- Dobie, W. L., and Hughes, H. D., 1956, List of Arkansas oil and gas wells: Arkansas Geological and Conservation Commission Supplement to Information Circular 10, 54 p.
- Edds, Joe, and Fitzpatrick, D. J., 1984a, Maps showing altitude of the potentiometric surface and changes in water levels of the alluvial aquifer in eastern Arkansas, spring 1983: U.S. Geological Survey Water-Resources Investigations Report 84-4264, 1 sheet.
- 1984b, Maps showing altitude of the potentiometric surface and changes in water levels of the Sparta Sand and Memphis Sand aquifers in eastern Arkansas, spring 1983: U.S. Geological Survey Water-Resources Investigations Report 84-4265, 1 sheet.
- Feth, J. H., 1981, Chloride in natural continental water—a review: U.S. Geological Survey Water-Supply Paper 2176, 30 p.
- Fitzpatrick, D. J., 1985, Occurrence of saltwater in the alluvial aquifer in the Boeuf-Tensas basin, Arkansas: U.S. Geological Survey Water-Resources Investigations Report 85-4029, 1 sheet.
- Halberg, H. N., 1977, Use of water in Arkansas, 1975: Arkansas Geological Commission Water Resources Summary Number 9, 28 p.
- Halberg, H. N., and Reed, J. E., 1964, Ground-water resources of eastern Arkansas in the vicinity of U.S. Highway 70: U.S. Geological Survey Water-Supply Paper 1779-V, 38 p.
- Haley, B. R., 1976, Geologic map of Arkansas: U.S. Geological Survey.

- Hall, A. P., and Holland, T. W., 1984, Water use in Arkansas, 1981: U.S. Geological Survey Water-Resources Investigations Report 84-4070, 1 sheet.
- Holland, T. W., and Ludwig, A. H., 1981, Use of water in Arkansas, 1980: Arkansas Geological Commission Water Resources Summary No. 14, 30 p.
- Hosman, R. L., 1969, Geohydrology of the Coastal Plain aquifers of Arkansas: U.S. Geological Survey Hydrologic Investigations Atlas HA-309, 1 sheet.
- Hosman, R. L., Long, A. T., Lambert, T. W., and others, 1968, Tertiary aquifers in the Mississippi Embayment, with discussions of quality of the water by H. G. Jeffery: U.S. Geological Survey Professional Paper 448-D, 29 p.
- Krinitzsky, E. L. and Wire, J. C., 1964, Ground water in alluvium of the lower Mississippi Valley (upper and central areas), U.S. Army Engineer Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi Technical Report no. 3-658, v. I and II, 100 p.
- Maxwell, G. R., Harris, Cornelius, and Gore, W. A., 1978, Soil survey of Monroe County, Arkansas: U.S. Department of Agriculture, Soil Conservation Service, 83 p.
- National Academy of Sciences, 1977, Drinking water and health, 939 p. National Academy of Sciences, National Academy of Engineering, 1974, Water quality criteria, 1972: Ecological Research Series EPA.R3.73.033, U.S. Government Printing Office, Washington, D.C., 594 p.
- Payne, J. N., 1968, Hydrologic significance of the lithofacies of the Sparta Sand in Arkansas, Louisiana, Mississippi and Texas: U.S. Geological Survey Professional Paper 569-A, 17 p.
- Pearson, G. A., 1960, Tolerance of crops to exchangeable sodium: U.S. Department of Agriculture Information Bulletin No. 216, 4 p.
- Petersen, J. C., Broom, M. E., and Bush, W. V., 1985, Geohydrologic units of the Gulf Coastal Plain in Arkansas: U.S. Geological Survey Water-Resources Investigations Report 85-4116, 20 p.
- Plebuch, R. O., 1962, Ground-water temperatures in the Coastal Plain of Arkansas: Arkansas Geological and Conservation Commission Water Resources Summary No. 2, 2 p.
- Reed, J. E., 1972, Analog simulation of water-level declines in the Sparta Sand, Mississippi Embayment: U.S. Geological Survey Hydrologic Investigations Atlas HA-434, 1 sheet.
- Richards, L. A., ed., 1954, Diagnosis and improvement of saline and alkali soils: United States Department of Agriculture Handbook No. 60, 160 p.
- Skougstad, M. W., Fishman, M. J., Friedman, L. C., Erdman, D. E., and Duncan, S. J., 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter Al, 626 p.
- Speer, P. R., Hines, M. S., Calandro, A. J., and others, 1966, Low-flow characteristics of streams in the Mississippi Embayment in southern Arkansas, northern Louisiana, and northeastern Texas, with a section on quality of the water by H. G. Jeffery: U.S. Geological Survey Professional Paper 448-G, 40 p.
- Stephenson, L. W., and Crider, A. F., 1916, Geology and ground waters of northeastern Arkansas, with a discussion of the chemical character of the waters by R. B. Dole: U.S. Geological Survey Water-Supply Paper 399.
- Terry, J. E., Hosman, R. L., and Bryant, C. T., 1979, Summary appraisals of the Nation's ground-water resources--Lower Mississippi region: U.S. Geological Survey Professional Paper 813-N. 41 p.

- U.S. Environmental Protection Agency, 1976, Quality criteria for water, Washington, D.C., 256 p.
- \_\_\_\_\_1979, National secondary drinking water regulations, Office of Drinking Water, 37 p.
- U.S. Geological Survey, 1977, Chemical and physical quality of water and sediment: Chapter 2 of National Handbook of Recommended Methods for Water Data Acquisition, 149 p.
- Westerfield, P. W., 1977, Well records, water-level measurements, logs of test holes, and chemical analyses of ground water in the Cache River alluvial aquifer-stream system, northeast Arkansas, 1946-76: U.S. Geological Survey Open-File Report 77-402, 166 p.
- Winter, T. C., 1976, Numerical simulation analysis of the interaction of lakes and ground water: U.S. Geological Survey Professional Paper 1001, 45 p.
- Wood, W. W., 1976, Guidelines for collection and field analysis of ground-water samples for selected unstable constituents: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 1, Chapter D2, 24 p.

#### ATTACHMENT A .-- WATER-OUALITY DATA FOR WELLS IN THE VICINITY OF BRINKLEY, ARKANSAS

WELL NO. 1 LOCAL NO. 01N01W04DAA1 SITE 1D 344331091062001 ALLUVIAL ADULFER

		MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE	TEMPER- ATURE	SPE- CLFIC CON- DUCT- ANCE	CHLO- RIDE, DIS- SOLVED (MG/L	
DATE	TIME		NGVD) (72000)	(neg c) (non1n)	(µ9/cm) (00095)	AS CL) (00940)	
AUG , 198	33						
15	1705	6	187.00	17.0	1020	57	

WELL NO. 2 LOCAL NO. 01N01W07ACC1 SITE ID 344249091085201 OWNER - BATEMAN BROTHERS ALLUVIAL AOUIFER

DATE	TIME	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( us/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	98 <b>3</b> 1200	6	183.00	18.0	460	11

WELL NO. 3 LOCAL NO. 01N01W08BCD1 SITE ID 344247091071001 OWNER - WILEY MEACHAM ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	
JUL , 19	83 1200	6	182.00	18.0	790	34	

WELL NO. 4 LOCAL NO. 01/01/21CDC1 SITE ID 344/034/091071001 OWNER - ALOYS RINEHART ALLUVIAL AQUIFER

DATE	3	ፐ፤ΜΕ	:	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DE O WEI TO (FI	PTH F LL, TAL EET)	R (G	LOW ATE PM) 058)	TEMP ATU (DEG (OOO	RE (C)	SPE CIF CON DUC ANC ( µS/ ( OOO	FIC IT- IE (cm)	UNI	AND- RD	COLOR (PLAT- INUM- COBALT UNITS) (00080)
JUL ,		3														
13 JUL.		, -	-	6	181.00	134	4	129	)	1	7.0		520			
19.		1515		6				1330	ו	1	7.0		556		7.2	2
				ALKA- LINITY FIELD (MG/L	BICAR- BONATE FET-FLD (MG/L	BO	AR- NATE -FLD	DIO:	RBON KIDE IS- LVED	HAR NES (MG	S	HAR NES NONC BONA	S,	DIS	CIUM S- LVED	MAGNE- SIUM, DIS- SOLVED
DATE	}	TIME		AS CACO3) (00410)	AS HCO3) (00440)	(MC <b>AS</b> (	:03)	AS (	7/L 202) 405)	AS CAC (009	03)	(MG	/L (03)	(MC	G/Ĺ CA)	(MG/L AS MG) (00925)
JUL,	1974	4														
19	•	1515		262	320		0	:	32		270		8	75	5	20
DATE		TIME		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SOR	ON	SI DI	K)	CHLI RIDI DIS- SOL' (MG, AS (	E, VED /L CL)	SULF DIS SOL (MG AS S	- VED /L O4)	SULE TOT (MG AS (007	AL (/L S)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
JUL , 19		1515		15	11		.4	2	.6	10		2	6		•1	<.10
	NATE		TIME	PHO TO (M AS	OS- R1 RUS, D TAL SC G/L (M P) AS	UIO- IDE, DIS- DIVED GG/L G F)	DI: SOI (MC AS	LVED G/L	RES AT DEC D SOI	IDS, IDUE 180 G. C IS- LVED G/L)	TUEN DI SOI	OF STI- NTS, IS- LVED G/L)	SO (UI AS	ON, IS- LVED G/L FE) 046)	NE D SO (U AS	NGA- SE, IS- LVED G/L MN)
٠.	лп., 19		1515		.590	.20		36		332		350		4600		610

WELL NO. 5. LOCAL NO. 01N02W01CCC1 SITE ID 344316091103001 OWNER - OHINCY MURPHY ALLUVIAL ACHIFER

			FLEV.			
			OF LAND		SPE-	CHLO-
			SURFACE		CIFIC	RIDE,
			DATUM		CON-	DIS-
DATE	TIME	MEDIUM	(FT. ABOVE NGVD)	TEMPER- ATURE (DEG C)	DUCT- ANCE (µS/cm)	SOLVED (MG/L AS CL)
			(72000)	(00010)	(00095)	(00940)
AUG , 19	183					
16	1520	6	181.00	17.0	610	21

WELL NO. 6 LOCAL NO. 01N02W01DAB1 SITE ID 344337091093901 ALLUVIAL ACHIFER

DATE	TIME	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG G) (OOO LO)	ANCE (µS/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19 27	83 1200	6.	185.00	18.0	700	29
WELL NO	. 7	LOCAL NO. 018	NO2WO4ACBI LFER	. SITE ID	34435909	1131001
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 198	1 <b>2</b> 00	. 6	186.00	18.5	425	12
WELL NO.	8	LOCAL NO. 01N ALLUVIAL AQUI		SITE ID	344352091	140701
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 198	3 1410	6	186.00	17.0	590	24
WELL NO.	9	LOCAL NO. 01NO ALLUVIAL AOUII		SITE ID	344413091	154501
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (#S/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 1983	3 1320	6	182.00	17.5	570	29

WELL NO. 10 LOCAL NO. 01N02W10BCA1 SITE ID 344258091122601 OWNER - ROY SCHENK ALLUVIAL AOUIFER

DATE  JUN , 19 25	TIME 75 1330		FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)
WELL NO	• 11	LOCAL NO. 011		SITE ID	344315091	1111201
DATE	тіме	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 198	1 <b>2</b> 00	6	186.00	18.0	440	6.8
WELL NO.	12	LOCAL NO. 01N		SITE ID	344245091	103001
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATHM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 198 26	3 1200	6	182.00	18.0	450	7.7
WELL NO.	13	LOCAL NO. OIN ALLUVIAL AQUI		SITE ID	344223091	103101
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. AROVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL., 1983	3 1200	6	182.00	18.5	465	8.7

WELL NO. 14 LOCAL NO. 01N02W14DAA1 SITE ID 344158091103701 OWNER - GEISLER ALLUVIAL AOUIFER

	DATE	TIME	MEDIUM A	C C EMPER+ DI ATURE AI DEG C) (µ3	NCE / S/cm) UNI	PH ( TAND- I ARD C ITS) U	OLOR LI PLAT- F NUM- ( OBALT NUTS) C	NITY BO IELD FET MG/L (MAS /ACO3) HO	T-FLD BC 4G/L FE' AS (1 CO3) AS	CAR→ DI ONATE I-FLD S HG/L ( CO3) AS	ARBON OXIDE DIS- OLVED MG/L CO2) 0405)
	JUN , 196 27	1 —	6	17.0	<b>39</b> 0	7.4	15	197	240	0	15
	DATE	TIME	HARD- NESS (MG/L AS CAGO3) (00900)		CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
	JUN , 27		- 200	, 0	59	12	8.7	9	.3	1.8	
	DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	(MG/L AS SO4)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
	JUN , 27		6.0	8.8	,11	.30	15	256	230	0	
			WELL NO. 15		0. 01NO2W2 AQUIFER	OABB1 SI	re in 344	1320911406	OI OWNER	- LONNIE	JOHNSON
DATE	: ТІМЕ	MED I	ELEV. OF LAND SURFACE DATUM (FT. UM ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
JUN ,	. 1975 • 1200	6	180.00	100	17.5	420	7.8	220	0	5.5	12

WELL NO. 16 LOCAL NO. 01N02W22DAB1 SITE ID 344103091115501 OWNER - PARK GROVE CHURCH ALLUVIAL AOUIFER

DATE SEP , 195	TIME	MEDIUM	•	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DHCT- ANGE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
17		6	180.00	20.50	64	6.7	21	26	0	8.2
DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L GACO3)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
SEP , 195	3	15	0	4.5	.80	3.0	7.0	.09	130	440
		WELL NO.		NO. 01NO		SITE ID	344254091	165401 OW	NER - BAT	EMAN BROTHERS
	DATE	TIME	MEDIUI	ELEV OF LA SURFA DATI (FT M ABOV NGVE (7200	AND ACE DEP' IM OF WELL VE TOTA O) (FEI	L, TEMP AL ATU ET) (DEG	RE ANCI	IC RIDI - DIS- T- SOLV E (MG, cm) AS (	E, - VED /L CL)	
	JUL , 26		6	186.	.00 125	1:	8.0	315 2.	.6	
		WELL NO.		NO. OING		SITE ID	344148091	164801 OW	NER – EAR	L UMHOLTZ
	DATE	TIME	MEDIUN	ELEV OF LA SURFA DATU (FT 4 ABOV NGVD (7200	AND ACE DEPT IM OF TOTA O) (FEE	TEMPI L ATUI	RE ANCI	IC RIDE - DIS- F- SOLV E (MG/ cm) AS (	; /ED /L CL)	
	AUG ,		6	187.	00 110	13	7.0	335 .	.80	

## WELL NO. 19 LOCAL NO. 01N03W14RAB1 SITE ID 344227091173801 ALLUVIAL AOUIFER

		DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
		JUL., 198:	1200	6	176.00	18.0	310	3.0		
		WELL NO.		CAL NO. 01		SITE ID	344125091	.173601 OWNE	R - CROEN	N NELSON
DATE TIN	1E	MEDIUM R.	ATE A' PM) (Di	CO	FIC N- PF CT- (STA CE AF /cm) UNII	NND- INT LD COI LS) INI	AT- FIE M- (MG BALT AS	TY BONAT LD FET-FL C/L (MG/L AS CO3) HCO3)	E CAR- D BONAT FET-FL (MG/L AS CO3	E DIS- D SOLVED (MG/L ) AS CO2)
JUL , 1974 24 111	.5	6 1190	)	17.0	386	7.4	5	176 216	n	0 14
DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	AD- SORP- TION RATIO	SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) 00940)
JUL., 19 24	74	170	(	51	11	11	12	.4	8.7	. 10
DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVEE (MG/L AS N) (00631)	PHOS- PHORUS, TOTAL (MG/L AS P)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUENTS, DIS-SOLVED ( (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) D1056)
JUL., 19 24	74 1115	16	<.10	.320	.20	44	247	260	4100	2000

WELL NO. 21 LOCAL NO. 01N03W24BBD1 SITE ID 344121091164201 OWNER - W. M. LEE ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAI (FEET	TEI A'		SPE- CIFIC CON- DUCT- ANCE µS/cm) 00095)	PH (STAND- ARD NITS) (00400)	( F - IN C(	LOR L PLAT- NIM- BALT HITS)	ALKA- INITY FIELD (MG/L AS CACO3) 00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
JUL , 196	ı —	6	186.00	123		17.0	292	7.2	2	5	138	170
DATE	Time	CAR BONA FET-F (MG/ AS CO (0044	TE DI LD SOL L (MG 3) AS C	IDE H S- N VED ( /L O2) (	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR BONATE (MG/L CACO3	CALC DIS SOL (MG	IUM 5 - I VED 50 /L (N CA) AS	AGNE- SIUM, DIS- DLVED MG/L S MG) 1925)	SODIUM DIS- SOLVED (MG/L AS NA	PERO ) SOD	IUM
JUL ,			0 1	7	140		1 36	1	2	7.0		10
DATE	TIME	SODI AD SORP TIO RATI	- SI - DI N SOL O (MG AS	UM, F S- D VED S /L ( K) A	CHLO- RIDE, DIS- SOLVED MG/L AS CL)	SULFAT DIS- SOLVE (MG/L AS SO4 (00945	DI: D SOL' (MG	N, SUN ATE CON S- TUF VED [ /L S( N) (N	IDS, OF ISTI- ENTS, DIS- DLVED IG/L)	IRON, DIS- SOLVE (UG/L AS FE	NES DI D SOL (UG ) AS	S- VED /L MN)
JUL , 14			.3 1	.6	7.5	8.	4	.18	210	490	0	0

#### WELL NO. 22 LOCAL NO. 02NOIW04CRAI SITE ID 344857091065301 OWNER ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)
AUG , 1	983										
03	1130	6	189.00	17.5	900	7.2	420	460	0	46	410
15	1415	6	189.00	17.0	890						
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG , 19	983										
03	1130	0	110	33	36	16	.8	2.2	26	66	<.10
15	1415								31		
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (HG/L AS %) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 19	983										
03	1130	.20	31	510	540	4400	520	.020	12	50	.22

WELL NO. 23 LOCAL NO. 02N01W05AAB1 SITE ID 344923091071301 ALLUVIAL AQUIFER

AUG , 19	983		(72000)	(00010)	(00095)	(00940)
DA <b>T</b> E.	TIME	MEDIUM	OF LAND SURFACE DATUM (FT. ABOVE NGVD)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE ( \u0362S/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)

# WELL NO. 24 LOCAL NO. 02N01W07CCC2 SITE ID 344739091091802 ALLUVIAL AOUIFER

DIL   1974   24   0850   6	DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( µS/cm) (00095)	PH (STAND- ARD NITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
JUL , 1983   26   1200			4			1910	14.8	993	7 1	1	107	490
26 1200 6 191.00 140 18.0 770			n			1010	10.0	903	/•1	,	391	400
CAR-   DIOXIDE   HARD-   NESS,   CALCIUM   SIUM,   SODIUM,   DIS-   SORP-   DIS-   D			6	191.00	140		18.0	770				
24 0850 0 61 360 0 97 29 52 24 1 2.0    NITRO- GEN, FLUO- SILICA, RESIDUE SUM OF MANGA-RIDE, SULFATE NO2+NO3 PHOS- RIDE, DIS- DIS- SOLVED (MG/L MG/L AS SOLVED SOLVED SOLVED (MG/L MG/L) AS FE) AS MN)    JUL , 1974	DATE	TIME	BONATE FET-FLD (MG/L AS CO3)	DIOXIDE DIS- SOLVED (MG/L AS CO2)	NESS (MG/L AS CACO3)	NESS, NONCAR- BONATE (MG/L CACO3)	DIS- SOLVED (MG/L AS CA)	SIUM, DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	SODIUM	AD- SORP- TION RATIO	SIUM, DIS- SOLVED (MG/L AS K)
NITRO-   CHLO-   CEN,   FLUO-   SILICA,   RESIDUE   SUM OF   MANGA-	JUL , 19	974										
CHLO-	24	0850	0	61	360	0	97	29	52	24	1	2.0
24 0850 42 27 .55 .280 .20 31 465 520 2900 310 JUL , 1983	DATE	TIME	RIDE, DIS- SOLVED (MG/L AS CL)	DIS- SOLVED (MG/L AS SO4)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHORUS, TOTAL (MG/L AS P)	RIDE, DIS- SOLVED (MG/L AS F)	DIS- SOLVED (MG/L AS SIO2)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	DIS- SOLVED (UG/L AS FE)	NESE, DIS- SOLVED (UG/L AS MN)
	24	0850	42	27	.55	.280	.20	31	, 465	520	2900	310
			42									

### WELL NO. 25 LOCAL NO. 02NOLWORAAC1 SITE ID 344817091072001 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L- AS CL) (00940)
JUL , 19		6	185.00	18.0	915	44

WELL NO. 26 LOCAL NO. 02NOLW09DAC1 SITE ID 344755091061901 ALLUVIAL ADULFER

DATE JUL , 1983	TIME	MEDIUM	OF LAND SURFACE DATUM (FT. ABOVE NGVD)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (µS/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
			(72000)	(00010)	(00095)	(00940)
JUL , 19 28	1200	6	185.00	18.0	930	37

WELL NO. 27 LOCAL NO. 02N01W18CCB1 SITE ID 344655091091901 OWNER - JERESA LAND CO. ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( \u2228S/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JIIL., 19	83 1200	6	190.00	18.0	865	71

WELL NO. 28 LOCAL NO. 02N01W19CDA1 SITE ID 344600091084701 OWNER - KENNETH FRIAR ALLUVIAL AQUIFER

			ELEV.	•		
			OF LAND		SPE-	CHLO-
			SURFACE		CIFIC	RIDE,
			DATUM		CON-	DIS-
			(FT.	TEMPER-	DUCT-	SOLVED
		MEDIUM	ABOVE	ATURE	ANCE	(MG/L
DATE	TIME		NGVD)	(DEG C)	(µS/cm)	AS CL)
			(72000)	(00010)	(00095)	(00940)
Jul. , 19	983					
26	1200	6	196.00	18.0	840	45

WELL NO. 29 LOCAL NO. 02N01W20DAB1 SITE ID 344613091072601 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	OF LAND SURFACE DATUM (FT. ABOVE NGVD)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
ЈИ <b>Т. ,</b> 19	1200	6	(72000)	18.0	(00095)	(00940)

WELL NO. 30 LOCAL NO. 02N01W31AAA1 SITE ID 344456091081601 ALLUVIAL AGUIFER

ELEV. OF LAND SURFACE SPE-CHLO-RIDE, CIFIC DATUM CON-DIS-TEMPER-DUCT-SOLVED (FT. MEDIUM ATURE ANCE (MG/L ABOVE NGVD) (DEG C) (µS/cm) AS CL) DATE TIME (72000) (00010) (00095) (00940) AUG , 1983 197.00 950 48 17.5 16... 1620

WELL NO. 31 LOCAL NO. 02N01W32DCA1 SITE ID 344415091073501 ALLUVIAL AQUIFER

ELEV. OF LAND SPE-CHLO-SURFACE CIFIC RIDE. DATUM DIS-(FT. TEMPER-DUCT-SOLVED MEDIUM AROVE ATURE ANCE (MG/L AS CL) DATE TIME NGVD) (DEG C) (µS/cm) (00010) (00095) (72000) AUG , 1983 1625 193.00 17.5 810

WELL NO. 32 LOCAL NO. 02N02W02BBA1 SITE ID 344925091111301 OWNER - ROBERT FITTS ALLUVIAL AQUIFER

ELEV. OF LAND CHLO-SPE-SURFACE DEPTH CIFIC RIDE. DATUM OF CON-DIS-(FT. WELL, TEMPER-DUCT-SOLVED MEDIUM ABOVE TOTAL ATURE ANCE (MG/L DATE TIME (FEET) (72008) (MS/cm) (00095) AS CL) (00940) NGVD) (DEG C) (72000) (00010) AUG , 1984 08... 1730 6 195.00 125 18.0 782 50

WELL NO. 33 LOCAL NO. 02N02W03CAA1 SITE ID 344853091120001 ALLUVIAL AQUIFER

ELEV. OF LAND SPE-CHLO-SURFACE CIFIC RIDE, DATUM CON-DIS-(FT. TEMPER-DUCT-SOLVED MEDIUM ATURE ABOVE ANCE (MG/L DATE TIME NGVD) (DEG C) (uS/cm) AS CL.) (72000) (00010) (00095) (00940) AUG , 1984 09... 0815 6 191.00 17.0 1470 260

WELL NO. 34 LOCAL NO. 02N02W04AAA1 SITE JD 344926091122901 OWNER - ED DOPPLE ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	984 0930	6	189.00	122	17.5	1100	120

WELL NO. 35 LOCAL NO. 02N02W04DDD1 SITE ID 344833091122901 OWNER - VIRGIL ENGLER ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 1	982	6	186.00	17.5	1620	320

WELL NO. 36 LOCAL NO. 02N02W05CBB1 SITE ID 344901091143401 OWNER - GLEN FULLER ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
MAY , 19	75								
20		6	189.00	135			1650		
23		6	189.00	135			1660		
JUN									
03		6	189.00	135			1680		
29	1000	6	189.00	135	135		1650	7.5	374
JUL									
02		6	189.00	135			1660	7.4	
12		6	189.00	135				7.6	
12	1100	6	189.00	135			1680	7.6	381
SEP , 19	82								
09		6	189.00	135			1280		
JUL , 19	83								
28	1200	6	189.00	135		18.5	1020		
AUG							7		
02	1300	6	189.00	135	_	18.0	1270	7.3	420

WELL NO. 36 LOCAL NO. 02N02W05CBB1 SITE ID 344901091143401 OWNER - GLEN FULLER ALLUVIAL AQUIFER - CONTINUED

DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JUN , 19									
29 JUL , 19	75	460	0	23	410	37	110	33	150
12 AUG , 198	1100 83	460	0	19					150
02	1300	470	0	37	380	0	100	32	110
DATE	TIME	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
MAY , 197	75								
23 JUN					230				
29 JUL	1000		3		230				
02	1100				230 240			***	-
SEP , 198					24()				
09 JUL , 198					220				
28 AUG	1200	-			160				
02	1300	38	3	3.0	170	9.2	<.10	.30	30
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
MAY , 197	5								
20		1070							
23 JUN		1080							
03 29	1000	1090		6300					
JUL	• 171.77			0.300					
02 AUG , 198	3	1080							
02	1300	652	690	4600	320	•030	19	200	1.0

WELL NO. 37 LOGAL NO. 02N02W06AAD1 SITE ID 344920091144201 OWNER - FULLER FARMS ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE PET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
SEP , 1	982	. 6	189.00	110	17.5	750					
AUG , 1	983	. 0	107.00	1117	17.5	7 30					
02	1330	6	189.00	110	17.5	812	7.3	340	370	0	29
DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
SEP , 19	982									95	
AUG , 19	983					-				45	
02	1330	310	0	84	25	42	22	1	2.0	70	10
DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 19	983 1330	.86	.30	30	450	450	3400	.010	13	60	.44

WELL NO. 38 LOCAL NO. 02N02W06DCB1 SITE ID 344845091150901 OWNER - FULLER FARMS ALLUVIAL AQUIFER

DATE	TIME	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	82	6	186.00	130	17.5	1030	200

WELL NO. 39 LOCAL NO. 02N02W06DDA1 SITE ID 344843091143701 ALLUVIAL ADMIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DHCT- ANCE ( µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19						
28	1200	6	189.00	18.5	1420	240

WELL NO. 40 LOCAL NO. 02N02W07ACD1 SITE ID 344810091145601 OWNER - FULLER FARMS ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)

SEP , 1982 10... -- 6 186.00 17.5 1450 260

WELL NO. 41 LOCAL NO. 02N02W118BA1 SITE ID 344830091111501 OWNER - GARY F. SMITH ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	
AUG , 19	984 1800	6	194.00	134	17.5	1320	180	

WELL NO. 42 LOCAL NO. 02N02W1188D1 SITE ID 344818091111801 OWNER - SAM MEDFORD ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)
JUN , 19											
22 AUG	1650	6	192.00	17.5	1110						
02	1530	6	192.00	17.5	1270	7.3	440	500	0	40	390
11	1350	6	192.00	17.5	1280						
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD— SORP— TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
JUN . 19	83										
22 AUG	1650	-	***						160	*****	
02	1530	0	100	34	110	38	3	2.6	150	20	<.10
11	1350								150		
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 19											
02	1530	.20	28	685	700	4700	380	<.010	18	180	.98

WELL NO. 43 LOCAL NO. 02N02W11CBB1 SITE ID 344802091111901 OWNER - SAM MEDFORD ALLUVIAL AQUIPER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
SEP , 1	975								
10 SEP , 1	982	6	195.00	93.00	93.0	18.0	10 <b>9</b> 0	7.3	364
10 AUG , 1		6	195.00	93.00	-	17.0	1240	-	_
02	1615	6	195.00	93.00		22.0	1450	7.3	480
11	1320	6	195.00	93.00		17.5	1420		
DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
SEP , 19	975								
10 AUG , 19	93	440	0	35	340	0	86	30	83
()2	1615	530	0	42	520	43	140	42	100
DATE	TIME	PERGENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
ama 10									
SEP , 19 10 SEP , 19			2		100				
10 AUG , 19					160	***			
02	1615	29	2	2.4	210	14	<.10	•20	31
11	1320				140				
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (IIG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS R) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
SEP , 19	75								
10		558		2800					
AUG , 198		825	810	4700	740	•020	12	110	1.6
	1919	043	010	4700	740	•1720	12	110	1.4

WELL NO. 44 LOCAL NO. 02N02WIIDCC1 SITE ID 344741091105401 OWNER - SAM HEDFORD ALLUVIAL AOUIFER

DATE AUG , 198	1230	6	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
WELL NO.	43	LOCAL NO. 028 ALLUVIAL AQUI		SITE ID	344/3509	.093291
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
JUL , 198	3 1200	6	190.00	18.0	1010	110
WELL NO.	46	LOCAL NO. 02N		SITE ID	344738091	103401
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 1983	3 1425	6	191.00	17.0	1440	190
WELL NO.	47	LOCAL NO. 02N ALLUVIAL AQUI		SITE ID	344738091	111501
DATE.	T[ME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DICT- ANCE ( us/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 1983 22	1725	Ē	197 00	17 ^	720	40
AliG		6	187.00	17.0	730	69
11	1300	6	187 •00	17.5	850	87

WELL NO. 48 LOCAL NO. 02N02W15BBA1 SITE ID 344740091121401 OWNER - MALLARD FARMS ALLUVIAL ADULFER

		ELEV. OF LAND						
TIME	MEDIUM	SURFACE DATHM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (LS/cm) (OOO95)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	6	183.00	130	17.5	1710	340		
NO. 49			SCAC1 SIT	TE ID 3447	0709112130	01 OWNER	- MALLARD	FARMS
TIME		OF SUR DA ( IUM AB NG	LAND FACE TUM FT. TEM OVE AT	CI CO (PER- DU TURE AN	FIC RI N- DI CT- SO CE (MC /cm) AS	DE, S- LVED G/L CL)		
		6 18	3.00	17.5	1500 220	)		
NO. 50			7ACC1 SIT	E ID 3447	1709113590	01 OWNER	- GEORGE	HILSON
TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	6	187.00	E115	18.0	1940	370		
	LOCAL NO	. 02N02W1	7BCC1 SIT				– D. C. M	ORRISON
ELEV. OF LAND SURFACE	DEPTH		SPE- CIFIC CON-	РН	ALKA- LINITY FIELD	BICAR- BONATE FET-FLD	CAR- BONATE	CARBON DIOXIDE DIS-
	1983 . 1745 . NO. 50 . TIME 	1730 6 . NO. 49 LOCAL NO ALLUVIAL  1983 . 1745 . NO. 50 LOCAL NO ALLUVIAL  TIME MEDIUM  TIME 6 1200 6 . NO. 51 LOCAL NO ALLUVIAL  ELEV.	TIME NGVD) (72000)  1730 6 183.00  . NO. 49 LOCAL NO. 02N02WI ALLUVIAL AOUIFER  EL OF SUR NG (72  1983 . 1745 6 18  . NO. 50 LOCAL NO. 02N02WI ALLUVIAL AQUIFER  TIME ELEV.  TIME NGC (72  1983 . 1745 6 18  . NO. 50 LOCAL NO. 02N02WI ALLUVIAL AQUIFER  ELEV.  TIME NGVD) (72000)	TIME	TIME NGVD) (FRET) (DEG C) (72000) (72008) (00010)  1730 6 183.00 130 17.5  NO. 49 LOCAL NO. 02N02W15CAC1 SITE ID 3447 ALLUVIAL AOUIFER  FLEV.  OF LAND SP SURFACE CI DATUM CO (FT. TEMPER—DU MEDIUM ABOVE ATURE AN NGVD) (DEG C) (WS (72000) (00010) (00  1983  1745 6 183.00 17.5  NO. 50 LOCAL NO. 02N02W17ACC1 SITE ID 3447 ALLUVIAL AQUIFER  FLEV.  OF LAND SURFACE DEPTH DATUM OF (FT. WELL, TEMPER— NGVD) (FEET) (DEG C) (72000) (72008) (00010)  —— 6 187.00 E115 18.0  1200 6 187.00 — 18.5  NO. 51 LOCAL NO. 02N02W17BCC1 SITE ID 3447 ALLUVIAL AQUIFER  ELEV.	TIME	TIME   NGVD) (FERT) (DEG C) (US/cm) AS CL) (72000) (72008) (00010) (00095) (00940)	TIME

1820 1790 1780

110 --

DATE

JUL , 1975 08... 1000 10... --12... 1800

TIME

187.00 110 187.00 110 187.00 110

6

WELL NO. 51 LOCAL NO. 02N02WI7BCC1 SITE ID 344717091143201 OWNER - D. C. MORRISON ALLUVIAL AQUIFER - CONTINUED

DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
JUL., 19										
08	1000	510	150	130	44	180	4	320	822	5500
10								300		
12	1800	480		120	43	180	4	300	909	5000

WELL NO. 52 LOCAL NO. 02N02W17BCC2 SITE ID 344717091143202 OWNER - D. C. MORRISON ALLUVIAL AQUIPER

DATE	time.	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	82						
03		6	187.00	110	18.0	2180	400
JUL , 19							•
28	1200	6	187.00	110	18.5	1890	410

WELL NO. 53 LOCAL NO. 02N02W17CBB1 SITE ID 344713091143601 OWNER - GEORGE HILSDON ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	82	6	185.00	E115	18.0	1940	<b>37</b> 0

WELL NO. 54 LOCAL NO. 02N02W19DBB1 SITE ID 344715091150701 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	1200	6	186.00	18.5	2120	460

### WELL NO. 55 LOCAL NO. 02N02W20BBB1 SITE ID 344647091143701 ALLUVIAL AOUIFER

		DATE	TIME	ME.	OF SU D	BOVE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE ( µS/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)		
		JUL . 26			·	2000) 88.00	18.0	1160	(00940)		
		WEI.L	NO. 56		D. 02N02W L AQUIFER		SITE ID	344638091	143701 09	INER - TOWN	ISEND ESTATE
DATE	TIME	MED IUM	FLOW RATE (GPM) (00058)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (uS/ci (0009)	PH - (STA) ARI m) UNITS	ND- INU D COB S) UNI	AT- FIF M- (MC BALT AS TS) CAC	TY BONA LLD FET-F G/L (MG/ G AS GO3) HCO3	TTE CAR- PLD BONATE L FET-FLD (MG/L AS CO3)
AUG , 197	4	6	640	98.0	18.0	10:	30	7.2	3	358 4	40 0
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNI SIUI DIS- SOLVI (MG/I AS MG	M, SODIU - DIS- ED SOLVE L (MG/ G) AS N	- ED /L PERG NA) SOD	SOR TI ENT RAT	ON SOLV TO (MG/ AS K	M, RIDE, DIS- ED SOLVED ( MG/L ) AS CL)
AUG , 1974	4	44	390	32	100	34	65		26	1 5.	1 110
DATE	E TIME	SULF DIS SOL (MO AS S (OO9	GE PATE NO2+ - DI VED SOL (/L (MC 604) AS	S- PHO VED TO VL (M N) AS	IOS- RI PRUS, I PTAL SC IG/L (N IP) AS	IDE, DIS- DLVED 4G/L 3 F)	BILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
	, 1974 	- 2	5	.72	.440	•20	35	588	590	4000	<b>3</b> 90 ·

WELL NO. 57 LOCAL NO. 02N02W21DDC1 SITE ID 344558091124901 OWNER - JAMES CROMLEY ALLUVIAL AOUIFER

DATE	:	TIME		MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	ANCE (µS/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	1983			6	185.00	113	18.0	825	30		
	WELL	NO.	58		O. O2NO2W L AQUIFER	22DCAL SI	TE ID 344	606091114	501		
	DATE		TIME		OF SUI DIUM AJ	ROVE AT	C CO TPER— DI TURE AI EG C) (µ:	IFIC R ON- D UCT- SO NCE (1 S/cm) A	HLO- IDE, IS- DLVED 4G/L S CL)		
	AUG ,	1983	3								
	11		1600		6 18	35.00	17.0	1360 13	20		
	WELL	NO.	59		0. 02N02W2	22DDB1 SI	re id 3440	6090911144	101		
	1	DATE		TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)			
		л. Э••••			6	186.00	17.0	1300			
	WELL	NO.	60		0. 02N02W2	SABCL SIT	TR IN 3445	5400910953	OL OWNER	- DR. V.	PARDO
MED	TUM	ELE OF L SURF DAT (F ABO NGV (720	AND ACE UM T. VE D)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
	6	187	.00	120	110	18.5	1200	7.4	435	530	0
	6	187	.00	120		18.0	1340	-			
DIO DIO SO (M AS	RBON XIDE IS- LVED G/L GO2) 405)	HAR NES (MG AS CAC (009	S /L ()3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
	34		480	42	120	43	51	1	50	656	1800

DATE TIME

SEP , 1975 11... --JUN , 1983 23... 1340

DATE TIME

SEP , 1975 11... --JUN , 1983 23... 1340

WELL NO. 61 LOCAL NO. 02N02W25BRA1 SITE ID 344554091101401 OWNER - DR. V. PARDO ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
	,									
JUL , 196		4	187.00	120	1270	17.0	876	7.4	5	397
11		6 6	187.00	120	1270	20.0	1280	7.5		397
JUN , 198	13	.,	107 100	• • • •		•.,•.,		, • 5		
23	1315	6	187.00	120			1070			
23	1330	6	187.00	120			1330			
AliG ()2	1415	6	187.00	120		_	1180	7.3		460
DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)
·										
JUL , 196	1	480	0	31	430	29	110	36	47	19
SEP , 197	5	400	0	31	430	29	110	30	47	19
11	·	440	0	22						
AUG , 198	3									
02	1415	520	0	41	490	34	130	41	59	21
		SODIUM AD- SORP- TION	POTAS- SIUM, DIS- SOLVED	CHLO- RIDE, DIS- SOLVED	SULFATE DIS- SOLVED	NITRO- GEN, NITRATE DIS- SOLVED	NITRO- GEN, NO2+NO3 DIS- SOLVED	FLUO- RIDE, DIS- SOLVED	SILICA, DIS- SOLVED (MG/L	SOLIDS, RESIDUE AT 180 DEG. C
DATE	TIME	RATIO (00931)	(MG/L AS K) (00935)	(MG/L AS CL) (00940)	(MG/L AS SO4) (00945)	(MG/L AS N) (00618)	(MG/L AS N) (00631)	(MG/L AS F) (00950)	AS SIO2) (00955)	SOLVED (MG/L) (70300)
			AS K)	AS CL)	AS SO4)	AS N)	AS N)	AS F)	8102)	(MG/L)
JUL , 196		(00931)	AS K) (00935)	AS CL) (00940)	AS SO4) (00945)	AS N) (00618)	AS N)	AS F)	8102)	(MG/L) (70300)
JUL , 196	1		AS K)	AS CL)	AS SO4)	AS N)	AS N)	AS F)	8102)	(MG/L)
JUL , 196	1	(00931)	AS K) (00935)	AS CL) (00940)	AS SO4) (00945)	AS N) (00618)	AS N)	AS F)	8102)	(MG/L) (70300)
JUL , 196 14 SEP , 197 11 JUN , 198	1 5 3	(00931)	AS K) (00935)	AS CL) (00940) 45	AS SO4) (00945)	AS N) (00618)	AS N)	AS F)	8102)	(MG/L) (70300)
JUL , 196 14 SEP , 197 11 JUN , 198 23	1 5 3 1315	(00931)	AS K) (00935)	AS CL) (00940) 45 70 88	AS SO4) (00945)	AS N) (00618)	AS N)	AS F)	8102)	(MG/L) (70300)
JUL , 196 14 SEP , 197 11 JUN , 198 23 23	1 5 3	(00931)	AS K) (00935)	AS CL) (00940) 45	AS SO4) (00945)	AS N) (00618)	AS N)	AS F)	8102)	(MG/L) (70300)
JUL , 196 14 SEP , 197 11 JUN , 198 23	1 5 3 1315	(00931)	AS K) (00935)	AS CL) (00940) 45 70 88	AS SO4) (00945)	AS N) (00618)	AS N)	AS F)	8102)	(MG/L) (70300)
JUL , 196 14 SEP , 197 11 JUN , 198 23 AUG	1 5 3 1315 1330	(00931)	AS K) (00935)  4.1   2.3  DS, DF FII- IRO TS, DI S- SOL (UG VED (UG AS	AS CL) (00940) 45 70 88 110 84 IRO N, TOT S- REC VED ERA /L (IIG FE) AS	AS SO4) (00945) 65 ——————————————————————————————————	AS N) (00618)  .59 GA- E, IODII S- VED SOL' /L (MG IN) AS	AS N) (00631)  2.9  DE, LITH S- DI VED SOL // (UG	AS F) (00950) 20  IUM BORE S- DI: VED SOL' /L (UG LI) AS S	\$102) (00955)   31 ON, BROM S- DI VED SOL/ /L (MG 8) AS	(MG/L) (70300) 557   720 IDE S- VED /L
JUL , 196 14 SEP , 197 11 JUN , 198 23 AUG 02	1 5 3 1315 1330 1415 TIME	(00931)  1  SOLII SUM ( CONS' TUEN DI' SOLI	AS K) (00935) 4.1  2.3 DS, DF FII - IRO TS, DI S- SOL (UG)	AS CL) (00940) 45 70 88 110 84 IRO N, TOT S- REC VED ERA /L (IIG FE) AS	AS SO4) (00945) 65 ——————————————————————————————————	AS N) (00618)  .59 GA- E, IODII S- VED SOL' (MG/L (MG/L) MN) AS	AS N) (00631)  2.9  DE, LITH S- DI VED SOL // (UG	AS F) (00950) 20  IUM BORE S- DI: VED SOL' /L (UG LI) AS S	\$102) (00955)   31 ON, BROM S- DI VED SOL/ /L (MG 8) AS	(MG/L) (70300) 557   720 IDE S- VED /L
JUL , 196 14 SEP , 197 11 JUN , 198 23 23 AUG 02	1	(00931)  1  SOLE SUM ( CONS' TUEN DT: SOL( (MG,	AS K) (00935) 4.1  2.3 DS, DF FII - IRO TS, DI S- SOL (UG)	AS CL) (00940)  45  70  88 110  84  IRO N, TOT S- REC VED ERA /L (UG FE) AS 46) (010-	AS SO4) (00945) 65 ——————————————————————————————————	AS N) (00618)  .59 GA- E, IODII S- VED SOL' (MG/L (MG/L) MN) AS	AS N) (00631)  2.9  DE, LITH S- DI VED SOL // (UG	AS F) (00950) 20  IUM BORE S- DI: VED SOL' /L (UG LI) AS S	\$102) (00955)   31 ON, BROM S- DI VED SOL/ /L (MG 8) AS	(MG/L) (70300) 557   720 IDE S- VED /L
JUL , 196 14 JUN , 198 23 23 AUG 02  DATE	1	(00931)  1  SOLII SUM (CONS) TUEN DISOLU (MG, (7030)	AS K) (00935)  4.1   2.3  DS, DF, DF IRO TS, DI IRO TS, DI (UG VED	AS CL) (00940)  45  70  88 110  84  IRO N, TOT S- REC VED ERA /L (UG FE) AS 46) (010-	AS SO4) (00945) 65 ——————————————————————————————————	AS N) (00618)  .59	AS N) (00631)  2.9  DE, LITH S- DI VED SOL // (UG	AS F) (00950) 20  IUM BORE S- DI: VED SOL' /L (UG LI) AS S	\$102) (00955)   31 ON, BROM S- DI VED SOL/ /L (MG 8) AS	(MG/L) (70300) 557  720 IDE S- VED /L BR)

WELL NO. 62 LOCAL NO. 02N02W25BBA2 SITE ID 344548091101702 OWNER - DR. V. PARDO ALLUVIAL AQUIFER

DATE	тіме	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
SEP , 197	5										
11 JUN , 198	3	6	187.00	122	110	18.0	1380	7.3	446	540	0
23	1330	6	187.00	122	***		1330	-			
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
SEP , 197	5	43	550	100	140	48	57	1	85	756	2100
JUN , 198:	1330	4,	330	100	14()	40	31		6.5	7 30	2100

# WELL NO. 63 LOCAL NO. 02N02W26DBD2 SITE ID 344517091104602 OWNER - DR. V. PARDO ALLUVIAL AQUIFER

DATE	TIME	Medium	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µ4/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	83 1635	6	186.00	17.0	880	56

### WELL NO. 64 LOCAL NO. 02N02W27AAA1 SITE ID 344554091113201 OWNER - DR. V. PARDO ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD). (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
JUL., 19	83								
26 AUG	1200	6	187.00	120	0.81	1030			
02	1500	6	187.00	120	17.5	1170	7.3	440	500

LOCAL NO. 02N02W27AAA1 SITE ID 344554091113201 OWNER - DR. V. PARDO ALLUVIAL AOULFER - CONTINUED WELL NO. 64

DATE	TIME	FE ( AS	CAR- ONATE T-FLD MG/L CO3) 0445)	CARBON DIOXIDE DIS- SOLVEE (MG/L AS CO2) (00405)	E HAI NES O (MC AS O GAG	3/L	HAR NES NONC BONA (MC CAC	SS, CAR- ATE S/L CO3)	(MC	- VED (/L (CA)	MAGNI SIUM DIS- SOLVI (MG/I AS MG (0092)	1, SOD - DI ZD SOL - (M - AS		PERO SOD (009	IUM
AUG , 19	983 1 <b>5</b> 00		0	40		470		29	120	ı	41	6	0		22
DATE	TIME	S	ODIUM AD- ORP- TION ATIO 0931)	POTAS- SIUM, DIS- SOLVEI (MG/L AS K) (00935)	, RII DIS D SOI (MC AS	DE, S- LVED S/L CL)	SULF DIS SOL (MO AS S	- VED (/L (04)	GE NO2+ DI	S- Ved (/L N)	FLUO- RIDE, DIS- SOLVE (MG/I AS F)	DI: SOID (MC	LVED G/L	DI	DUE 80 . C S- VED /L)
JUL , 19 26 AUG 02	1200 1500		 1	3.1	· 100		6		(		.2		<b></b> 34		<del></del> 694
D.A	TE	TIME	SOL	OF STI- I STS, (S- S LVED (G/L) A	RON, DIS- OLVED UG/L S FE)	NE D SO (II AS	NGA- SE, IS- LVED G/L MN) 056)	D: SO! (MC AS	IDE, IS- LVED G/L I) 365)	LITH DISOLUTION (NG AS 1	S- Ved /L LI)	BORON, DIS- SOLVED (UG/L AS B) 01020)	SOL (MC	S- VED (/L BR)	
		3 1500		670	3700		400		.010		22	60		.61	
		WELL NO		LOCAL N			9CBC1	SIT	E ID	344519	909114	4001 OV	√ner -	BER	т ніскѕ
DATE TI	•1E	MEDIUM	FLE OF U SURF DAT (F ABO NGV (720	AND PACE D TUM T. W EVE T	EPTH OF ELL, OTAL FEET) 2008)	R/ (Cl	LOW ATE PM) 158)	TEMP ATU (DEC (OOC	JRE G C)	SPE- CIFI CON- DUCT ANCE ( µS/c) ( 0009	IC - T- ( E cm) U	PH STAND- ARD NITS) 00400)	COR	AT- M- ALT TS)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
MAY , 1961 25		б	186	.00 1	10	1700	)	1	8.0	4	433	8.0		10	221

HARD~

NESS, NONCAR-

MONATE

(MG/L

CACO3)

0

(00902)

CALCIUM

DIS-SOLVED

(MG/L

AS CA)

(00915)

58

MAGNE-

DIS-

SOLVED

(MG/L

AS MG)

(00925)

17

SIUM,

SODIUM, DIS-SOLVED

(MG/L

AS NA)

(00930)

18

PERCENT

SODIUM

15

(00932)

DATE

MAY , 1961 25...

TIME

BICAR-

BONATE

FET-FLD

(MG/L

AS

HCO3)

270

CARBON

DIOXIDE

DIS-

SOLVED

(MG/L

AS CO2) (00405)

4.3

HARD-

NESS

(MG/L

CACO3)

210

(00900)

AS

CAR-

BONATE

FET-FLD

(MG/L

AS CO3)

0

(00440) (00445)

# WELL NO. 65 LOCAL NO. 02N02W29CBC1 SITE ID 344519091144001 OWNER - BERT HICKS ALLUVIAL ACHIFER - CONTINUED

		ALLUVIAL AOU	TEER - CON	TINUED				
DATE TIME	AD- SORP- TION RATIO	POTAS- CHLO- SIUM, RIDE, DIS- DIS- SOLVED SOLVED (MG/L (MG/L AS K) AS CL) 00935) (00940)	(MG/L AS SO4)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	RESIDUE	SOLIDS, SUM OF CONSTI- THENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (IIG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
MAY , 1961	.6	2.5 16	8.2	•16	<b>29</b> 2	250	2700	0
	WELL NO. 66	LOCAL NO. 02 ALLUVIAL AOU		SITE ID	344446091	142301		
	DATE TIP	MED LUM ME	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DHCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	JUL , 1983 26 120	00 6	183.00	18.0	500	12		
	WELL NO. 67	LOCAL NO. 02 ALLUVIAL AQU		SITE ID	344410091	103002		
	DATE TIM	MEDIUM DE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	AUG , 1983 16 151	0 6	185.00	17.5	600	16		
	WELL NO. 68	LOCAL NO. 021		SITE ID	344841091	161601 OW	NER – BOBE	BIE FULLER
	DATE TIM	· MEDIUM E	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	HIN , 1983 21 144	5 6	186.00	17.5	790	78		

WELL NO. 69 LOCAL NO. 02N03W01DAD1 SITE ID 344854091154501 OWNER - FULLER FARMS ALLUVIAL AQUIFER

	DATE TI		AROVE (1 NGVD) (1 (72000) (1	SPE- CIFIC CON- EMPER- DUCT- ATURE ANGE DEG C) (LS/cn 00010) (00093	DIS- - SOLVED (MG/L h) AS CL) 5) (00940)	
	29 126 WELL NO. 70			18.0 68 TTE ID 3448060		r - ROY GRIZZLE NO.
	DATE TIME	OF SUR DA' ( MEDIUM AB NG'	EV. LAND FACE DEPTH TIM OF FT. WELL, OVE TOTAL VD) (FEET)	TEMPER- F ATURE A (DEG C) ()	SPE- CHLO- CIFIC RIDE, SON- DIS- DUCT- SOLVED INCE (MG/L 4S/cm) AS CL)	
	SEP , 1982 10 WELL NO. 71			17.0 TE ID 3448010	1050 200 91155001 OWNER	- J. B. MILEY
DATE TIME	ELEV. OF LAND SURFACE DATUM (FT. MEDIUM ABOVE NGVD) (72000)	DEPTH OF WELL, TEMI TOTAL ATT (FEET) (DEC	SPE- CIFIC CON- PER- DUCT-	PH F (STAND- ( ARD UNITS) C	LKA- BICAR- NITY BONATE IELD FET-FLD MG/L (MG/L AS AS AC03) HC03) 0410) (00440)	CAR- DIOXIDE BONATE DIS- FET-FLD SOLVED (MG/L (MG/L AS CO3) AS CO2)
AUG , 1975 27 1215	6 180.00	130	19.5 1480	6.7	259 320	0 100
DATE TIME	HARD- N NESS NO (MG/L BO AS ( E CACO3) C	ARD- ESS, GALCIIM NCAR- NATE SOLVED HG/L (MG/L ACO3) AS CA) 0902) (00915)	DIS- D SOLVED SO (MG/L ( AS MG) A	SODIUM, AD- IS- SORP- LVED TION MG/L RATIO S NA) 0930) (00931	M CHLO- RE: RIDE, AT DIS- DI SOLVED (MG/L SO AS CL) (1	LIDS, SIDHE 180 IRON, EG. C DIS- DIS- SOLVED OLVED (UG/L MG/L) AS FE) 0300) (01046)
AUG , 1975 27 1215	340	80 91	27 1	50 4	280	1230 4000

WELL NO. 72 LOCAL NO. 02N03W13ABB1 SITE ID 344743091161301 OWNER - ROY GRIZZLE NO. 2 ALLUVIAL AOUIFER

DATE	TIME	MEDIUN	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FRET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
SEP , 1	982	6	183.00	E100	17.5	1500	380		
i	VELI. NO. 73		. 02N03W	13DDD1 SI	TE ID 3446	5510911548	301 OWNER	- ROY GRIZZLE	NO. 3
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
SEP , 1	982								
10 JUN , 1		6	182.00	E100	17.5	965	150		
21 JUL	1600	6	182.00			1500	280		
26	1200	6	182.00		18.0	1420	270		
w	ELL NO. 74	LOCAL NO		3DCC1 SIT	E ID 3446	<b>02091</b> 1716	01 OWNER	- ROY GRIZZLE	NO. 4
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (O0095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
SEP , 19	982	6	182.00	117	17.5	445	24		
WI	ELL NO. 75	LOCAL NO.		5ABC1 SIT	E ID 3445	500911612	01 OWNER	- ROY GRIZZLE	NO. 6
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
SEP , 19	982 	6	181.00	E100	17.5	510	55		

WELL NO. 76 LOCAL NO. 02N03W25BBB1 SITE ID 344559091165001 OWNER - ROY GRIZZLE NO. 5 ALLUVIAL ACCUFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	82					-1-	
10 JUL , 19		6	186.00	E100	17.5	525	60
29	1200	6	186.00	-	18.0	555	29

WELL NO. 77 LOCAL NO. 02N03W26BDC1 SITE ID 344535091173201 OWNER - TOWNSEND ESTATE ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (PEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (us/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	983 1035	6	185.00	115	17.5	640	20

WELL NO. 78 LOCAL NO. 02N03W26CRB1 SITE ID 344535091175201 OWNER - JOHN B. MOORE QUARTERNARY AQUIFER

#### WATER QUALITY DATA

Date	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANGE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	83					
21 AUG	1700	6	190.00		575	30
16	1100	6	190.00	17.5	570	29

WELL NO. 79 LOCAL NO. 02N03W26CCA1 SITE ID 344516091174001 OWNER - RAY TOWNSEND ALLUVIAL AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	83 1200	6	188.00	116	18.0	550	18

WELL NO. 80 LOCAL NO. 02N03W27DDD1 SITE ID 344509091175601 ALLUVIAL AUUIFER

			OF LAND SURFACE DATUM (FT.	TEMPER-	SPE- CIFIC CON- DUCT-	CHI.O- RIDE, DIS- SOLVED
DATE	TIME	MEDIUM	ABOVE NGVD) (72000)	ATURE (DEG C) (00010)	ANCE (µS/cm) (00095)	(MG/L AS CL) (00940)
AUG , 19	1000	6	185.00	17.5	580	28

WELL NO. 81 LOCAL NO. 02N03W35CCB2 SITE ID 344425091175202 OWNER - TOWNSEND ESTATE ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (UMHOS) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	9 <b>83</b> 1 <b>2</b> 00	6	186.00	18.5	482	29

WELL NO. 82 LOCAL NO. 03N01W17ABB1 SITE ID 345250091072801 OWNER - HAROLD MASON NO. 3 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 1	982	6	190.00	16.5	705	50

WELL NO. 83 LOCAL NO. 03N01W17BBA1 SITE ID 345254091075001 OWNER - MAROLD MASON NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MED TUM	OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 1	982	6	190.00	16.5	700	20

WELL NO. 84 LOCAL NO. 03NOIWI7BDAL SITE ID 345236091073501 OWNER - HAROLD MARON NO. 4 ALLUVIAL AOUIFER

		ALLUVIAL AOU	<b>IFER</b>					
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
cen 100	•							
SEP , 198		- 6	190.00	17.0	535	35		
WELL NO.	85	LOCAL NO. 03		SITE ID	345215091	1074601 OW	NER - HAROLD	MASON NO. 5
DATE	TIME	MEDIUH	ELEV. OF LAND SURFACE DATUM (PT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
SEP , 198	2							
10		. 6	190.00	17.0	720	45		
WELL NO.		LOCAL NO. 03		SITE ID	345204091	081601		
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
JUL , 1983 28	1200	6	191.00	18.0	705	16		
WELL NO.		LOCAL NO. 03N ALLUVIAL AQUI		SITE ID	345111091	083301		
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µ8/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	•	

18.0 720 16

186.00

JUL , 1983 28... 1200

WELL NO. 88 LOCAL NO. 03N01W20ABA1 SITE ID 345201091072101 OWNER - C. E. MITCHELL

		ALLUVIAL AQUI	FER			
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 198	3 1200	6	189.00	18.0	785	24
WELL NO.	89	LOCAL NO. 03N		SITE ID	345201091	065601
DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)

DUCT-ANCE (µS/cm) (00095) (72000) (00010) JUL , 1983 28... 1200

190.00

### WELL NO. 90 LOCAL NO. 03N01W29DCC1 SITE ID 345019091072801 OWNER - M. M. LUSK ALLUVIAL AQUIFER

18.0

990

55

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND-ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUL , 196	1	6	190.00	130	463	17.0	636	7.9	5	338
17		U	170.00	1.50	403	17.0	0.50	7.09	,	330
DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)
JUL., 196	1									
19		410	. 0	8.2	330	0	86	29	23	13
DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (HG/L AS MN) (01056)
JUL , 196	1	.6	2.0	25	29	.23	371	390	3200	110

WELL NO. 91 LOGAL NO. 03N01W32DDD1 SITE ID 344925091070701 ALLUVIAL AOUIFER

DATE	TIME	ELEV OF LAI SURFAI DATUI (FT MEDIUM ABOVI (72000	ND CE M . TEMPER- E ATURE ) (DEG C)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
15	1355	6 188.0	00 17.5	900	24
WELL NO.	92	LOCAL NO. 03N01W33C	SC1 SITE ID	3449 <b>3</b> 8091	070501
DATE	TIME	ELEV OF LAI SURFAI DATUI (PT MEDIUM AROVI NGVD (72000	ND CE 1 . TEMPER- E ATURE ) (DEG C)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 1983	3 1200	6 189 . (	00 18.0	825	19
WELL NO.	93	LOCAL NO. 03N02W01D	SAL SITE ID	345412091	092701
DATE	TIME	ELEV OF LAI SURFAI DATUI (FT MEDIUM AROVI NGVD (72000	nd Ce 1 . Temper- e ature ) (deg c)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 1983 28	1200	6 190.0	00 17.0	1060	53
WELL NO.	94	LOCAL NO. 03N02W02AI	BAL SITE ID	345436091	103301
DATE	TIME	ELEV OF LAI SURFA DATUI (FT. MEDIUM AROVI NGVD) (72000	ND CE 1 . TEMPER- E ATURE ) (DEG C)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
лит. , 1983 28	1200	6 190.0	00 17.0	860	40

WELL NO. 95 LOCAL NO. 03N02W03DDB1 SITE ID 345357091113001 OWNER - COTTON BELT RAILROAD ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( uS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
FEB , 19	52	6	200.00	148	18.0	730	8.0	350	430
DATE	TIME	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	NESS, NONCAR- BONATE (MG/L CACO3) (00902)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRATE DIS- SOLVED (MG/L AS N) (00618)	TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
FEB , 19	52	0	6.8	<b>37</b> 0	25	32	22	.25	2400

WELL NO. 96 LOCAL NO. 03N02W04BDC1 SITE ID 345422091130401 OWNER - BROWN ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	83					
14	0800	6	.192.00	17.0	1010	120
14	0900	6	192.00	17.0	2080	420

WELL NO. 97 LOCAL NO. 03N02W04CCD1 SITE ID 345350091131301 OWNER - LEHMAN FOWLER ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	PLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( us/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUL , 19	52								
07 JUN 19	-	6	192.00	160		17.0	498	8.4	185
22	-	6	192.00	160		17.0	729	7.4	328
AUG 24		6	192.00	160	·	17.0	749	7.3	328
JUN , 19		6	192.00	160	110		1080	7.4	358
SEP , 199		6	192.00	160	-		955		
JUL , 191	8 <b>3</b> 1200	6	192.00	160		17.0	1040	-	

WELL NO. 97 LOCAL NO. 03N02W04CCD1 SITE ID 345350091131301 OWNER - LEHMAN FOWLER ALLUVIAL AOUIFER - CONTINUED

DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JUL , 195		220	4	1.4	210	30		_	
JUN , 195 22 AUG		400	0	25	330	0	91	24	
24 JUN , 197	-	400	0	32	330	0	130	3.3	
20		440	0	28	410	53	110	33	58
DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS 804) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLIIO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
JUL., 195 07 JUN., 195			50	12	•11	•20			2700
22 AUG			49	14	.00				<b>27</b> 00
24 JUN , 197			50	13	.05				2400
20 SEP , 198		1	100	-			485	640	-
10 JUL., 198		<del></del>	110	-					
28	1200		100			_			

WELL NO. 98 LOCAL NO. 03N02W05BBB1 SITE ID 345442091142301 OWNER - SUNNY FARMS NO. 3 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	CIFIC CON- DUCT- ANCE (µS/cm) (OOO95)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	0945	6	196.00	17.0	3050	770

WELL NO. 99 LOCAL NO. 03N02W05BCB1 SITE ID 345430091142401 OWNER - SUNNY FARMS NO. 2 ALLUVIAL AOUTFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
.IUN , 19	183					
14	n <b>93</b> 0	6	196.00	17.0	2900	720

WELL NO. 100 LOCAL NO. 03N02W06DDD1 SITE ID 345351091142801 OWNER - BARNEY WATTS ALLIVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANGE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
MAR , 1	985 111 <b>5</b>	6	190.00	16.5	533	50

WELL NO. 101 LOCAL NO. 03N02W08ADA1 SITE ID 345335091132501 OWNER - PINEY FARMS ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUN , 19 20		6	191.00	160	110		990	7.4	346
14 AUG	0840	6	191.00	160		17.0	1030		
03 SEP	1300	6	191.00	160		18.0	1020	7.3	420
03	1300	6	191.00	160					
DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JUN , 19 20 AUG , 19		420	n	27	380	36	100	32	49
03 SEP , 198	1300	470	0	37	410	0	110	33	57
03	1300	470	0						
DATE	TIME	PERCENT SODLIM (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
JUN , 193 20 JUN , 198			l		75				
14 AUG	0840				120				
03	1300	23	1	1.8	100	10	<.10	.30	35

WELL NO. 101 LOCAL NO. 03 NO2WORADAI SITE ID 345335091132501 OWNER - PINEY FARMS ALLUVIAL AOUIFER - CONTINUED

			ALLUVIAL AC	OUIFER - CO	NTINUED				
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (HG/L) (70300)	TUENTS, DIS- SOLVED (MG/L)	IRON, NES DIS- D' SOLVED SOI (IIG/L (IIG AS FE) AS	IS- D LVED SO G/L (M MN) ÅS	IS- D LVED SOI G/L (III I) AS	HIUM BORO IS- DIS- LVED SOLV G/L (UG/ LI) AS B 130) (0102)	DIS- ED SOLVED L (MG/L ) AS BR)	
JUN , 19 20	75	465		1700					
AUG , 19	83 1300	588	580	2800	300	.020	17	80 .66	
03	1300	200	260	2000	300	•1120	17	.00	
	WELL	NO. 102	LOCAL NO. (		I SITE ID	34534909	1135601 OWN	ER - MRS. M	ACIE OAKS
	DATE T	'IME	OF SU		TAL ATEM	SPI CTI CON PER- DUG URE ANC URE (US) D10) (000	FIC RIDE V- DIS- TT- SOLVI DE (MG/1 /cm) AS CI	• ED L L)	
	MAR , 1985	230	6 1	92.00 50	0.00	15.5	700 38		
	WELL	NO. 103	LOCAL NO. O		SITE ID	345349091	141201 OWNE	ER – WILLIE	CALAHAN
	DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	MAR ,		6	191.00	17.0	638	27		
	WELL	NO. 104	LOCAL NO. 0 ALLUVIAL AQ		SITE ID	345323091	135701 OWNF	R - LEW E.	SORRELLS NO. 1
	DATE	тіме	мёртим	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (OOO95)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	JUN , 1		6	.190 • 00	17.0	1040	140		

WELL NO. 105 LOCAL NO. 03N02W08CDA1 SITE ID 345306091135901 OWNER - LEW E SORRELLS ALLUVIAL AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
JUN , 197	5									
17		6	188.00		933	7.6				
20 Jul		6	188.00		919	7.6				
01	1000	6	188.00	120	938	7.2	379	460	n	46
DATE	TIME	HARD NESS (MG/ AS CACO (0090	NONC L BONA (MG	S, CALC AR- DIS TE SOL /L (MG 03) AS	TUM SI - DI VED SOL /L (MG CA) AS	MG) AS	UM, A - SOR ED TI /L RAT NA)	ON SOL'	E, IRO - DI VED SOL /L (HG CL) AS	S- VED /L FE)
JUN , 17 20 JUL								- 82 - 74		
01	• 1000	3	80	0 100	31	50		1 76	4	იიი

WELL NO. 106 LOCAL NO. 03N02W08DCD1 SITE ID 345258091134201 OWNER - LEW E. SORRELLS NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SAM- PLING DEPTH (FEET) (00003)	CI CO DU AN ( µS	CE /cm) I	PH (STAND- ARD JNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR-	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
JUN , 19	75										
30 • • •		6	186.00			731	7.7			***	
03		6	186.00			731	7.7				
13	1100	6	186.00	120		732	7.1	364	440	n	56
			HAR	D-		MAGNE	! <b>-</b> -	SOI	DIUM CH	LO-	
		HAR			CIUM	SIUM				DE. IRC	N.
		NES		AR- DI	S-	DIS-	DIS	<b>-</b> so			S-
		(MG			LVED	SOLVE			ON SO	LVED SOL	.VED
		AS	• • • •		G/L	(MG/L				G/L (116	
DATE	E TIME	CAC (009)			CA) 915)	AS MG (00925				CL) AS 940) (010	FE) 46)
JUN .	. 1975										
30 .						_			24		
JUL									-		
03						-	-		22	2	
13	1100	,	34()	0 9	n	28	27		.7 22	2 2	800

WELL NO. 107 LOCAL NO. 03N02W09AAA1 SITE ID 345345091122301 OWNER - WAYNE PATTERSON ALLUVIAL AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	PL DE ( P	M- ING PTH EET) OO3)	TEMPER- ATURE (DEG C) (00010)	ANC (µS/	FIC  -  T-    CE	PH (STAND- ARD IINITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUL , 1952	!		100 00								
11 JUN , 1953	- <del>-</del>	6	190.00	120			17.0		550	8.1	235
22 AUG		6	190.00	120			17.0	1	710	7.4	344
24 JUN , 1975		6	190.00	120			17.0	1	725	7.3	343
20		6	190.00	120	110	n			860	7.4	326
JUL , 1976		6	190.00	120			17.0		780	7.4	
JUL , 1983 28	1200	6	190.00	120		-	17.5		920		
DATE	T I ME.	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HAI NE: (Mi A: CAI	G/L	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	SOL (MG AS	- VED (/L (CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JUL , 1952 11 JUN , 1953		290	n	3.6		280	43				
AUG		420	0	27		330	0	93		24	***
24 JUN , 1975		420	0	33		340	0	130		3.7	
20		400	0	25		350	24	92		29	31
DATE	TIME.	SO T RA	AD- RI RP- DI ION SO FIO (M AS	S- D LVED S( G/L (1 CL) AS	LFATE IS- OLVED 4G/L SO4)	G NIT D SO (M AS	EN, RE RATE AT IS- D LVED G/L S N) (I	LIDS, SIDUE 180 EG. C DIS- DLVED MG/L)	IRO DI SOL (UG AS (010-	N, TO S- RE VED ER /L (U FE) AS	ON, TAL COV- ABLE G/L FE) 045)
.fift. ,			30	4	9.0		.29				1700
JUN , 22	1953		3'		12		.29				2400
AUG											
24 JUN ,	1975	•	3'		12		.05				1900
20 JIT. ,	1976		.7 40					444	21	100	
06 JUL., 28	1983		50							~~	
ಪರ•••	. 1200		~ <del>~</del> ).	,							

WELL NO. 108 LOCAL NO. 03N02W10ADA1 SITE ID 345334091111801 OWNER - FERRELL COOPER ALLUVIAL AOUIFER

DATE	TIME	меріим	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
FEB , 19		6	200.00	100	18.0	1520	8.1	348	420
DATE	TIME	CAR- BONATE FET-FLD (MG/I. AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	IRON, TOTAL RECOV— ERABLE (UG/L AS FE) (01045)
FEB , 19	52	0	5.4	460	110	150	250	.36	6900

WELL NO. 109 LOCAL NO. 03NO2W10DAC1 SITE ID 345315091112201 OWNER - STANDARD ICE CO. ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
OCT , 194	.9	,						,		
27 JAN . 195	2	. 6				1140	7.6	407	500	0
24 FEB	-	6	200.00	147		1140	7.7	409	500	0
05 JUN , 195	3	6	200.00	147	18.0	1130	7.8	404	490	0
09 AUG		6	200.00	147	18.0	1140	7.8	413	500	0
24		6	200.00	147	18.0	855	8.4	205	230	8
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT , 194	9									
27 JAN , 195	2	20	440	30	120	35	92	31	2	6.2
24 FEB		16	460	53						
05 JUN , 195	3	12	450	46						
09 AUG		13	430	16	120	33				
24		1.5	230	26	71	13				

WELL NO. 109 LOCAL NO. 03N02W10DAC1 SITE ID 345315091112201 OWNER - STANDARD IGE CO. ALLUVIAL AQUIFER - CONTINUED

DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)
OCT , 1949	9									
27 JAN , 195	2	100	78	.52	•00	31	750	720	1600	6100
24 FEB		99	80	.32					3300	
05		210	78	.36				-	3300	
JUN , 1951		100	84	.43					3000	
AUG 24		100	72	.45	-				30	

WELL NO. 110 LOCAL NO. 03N02W10DBC1 SITE ID 345313091114701 OWNER - CITY OF BRINKLEY NO. 1 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET)			BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
OCT , 194	9	6	205.00	143	955	372	450	0
DATE	TIME	HAR NES: ( MG AS CAC ( 0096	S NONC /L BONA (MC 03) CAC	SS, R1 CAR- D1 ATE SC C/L (N CO3) AS	S- DI DLVED SO MG/L (M S CL) AS	GE FATE NITR S- DI	S- REC LVED ERA G/L (UG N) AS	AL OV- BLE /L FE)
OCT ,		:	240	0 8	12	12	.18 130	000

WELL NO. 111 LOCAL NO. 03NO2W10DBC2 SITE ID 345313091114801 OWNER - CITY OF BRINKLEY NO. 2 ALLIVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (O0095)	PH (STAND- ARD NITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
JUN , 194	.6							400	<b></b>	•
26		6	205.00	192	17.0	1070	7.1	420	510	0
DATE	тіме	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
JUN , 194 26	6 	64	510	93	140	42	69	22	1	15
DATE	TIME	CHL RID DIS SOL (MG AS (009	E, SULF - DIS- VED SOL- /L (MG CL) AS S	VED SOL /L (MG 04) AS	E, DIS S- SOI VED (MC S/L AS F) SIC	CA, RES - AT VED DEG S/L D S SOI (MC	G. C THEN IS- DI LVED SOL G/L) (MC	OF IROSTI- TOT STI- TOT STS, REC SS- ERA LVED (UG S/L) AS	AL TOI OV- REC BLE ERA C/L (UG FE) AS	M, CAL COV- BLE C/L AL)
JUN ,		150	50	5	.00 3	10	832	740 . 2	• 200 42	000

### WELL NO. 112 LOCAL NO. 03N02W10DBC5 SITE ID 345313091114901 OWNER - CITY OF BRINKLEY NO. 6 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER-ATURE (DEG C) (00010)	SPE- GIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUH- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
OCT , 1	961									
09		6	206.00	150	18.0	787	7.6	0	123	150
			CARBON		HARD-		MAGNE-			SODIUM
		CAR-	DIOXIDE	HARD-	NESS,	CALCIUM	SIUM,	SODIUM,		AD-
		BONATE FET-FLD	DIS- SOLVED	NESS (MG/L	NONCAR- BONATE	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED		SORP- TION
		(MG/L	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L	PERCENT	RATIO
DATE	TIME	AS (03)	AS CO2)	CACO3)	CACO3)	AS CA)	AS MG)	AS NA)	SODIUM	
		(00445)	(00405)	(00900)	(00902)	(00915)	(00925)	(00930)	(00932)	(00931)
ост , 19	961									
09		0	6.0	200	79	33	29	88	48	3

WELL NO. 112 LOCAL NO. 03N02W100BC5 SITE ID 345313091114901 OWNER - CITY OF BRINKLEY NO. 6 ALLUVIAL AGUIFER - CONTINUED

OCT , 1961 120 .30 12 490 450 0 3.4

> WELL NO. 113 LOCAL NO. 03N02W11AAA1 SITE ID 345345091101501 ALLUVIAL AGUIFER

ELEV. SPE-OF LAND CHLO-SURFACE CIFIC RIDE, DATUM DIS-TEMPER-DUCT-SOLVED (FT. MEDIUM ABOVE ATURE ANCE (MG/L DATE TIME NGVD) (DEG C) (µS/cm) AS CL) (72000) (00010) (00095)(00940) JUL , 1983

WELL NO. 114 LOCAL NO. 03NO2W13ADD1 SITE ID 345228091091901

ALLUVIAL AQUIFER

190.00

17.5

925

65

1200

ELEV. OF LAND SPE-CHLO-SURFACE CIFIC RIDE, DATUM CON-DIS-SOLVED TEMPER-DUCT-MEDIUM ABOVE ATURE ANCE (MG/L NGVD) DATE TIME (DEG C) (µS/cm) AS CL) (72000)(00010) (00095)(00940)

JUL , 1983 1200 186.00 18.0 800 21

WELL NO. 115 LOCAL NO. 03N02W14DAG1 SITE ID 345217091103001 ALLUVIAL AQUIFER

ELEV. OF LAND SPE-CHLO-SURFACE DEPTH CIFIC RIDE, DATUM OF CON-DIS-SOLVED (FT. WELL. TEMPER-DUCT-MEDIUM ABOVE TOTAL (MG/L ATURE ANCE DATE TIME NGVD) (FEET) (DEG C) (uS/cm) AS CL.) (00010) (00940) (72000) (72008) (00095) AUG , 1984 08... 1610 196.00 130 17.0 1200 100

WELL NO. 116 LOCAL NO. 03N02W16AAA1 SITE ID 345251091122501 OWNER - W. M. DICKSON ALLUVIAL AOUIFER

DATE	тімк	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	983 1745	6	190.00	160	17.0	860	39

WELL NO. 117 LOCAL NO. 03N02WIRABBI SITE ID 345252091150301 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. AROVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	183 1520	6	177.00	17.0	1030	120

WELL NO. 118 LOCAL NO. 03N02W20ADC1 SITE ID 345139091134101 OWNER - J. B. MILEY ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
AUG , 193	75										
27	1100	6	182.00	120	120	17.5	750	6.6	338	410	0
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG , 197	75										
27	1100	164	330	0	88	27	30	.7	60	419	2500

WELL NO. 119 LOCAL NO. 03N02W21ADC1 SITE ID 345138091123301 OWNER - FRANK MORGAN ALLIVITAL AGULFER

DATE TIME		MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)		i ATU	(C)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
SEP , 1975		6	190.00	146	146	1	18.0	.1180	7.3	359	440	0
SEP , 1982	-	6	190.00	146	-	. <b>-</b> 1	17.0	900			***	
AUG , 1984 09 1045		6	190.00	146	-	1	17.5	1020				
DATE TIME		CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIU DIS- SOLVE (MG/I AS CA	IM S1 D1 ED S01 . (MC	IS- LVED S G/L MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
SEP , 1975		35	370	15	100	30	)	82	2	75	620	2700
SEP , 1982	-					•••			-	78		
AUG , 1984 09 1045					-	-				96		
		WELL	NO. 120		O. 03NO2 L AQUIFE		SITE	ID 34512	280911311	01 OWNER	- WAYNE R	OEDIGER
DATE TIME		MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER ATURE (DEG C	ANC	'IC  -  T- (  E  cm)   [	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
AUG , 1975 27 1000		6	186.00	130	19.	0 1	360	6.3	399	490	0	387
SEP , 1982	_	6	186.00	130	19.		120					-
JUN , 1983 15 1300		6	186.00	130	17.		120					
		NE:	RD- NE SS NON G/L BON	CAR- D: ATE SO	LCIUM IS- DLVED	MAGNE- SIUM, DIS- SOLVED (MG/L	SODIU DIS- SOLVE (MG/	IM, A SOR ED TI	AD- RI RP- DI ION SO	LO- RES DE, AT S- DE LVED D	G. C D IS- SO	ON, IS- LVED G/L
DATE	TIME	CA	CO3) CA	CO3) A	S CA)	AS MG) 00925)	AS N (0093	IA)	AS	CL) (M	G/L) AS	FE) 046)
AUG , 1975 27 SEP , 1982	1000		410	16 11	0	34	96		2 120	n	648	3100
03 JUN , 1983		•							130	0		
15	1300								140	า		

WELL NO. 121 LOCAL NO. 03N02W22ACD1 SITE ID 345116091110501 OWNER - CARL RIDDELL ALLUVIAL ADUIFER

TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
85			45.00			28
		TIME	OF LAND SURFACE DATUM (FT. MEDIUM ABOVE TIME NGVD) (72000)	OF LAND SHRFACE DEPTH DATUM OF (FT. WELL, MEDIUM AROVE TOTAL TIME NGVD) (FEET) (72000) (72008)	OF LAND SURFACE DEPTH DATUM OF (FT. WELL, TEMPER- MEDIUM ABOVE TOTAL ATURE TIME NGVD) (FEET) (DEG C) (72000) (72008) (00010)	OF LAND SURFACE DEPTH CIFIC DATUM OF CON- (FT. WELL, TEMPER- DUCT- MEDIUM ABOVE TOTAL ATURE ANCE TIME NGVD) (FFET) (DEG C) (μS/cm) (72000) (72008) (00010) (00095)

WELL NO. 122 LOCAL NO. 03N02W23CCD1 SITE ID 345142091114301 OWNER - BILL NORMAN ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
MAR , 19	85 1630	6	206.00	100	15.0	1220	130

### WELL NO. 123 LOCAL NO. 03N02W23DAB1 SITE ID 345135091102901 ALLUVIAL AQUIFER

DATE	Time	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)
AUG , 19	983										
03	1420	6	192.00	18.0	1000	7.3	460	510	0	41	440
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG , 19	183										
03	1420	0	120	35	37	15	.8	2.3	47	40	<.10
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 19											
03	1420	•20	31	553	570	2900	300	•020	18	20	-41

#### WELL, NO. 124 LOCAL NO. 03N02W23DRR1 SITE ID 345134091104701 OWNER - GEISLER ALLIVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µ\$/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
JUN , 19	53									
22 SEP		6	195.00	128	17.0	810	7.3	405	490	0
15		6	195.00	128	17.0	776	7.9	368	450	
									NITRO-	
		CARBON		HARD-		MAGNE-	CHLO-		GEN,	IRON,
		DIOXIDE DIS-	HARD— NESS	NESS,	CALCIUM DIS-	SIUM, DIS-	RIDE, DIS-	SULFATE DIS-	NITRATE DIS-	TOTAL RECOV-
		SOLVED	(MG/L	BONATE	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	ERABLE
D.4.000	<b>77.49</b>	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L
DATE	TIME	AS CO2) (00405)	(00900)	CACO3) (00902)	AS CA) (00915)	AS MG) (00925)	AS CL) (00940)	AS 504) (00945)	AS N) (00618)	AS FE) (01045)
JUN , 19	53									
22		39	400	0	110	31	30	22	.50	3400
15		9.0	<b>37</b> 0	0	96	31	30	26	•50	2700

#### WELL NO. 125 LOGAL NO. 03N02W24BBB1 SITE ID 345200091100901 OWNER - GEISLER FARMS ALLUVIAL ACUIFER

DATE	TIME	MEDIUM	FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µ8/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	151 <b>5</b>	6	188.00	130	17.5	1140	69

#### WELL NO. 126 LOCAL NO. 03N02W25CDC1 SITE ID 345020091100201 OWNER - BRUCE MARTIN ALLUVIAL AQUIFER

DATE	TIME	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19							
08	1400	6	192.00	130	17.5	871	71

#### WELL NO. 127 LOCAL NO. 03NO2W26AAB1 SITE ID 345103091103301 OWNER - VERN VAHER ALLHVIAL AOUIFER

DATE	TIME	MEDIUM	OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (PEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 198	4						
08	1445	6	193.00	130	17.5	980	56

#### WELL NO. 128 LOCAL NO. 03NO2W27CCA1 SITE ID 345029091121201 ALLUVIAL ACUIFER

	DATE	TIME		MEDIUM	ELEVOR LAI OF LAI SURFAC DATUI (FT. ABOVI NGVD) (72000	ND CE DEF 4 OF WEI TOI ) (FE	L, AL ET)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE ( µS/cm (00095	RID DIS SOL (MG n) AS	E, - VED /L CL)	
	AUG , 09			6	185.0	00 130		17.0	105	50 71		
		WELL NO.	129	LOCAL N			SITE	ID 3450	3809111	13201 OW	ner – Jam	IES SHARP
	DATE	TIME		MEDIUM	ELEV. OF LAN SURFAC DATUN (FT. ABOVE NGVD)	ND TE DEP TOT TOT TOT	L, AL ET)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm (00095	DIS- SOL' (MG a) AS	E, - VED /L CL)	
1	MAR , 06			6	206.0	00 90	.00	14.0	108	10 65		
		WELL NO.	130	LOCAL NO			SITE	ID 3451	10 <b>9</b> 09113	12001 OW	NER - JOH	IN RAY
DATE TIME	ž.	MEDIUM	ELF OF I SURI DAT (F ABC NGV (720	AND FACE TUM FT. TER DVE AT (D) (DI	Ture Eg () (	SPE- CIFIC CON- DUCT- ANCE µS/cm) 00095)	PH (STA AR UNIT (004	LIN F1 ND- (N D A S) CA	iity (ELD F 1g/L 18 1003)	BICAR- BONATE PET-FLD (MG/L AS HCO3) 00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
JUN , 1953 22	-	6	185	<b>5.</b> 00	18.0	922		7.4	410	500	· o	32
24	-	6	185	.00	17.0	941		7.5	409	500	0	25
DATE	TIME	HAR NES (MG AS CAC (1009	S /L 03)	HARD- NESS, NONGAR- BONATE (MG/L CACO3) (00902)	CALCIU DIS- SOLVE (MG/L AS CA	DI D SOL' (MG	UM, S- VED /L MG)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFAT DIS- SOLVE (MG/L AS SO4 (00945	DIS D SOLV (MG/	N, IRO ATE TOT S- REC VED ERA (L (UG N) AS	AL OV- BLE /L FE)
JUN , 1953 22			400	o	110	31		76	2.	n .	.00 4	300
	,	WELL NO.		LOCAL NO			SITE	ID 3450	2009113	0201		
	.11.	ՄL , 1983	TIME		O S	ELEV. F LAND URFACE DATUM (FT. ABOVE NGVD) 72000)	TEMPI ATUI ( DEG ( 000 )	CI CO TR- DU TE AN C) (JS	FIC N- CT- CE /am) (195) (1	CHLO RIDE, DIS SOLVED (MG/L AS CL) 00940)		
			<b>120</b> 0		6	186.00	16	1.5	1140	150		

WELL NO. 132 LOCAL NO. 03N02W29CBA1 SITE ID 345040091142301 OWNER - MRS. A. W. WARD ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	DATUM (FT. V ABOVE 1		FLOW F RATE ( (GPM) (	PEPTH A	C C EMPER- D ATURE A DEG C) (µ	UCT- (S' NCE S/cm) UN	PH ( T <b>AND-</b> 1 ARD ( LTS) U	COLOR (PLAT- INIM- COBALT INITS)
JUL , 195	2									
11		6	191.00	36			16.5	554	8.6	
JUN , 195	. <del></del>	6	191.00	36			17.0	802	7.3	
AUG 24		6	191.00 1	36			17.0	786	7.4	
MAR , 196 29	l 	6					17.0	634	7.4	5
AUG , 197	4	6		16	500 1	.13	17.0	436	7.2	3
15	1330		191.00	36			17.0	435		
DATE	TIME	ALKA- LINITY FIELD (MG/LL AS CACO3 (00410		CAR- BONATE FET-FLI (MG/L AS CO3)	SOLVED (MG/L AS CO2)	HARD- NESS (MG/L AS GACO3)		CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS HG) (00925)	•
JUL,	1952									
JUN ,		- 16	1 170	12	.7	200	39		-	
22		- 33	400	0	32	310	0	85	23	
AUG 24		- 31	1 380	n	24	310	0	120	4.2	
MAR , 29	. 1961	- 284	350	o	22	280	0	75	23	
AUG ,		- 199	240	0	24	190	0	50	16	
		• ,		·	••	170	.,	30	10	
DATE	TIME	SODIUM DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	
1118										
ЛШ <b>.</b> 11		· <u></u>				86	2.0	•02		
JUN , 22			. <del></del>			84	1.0	•00		
MAR , 29		31	19	.8	<b>2.</b> 2	45	2.2	.41		
AUG ,	1974	. 16	15	.5	1.2	18	5.6		.37	
JUN ,	1983	10		• ,	1.2		J•0		•3/	
15	1330					24				

WELL NO. 132 LOCAL NO. 03N02W29CBA1 SITE ID 345040091142301 OWNER - MRS. A. W. WARD ALLUVIAL ACHIFER - CONTINUED

DATE	TIME	PHOS- PHORUS, TOTAL (MG/I, AS P) (00665)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
Jm., 195	2							6100	
JUN , 195	3								
22 AUG					-			4200	
24								2800	
MAR , 1961 29 AUG , 1974			.30	18	315	370		<b>29</b> 0	
07		•290	•20	38	257	270	2500		220

WELL NO. 133 LOCAL NO. 03N02W30ACB1 SITE ID 345058091150201 OWNER - BOB KEMMER ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19						
15	1400	6	186.00	17.0	320	12

WELL NO. 134 LOCAL NO. 03N02W31DBA1 SITE ID 344948091145801 OWNER - BOOTS MILEY ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
SEP , 197	5										
10 JUN 198	1100	6	188.00	132	120	18.0	595	7.3	235	290	0
21	1345	6	188.00	132		18.0	505				
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
SEP , 197	5										
10 JUN , 198	1100	23	240	3	64	19	29	.8	45	344	<b>34</b> 00
21	1345								24		

### WELL NO. 135 LOCAL NO. 03N02W32ARA1 SITE ID 345019091134801 ALLUVIAL ADULFER

DATE	TIME	MEDIUM	ELEV. OF LAND SHRFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	1200	6	186.00	18.0	775	53

# WELL NO. 136 LOCAL NO. 03N02W32BEC1 SITE ID 345008091143101 OWNER - GLEN FULLER ALLUVIAL AQUIFER

			P1 PU						
			ELEV.						
			OF LAND			SPE-		ALKA-	BICAR-
			SURFACE	DEPTH		CIFIC		LINITY	BONATE
			DATUM	OF		CON-	PH	FIELD	FET-FLD
			(FT.	WELL.	TEMPER-	DUCT-	(STAND-	(MG/L	(MG/L
		MEDIUM	ABOVE	TOTAL	ATURE	ANCE	ARD	AS	AS
DATE	TIME		NGVD)	(FEET)	(DEG C)	(µS/cm)	UNITS)	CACO3)	HCO3)
DALL	1110.		(72000)	(72008)	(00010)	(00095)	(00400)	(00410)	(00440)
			(72000)	(72000)	(((((((((((((((((((((((((((((((((((((((	(00033)	(00,400)	(1104111)	(00440)
SEP , 19	82								
09	-	6	191.00	124	17.0	430			
JUL , 19	83								
27	1200	6	191.00	124	18.5	425			
AUG		*			• • • • •				
02	1215	6	191.00	124	17.5	469	7.4	230	<b>26</b> 0
02	1217	.0	171 000	124	17.03	409	/ • <del>•</del>	230	200
			CARBON		HARD-	•	MAGNE-		
		CAR-	DIOXIDE	HARD-	NESS,	CALCIUM	SIUM.	SODIUM.	
		BONATE	DIS-	NESS	NONCAR-	DIS-	DIS-	DIS-	
		FET-FLD	SOLVED	(MG/L	MONATE	SOLVED	SOLVED	SOLVED	
		(MG/L	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L	9 F 9 C V WT
									PERCENT
DATE	TIME	AS CO3)	AS CO2)	CACO3)	CACO3)	AS CA)	AS MG)	AS NA)	SODIUM
		(00445)	(00405)	(00900)	(00902)	(00915)	(00925)	(00930)	(00932)
AUG , 19	83								
02	1215	0	16	220	0	59	18	14	12
						NITRO-			SOLIDS,
		CODTIN	20444	OUT A			<b>30</b> 110		
		SODIUM	POTAS-	CHLO-		GEN,	FLUO-	SILICA,	RESIDUE
		AD-	STUM,	RIDE,	SULFATE	NO2+NO3	RIDE,	DIS-	AT 180
		SORP-	DIS-	DIS-	DIS-	DIS-	DIS-	SOLVED	DEG. C
		TION	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	(MG/L	DIS-
		RATIO	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	AS	SOLVED
DATE	TIME		AS K)	AS CL)	AS 804)	AS N)	AS F)	SIO2)	(MG/L)
	• • • • • • • • • • • • • • • • • • • •	(00931)	(00935)	(00940)	(00945)	(00631)	(00950)	(00955)	(70300)
		(00731)	(00733)	(00940)	(1094))	(10031)	(007307	(1)(1733)	(70300)
ann 10									
SEP , 198	82								
09				26	. —				
JUL , 198	83								
27	1200			20					
AUG									
02	1215	.4	1.0	20	4.2	<.10	.20	35	256
		• • •	• • • •	••••		*****	• • • • •	33	200

WELL NO. 136 LOCAL NO. 03N02W32BBC1 SITE ID 345008091143101 OWNER - GLEN FULLER ALLUVIAL AQUIFER - CONTINUED

DATE	TIME	TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (NG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (NG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 19	983 1215	280	2500	190	•010	9	20	•13

#### WELL NO. 137 LOCAL NO. 03N02W32CBB1 SITE ID 344951091143001 OWNER - GLEN FULLER NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (UMHOS) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
JUL , 195	52	,				•				
11 JUN , 195		6	190.00	128	17.0	902	7.9	331	400	0
22 AUG		6	190.00	128	18.0	955	7.4		470	0
24		6	190.00	128	18.0	974	7.7	384	470	0
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (100925)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (DO940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	IRON, TOTAL RECOV- ERABLE (IIC/L AS FE) (01045)
JUL , 195 11 JUN , 195		8.1	380	51	_		110	1.0	.05	4800
22		30	370	0	100	28	99	1.0		5100
AUG										

WELL NO. 138 LOCAL NO. 03N02W33DAA1 SITE ID 344952091123101 OWNER - HOWARD GIBRS ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	184						
09	0945	6	191.00	105	17.5	1080	110

WELL NO. 139 LOCAL NO. 03N02W34ADD1 SITE ID 344954091112501 OWNER - ST. JOHN M. B. CHURCH ALLIVIAL ADULFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. AROVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	83					
22	1615	6	189.00		920	110
AUG , 19	84					
08	1645	6	189.00	17.5	1210	160

WELL NO. 140 LOCAL NO. 03N02W36BDD1 SITE ID 344953091094801 ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JIL , 19 28	983 1200	6	191.00	18.5	755	34

WELL NO. 141 LOCAL NO. D3NO3W02ACD1 SITE ID 345420091165501 ALLUVIAL ACUIFER

DATE	TIME	неріин	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATTIRE (DEG C) (00010)	SPE~ CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	83 1200	6	179.00	17.5	200	3.8

WELL NO. 142 LOCAL NO. 03N03W02CAA1 SITE ID 345414091171201 OWNER - T. C. CARTER ESTATE ALLUVIAL AQUIFER

SAMPLE LOST

WELL NO. 143 LOCAL NO. 04NO1W06DCA1 SITE ID 345916091081801 ALLUVIAL ACHIFER

			ELEV.			
			OF LAND		SPE-	CHLO-
			SURFACE		CIFIC	RIDE.
			DATUM		CON-	DIS-
			(FT.	TEMPER-	DUCT-	SOLVED
		MEDIUM	ABOVE	ATURE	ANCE	(MG/L
DATE	TIME		NGVD)	(DEG C)	(µS/cm)	
			(72000)	(00010)	(00095)	(00940)
JUL . 19	Ωì					
29	1200	6	213.00	17.5	600	14
27	1200	v	213.00		000	
WELL NO	. 144 LO	CAL NO. 048	101 WOS ABB1	SITE ID	345902091	072501
	AL	LUVIAL AQUI	FER			
			ELEV.			
			OF LAND		SPE-	CHLO-
			SURFACE		CIFIC	RIDE,
			DATUM		CON-	DIS-
			(FT.	Temper-	DUCT-	SOLVED
		MEDIUM	ABOVE	ATURE	ANCE	(MG/L
DATE	TIME		NGVD)	(DEG C)	$(\mu S/cm)$	AS CL)
			(72000)	(00010)	(00095)	(00940)
AUG . 19	02					
17	0940	6	209.00	18.0	600	14
17	17540	•	207.00	10.40	.000	1.4

WELL NO. 145 LOCAL NO. 04NO1W08ADD1 SITE ID 345845091065801 ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	OF LAND SURFACE DATUM (FT. AROVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)
JUL , 19	973	6	210.00	145	1720	17.0	790

WELL NO. 146 LOCAL NO. 04N01W16CCC1 SITE ID 345720091065601 OWNER - H. WATKINS INC. ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	083 0825	6	211.00	18.0	<b>78</b> 0	32

WELL NO. 147 LOCAL NO. 04NOLWI7ABD1 SITE ID 345804091071901 OWNER - ENGLER ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INIM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUL , 196	51	6	207.00	130	1020	18.5	610	8.0	5	335
.,		V	207 100	•50	1020		0.0	0.0	_	303
DATE	TIME	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)
JUL , 196	1									
19		410	0	6.5	330	0	90	25	17	10
DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JUL., 196	1									
19		•4	1.9	17	6.0	.16	396	360	350	40

#### WELL NO. 148 LOCAL NO. 04NO1W28BAD1 SITE ID 345618091063001 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	OF LAND SURFACE DATHM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DHCT- ANCE (µS/cm) (00095)
JUL. , 1	973	6	206.00	145	815	16.5	910

WELL NO. 149 LOCAL NO. 04N01W33ADC1 SITE ID 345509091060801 ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT- ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)		(MG/L
AUG . 19	83					
17	1130	6	212.00	17.5	900	48
WELL NO	. 150	LOCAL NO. 04N ALLUVIAL AOUI		SITE ID	34 <b>5906</b> 091	100301
			ELEV.			

DATE	TIME	неотим	OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL., 19	83					
28	1200	6	198.00	17.5	470	9.9
AUG , 19						
07	1535	. 6	198.00	17.0	479	22

WELL NO. 151 LOCAL NO. 04N02W02ACA1 SITE ID 345935091101901 OWNER - THOMAS J. WILSON ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATTIRE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µ\$/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	984 0900	6	191.00	84.00	17.5	438	14

### WELL NO. 152 LOGAL NO. 04N02W04RBD1 SITE ID 350001091125701 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	83					
29	1200	6	182.00	17.5	170	.30

#### WELL NO. 153 LOCAL NO. 04NO2MO5DCA1 SITE ID 345918091133601 ALLUVIAL ADUIFER

DATE	TIM <b>E</b>	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	983 1120	6	188.00	17.0	225	5.9

WELL NO. 154 LOCAL NO. 04N02WIIDCD1 SITE ID 345814091102801 OWNER - SWINDLE ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (uS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	984 0815	6	200,00	130	17.5	465	31

#### WELL NO. 155 LOCAL NO. 04NO2W11DDR1 SITE ID 345820091101801 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	183					
12	0755	6	200.00	17.5	670	34

#### WELL NO. 156 LOCAL NO. 04N02W12AAB1 SITE ID 345857091091601 OWNER - ALFRED DENNEY ALLUVIAL AQUIFER

DATE	TIME	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	984 0945	6	210.00	135	17.5	568	26

WELL NO. 157 LOCAL NO. 04N02W12ADA1 SITE ID 345843091090201 OWNER - B. H. WARD ALLUVIAL AQUIFER

JUL , 1983	1200	6	212.00	130	17.5	620	16
DATE.	TIME	MEDIUM	OF LAND SURFACE DATUM (FT- ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)

WELL NO. 158 LOCAL NO. 04N02W13DAB1 SITE ID 345742091091201 ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	1200	6	195.00	17.0	750	130

WELL NO. 159 LOCAL NO. 04NO2W15DBA1 SITE ID 345743091112601 OWNER - ED HEAVNER ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIPIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	83						
12	0850	6	202.00	60.00	19.0	550	16
AUG , 19							
08	1030	6	202.00	60.00	17.5	468	18

WELL NO. 160 LOCAL NO. 04N02W17CAD1 SITE ID 345733091135101 ALLUVIAL AOUIFER

DATE	тіме	MEDLUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPF- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
ли. , 19 29	183 1200	6	176.00	17.0	210	3.0

WELL NO. 161 LOCAL NO. 04N02W22CDC1 SITE ID 345627091115301 OWNER - TOMMY SNELSON NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	182						
03 JUN , 19		6	201.00	110	18.0	738	44
13 AUG , 19	1030	6	201.00	110	17.0	760	38
08	1115	6	201.00	110	18.0	760	52

WELL NO. 162 LOCAL NO. 04N02W22DDB1 SITE ID 345637091112601 OWNER - BUCK FILES NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
01	1540	6	203.00		540	16
01	1720	6	203.00	-	560	16
02	0825	6	203.00		580	16
02	1645	6	203.00	16.0	580	18
03	1330	6	203.00	-	585	_

### WELL NO. 163 LOCAL NO. 04N02W24ABA1 SITE ID 345714091092101 ALLUVIAL AQUIFER

DATE AUG , 198	TIME	MEDIUM	NGVD) (72000)	(FEET) (72008)	(DEG C) (00010)	ANCE (µS/cm) (00095)	(MG/L AS CL) (00940)
		MEDIUM	OF LAND SURFACE DATUM (FT. ABOVE	DEPTH OF WELL, TOTAL	TEMPER-	SPE- CIFIC CON- DUCT- ANCE	CHLO- RIDE, DIS- SOLVED (MG/L

# WELL NO. 164 LOCAL NO. 04N02W25BAC1 SITE ID 345615091095201 ALLUVIAL AQUIFER

			ELEV.			
			OF LAND		SPE-	CHLO-
			SURFACE		CIFIC	RIDE.
			DATUM		CON-	DIS-
			(FT.	TEMPER-	DUCT-	SOLVED
		MEDIUM	ABOVE	ATURE	ANCE	(MG/L
DATE	TIME		NGVD)	(DEG C)	(µ\$/cm)	AS CL)
			(72000)	(00010)	(00095)	(00940)
JUL , 19	183					
28	1200	6	197.00	17.5	690	26

## WELL NO. 165 LOCAL NO. 04N02W25RBR1 SITE ID 345623091100801 ALLUVIAL ADDIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	83 1200	6	200.00	17.5	<b>83</b> 0	41

WELL NO. 166 LOCAL NO. 04NO2W26BBC1 SITE ID 345616091111101 OWNER - BUCK FILES NO. 1 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	982	6	201.00	17.5	590	55

WELL NO. 167 LOCAL NO. 04N02W26CCC1 SITE ID 345535091111001 OWNER - MILTON LAWSON ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (us/cm) (00095)	PH (STAND-ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
JUL . 19	52						•			
11 JUL		6	195.00	102	17.0	508	8.1	166	280	0
22		6	195.00	102	17.0	668	7.3	340	410	0
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	GALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	IRON, TOTAL RECOV— ERABLE (UG/L AS FR) (01045)
JUL , 19	52	3.6	280	51	_	_	22	18	.05	1900
JUL 22		33	<b>34</b> 0	2	94	26	21	18	•00	2200

WELL, NO. 168 LOCAL NO. 04N02W27ACB1 SITE ID 345612091114301 OWNER - BUCK FILES NO.4 ALLUVIAL ACUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 1	982	6	200.00	17.5	710	42

WELL NO. 169 LOCAL NO. 04N02W27BDB1 SITE ID 345609091115501 OWNER - TOMMY SNELSON NO. 1 ALLUVIAL AQUIFER

DATE	1°IMBE	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUN , 197									
10	1400	6	205.00	110	110	17.5	690	7.5	322
JUL , 197 08 AUG	_	6	205.00	110		18.0	615	7.7	
02		6	205.00	110		18.0	620		
03		6	205.00	110			630		
SEP 09		6	205.00	110		17.5	630		
SEP . 198	12	•	203.00	110		1/.5	630		_
03		6	205.00	110			1020		
09		6	205.00	110		17.5	920		
JUN , 198									
13 AUG	1045	6	205.00	110		17.0	1150		
03	0815	6	205.00	110		17.0	1 <b>2</b> 10	7.2	370
		BICAR- BONATE FET-FLD (MG/L	CAR- BONATE PET-FLD	CARBON DIOXIDE DIS- SOLVED	HARD- NESS (MG/L	HARD- NESS, NONCAR- BONATE	CALCIUM DIS- SOLVED	MAGNE- SIUM, DIS- SOLVED	SODIUM, DIS- SOLVED
		AS	(MG/L	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L
DATE	TIME	(00440)	AS CO3) (00445)	AS CO2) (00405)	CACO3) (00900)	CAC03) (00902)	AS CA) (00915)	AS MG) (00925)	AS NA) (00930)
JUN , 197	'5								
10	1400	390	0	20	300	0	81	24	18
AUG , 198	0815	410	0	41	410	37	110	32	75

WELL NO. 169 LOCAL NO. 04NO2W27BDB1 SITE ID 345609091115501 OWNER - TOMMY SNELSON NO. 1 ALLUVIAL AGUIFER - CONTINUED

	DATE	TIME		PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	FLIIO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	
•	JUN ,											
	10				.5	_	16					
	08 AUG	_	-				14					
	02 SEP ,		-				15					
	03						140					
	09 JUN ,	1983	•				140					
	13	1045					160					
	03	0815		29	2	2.1	180	1.1	<.10	•20	29	•
	DATE	TIME	j	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	
	JUN ,	1975										
	10	1400				830						
	03	0815		679	640	2600	580	.030	10	80	1.2	
			WELL 1	NO. 170	LOCAL NO		7CDDI SIT	TE ID 3455	390911150	01 OWNER	- BUCK FI	LES NO. 1
DATE	TIME	MEDI	UM .	ELEV. DF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
FEB , 198	4 0930	6		200.00	81.50	18.0	830	7.7	7.5	350	160	94
DAT	E 1	fime	MAGN SIU DIS SOLV (MG/ AS M	JM, SODI S- DIS ZED SOLV ZL (MG AG) AS	ED /L PERO NA) SOI	SO T CENT RA DIUM	AD+ S RP- D ION SO TIO (M AS	IUM, RII IS- DI: LVED SOI G/L (MC K) AS	S- DI: LVED SOI G/L (MG CL) AS:	GFATE NO2 S- D LVED SO G/L (M SO4) AS	H+NO3 RI DIS- D DLVED SO IG/L (M H N) AS	UO- DE, IS- LVED G/L F)
FEB 24.	, 1984 	930	28	46		22	1	2.0 90	) ;	29	•56	•20

WELL NO. 170 LOCAL NO. 04N02W27CDD1 SITE ID 345539091115001 OWNER - BUCK FILES NO. 1 ALLUVIAL AOUIFER - CONTINUED

DATE	TIME	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. G DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
FEB , 19	984 0 <b>93</b> 0	28	510	440	690	540	.010	7	30	.58

### WELL NO. 171 LOCAL NO. 04NO2W27CDD2 SITE ID 345539091115002 OWNER - BUCK FILES NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)		SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (HG/L AS CACO3) (00900)
NOV, 19	184	4									
28	0930	6	200.00	137	41.00	17.5	1010	7.3	387	38	440
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (O0631)
NOV , 19	84										
28	0930	57	120	35	26	11	.6	1.9	130	5.1	<.10
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (NG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
NOV , 19	84										
28	0930	.20	30	542	580	2100	380	.031	Я	50	.76

WELL NO. 172 LOCAL NO. 04N02W27DCB1 SITE ID 345546091113901 OWNER - BUCK FILES NO. 5 ALLUVIAL ADULFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)
SEP , 198	32	6	202.00	17.0	618						
AUG , 198	33	0	202 •00	17.0	010	. —	_				
03	0730	6	202.00	17.5	562	7.6	300	330	0	13	250
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
SEP , 198							-	-	50	_	
AUG , 198	0730	0	67	19	24	17	.7	1.3	14	7.3	<.10
03	07.30	U	707	19	24	17	• /	1.3	14	7.3	(.10
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 198	0 <b>73</b> 0	.20	32	327	3 <b>3</b> 0	1300	280	<.010	<4	20	•12

WELL NO. 173 LOCAL NO. 04N02W27DCC1 SITE ID 345535091113901 OWNER - CASE EQUIPMENT CO. ALLUVIAL AGUIFER

DATE	T1 ME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
MAY , 197	5									
29 JUL , 197	1000	6	200.00	17.0	710	7.4	302	370	0	23
08		6	200.00	18.0	695	7.4				-
			HARD-		MAGNE-		SODIUM	CHLO-	RESIDUE	
		HARD-	NESS,	CALCIUM	SIUM.	SODIUM,	AD-	RIDE.	AT 180	IRON,
		NESS	NONCAR-	DIS-	DIS-	DIS-	SORP-	DIS-	DEG. C	DIS-
		(MG/L	BONATE	SOLVED	SOLVED	SOLVED	TION	SOLVED	DIS-	SOLVED
		AS	(MG/L	(MG/L	(MG/L	(MG/L	RATIO	(MG/L	SOLVED	(11G/L
DATE	TIME	CACO3)	CACO3)	AS CA)	AS MG)	AS NA)		AS CL)	(MG/L)	AS FE)
		(00900)	(00902)	(00915)	(00925)	(00930)	(00931)	(00940)	(70300)	(01046)
MAY , 197	5									
29	1000	320	17	83	27	24	•6	-50	401	1200
JUL , 197	h									
08								58		

WELL NO. 174 LOCAL NO. 04N02W28CCD1 SITE ID 345540091130801 OWNER - WAYNE ROEDIGER ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE PET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (HG/L AS CO3) (00445)
JUN , 197	5										
11 JUL		6	196.00	85.00	85.0	18.0	1770	7.3	348	420	0
25 JUL , 197	- <del></del>	6	196.00	85.00			1580	7.7	249	300	0
08	"	6	196.00	85.00							
08	1600	6	196.00	85.00							
AUG											
04	***	6	196.00	85.00						-	
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
JUN , 197	5										
11 JUL		34	270	0	65	25	240	7	320	864	4100
25 AUG , 197		9.6							330		
04									450	-	_

# WELL NO. 175 LOCAL NO. 04N02W28DCD1 SITE ID 345536091124201 OWNER - WAYNE ROEDIGER ALLUVIAL AQUIFER

DATE	TIME	MED IUM	ELEV. OF LAND SURFACE DATIM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
MAY , 19	975								
19		6	193.00	85.00	-	~~		15	
20		6	193.00	85.00		1220	7.5	130	790
20	1030	6	193.00	85.00					790
29		6	193.00	85.00		1120		150	730
JUN									
05		6	193.00	85,00	17.0	1100		160	720
05	1245	6	193.00	85.00	17.0				720
JUL , 19	76								
06		6	193.00	85.00	17.5	1340	7.3	240	
AUG									
04		6	193.00	85,00		1460			
SEP									
09	-	6	193.00	85.00	17.5	1460			
JUL., 19	77								
19		6	193.00	85.00		1550			
AUG									
03		6	193.00	85.00		1410			

WELL NO. 176 LOCAL NO. 04N02W28DDB1 SITE ID 345547091122901 OWNER - WAYNE ROEDIGER ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
JUN , 197	75									
05 JUL , 193	1000 76	6	193.00	85.0	17.5	2530	7.4	313	380	0
06 AUG		6	193.00		17.5	2870	7.4	_	-	
03 JUN , 198		6	193.00		17.5	3200	7.1			
13	1335	6	193.00		17.0	3180				
DATE	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
JUN , 197		21		200		••	0.40	_		****
05 JUL , 197	1000 6	24	510	200	140	39	340	7	570	7800
06 AUG							-	***	740	
03 JUN , 198	٦								810	
13	1335								<b>79</b> 0	

WELL NO. 177 LOCAL NO. 04N02W28DDD1 SITE ID 345535091122101 OWNER - WAYNE ROEDIGER ALLUVIAL AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
OCT , 19	949									
06		6	192.00	130			358		154	190
AUG , 19	,,,, 	6	192.00	130		17.0	528	7.5	277	340
MAY , 19	75	,	100 00	120						200
20 29		6 6	192.00 192.00	130 130	120	18.5	2740 2520	7.2	310	380
JUL		.,	172400	130			2320			
27	0930	6	192.00	130		17.0	3340	7.0		~~
27 27	0935 0945	6 6	192.00 192.00	130 130		17.0 17.0	3150 3100	7.0 7.0		
27	1000	6	192.00	130		17.0	3000	7.0		
27	1030	6	192.00	130		17.0	<b>297</b> 0	6.9		
27	1130	6	192.00	130	_	17.0	2940	7.0		
27	1330	6	192.00	130		17.0	2880	7.0		
27	1830	6 .	192.00	130	-	17.0	2750	7.0		
28 OCT	0830	6	192.00	130		17.0	2680			
16	0845	6	192.00	130		17.5	3720	6.9		
16	0930	6	192.00	130		17.5	3580	7.0		
16	1030	6	192.00	130		17.5	3410	7.1		
16	1130	6	192.00	130		17.5	3270	7.1		
16	1230	6	192.00	130		17.5	3200	7.1		
16	1330	6	192.00	130		17.5	3150	7.1		
16	1430	6	192.00	130		17.5	3100	7.1		
JUL , 19 06 AUG	76	6	192.00	130	-	17.5	2450	7.2		-
03 SEP		6	192.00	130		17.5	2460	7.3		
09		6	192.00	130			2460			
AUG , 19 03 SEP , 19		6	192.00	130			3180			
03		6	192.00	130		17.5	3450			
JUN , 19 13	83 1335	6	192.00	130		17.0	3180			
AUG 03	0900	6	192.00	130		17.5	2920	7.1	430	460
	9900	Ü	192.00	130		17.5	2920	7.1	430	400
DATE	TIME	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (100902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)
OCT , 19	49	12		130	0					
AUG , 19	53									
24 MAY . 19	75	0	17	260	0	63	24			
20 AUG , 198		0	38	480	180	120	45	290		6
03	0900	0	58	460	2.7	130	32	410	66	9

WELL NO. 177 LOCAL NO. 04N02W28DDD1 SITE ID 345535091122101 OWNER - WAYNE ROEDIGER ALLUVIAL AQUIFER - CONTINUED

DATE	TIME	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDHE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT , 19	149								
06			22	3.0	•63				
AUG , 19			19	4.0	.29				
MAY , 19			650						2350
29			630						2330
OCT									
16	0845		830						
16 16	0 <b>930</b> 1030		780 740						
16	1130		710						
16	1230		680						
16	1330		660						
16	1430		650						-
ЛЛ., 19 06	/6		650						
AUG			650				****		
03			570						
SEP , 19	82								
03			800						
JUN , 19									
13 AUG	1335		790	***					
03	0900	6.9	700	3.8		<.10	.20	28	1610
.,,,,,,,	.,,,,,,	.,,	700	3.0		<b>(*10</b>	• 2(1	20	1010
DATE	TIME	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MC/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (NG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
OCT , 194	49								
06				550					
AUG , 195	)) 			20					
MAY , 197	75			20					~-
20			<10						
AUG , 198									
03	0900	1500	2500		450	.200	10	1200	3.8

WELL NO. 178 LOCAL NO. 04N02W28DDD2 SITE ID 345535091122102 OWNER - WAYNE ROEDIGER ALLUVIAL AODIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SAM- PLING DEPTH (FEET) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
MAY , 19	75										
20	′ ·	6	191.00	85.00	85.0	18.0	1280	7.8	325	400	0
29		6	191.00	85.00			1250				
JUL											
27	0931	6	191.00	85.00		17.0	855	7.2			
27	0935	6	191.00	85.00	_	17.0	852	7.2			
27	0945	6	191.00	85.00		17.0	935	7.2			
27	1000	6	191.00	85.00		17.0	1100	7.1		~~	
27	1030	6	191.00	85.00		17.0	1080	7.1			
27	1130	6	191.00	85.00		17.0	1080	7.1			
27	1330	6	191.00	85.00		17.5	1110	7.2			
27	1830	6	191.00	85.00		17.5	1170	7.1			
28 OCT	0830	6	191.00	85.00		17.0	1250				
16	1330	6	191.00	85.00		17.5	1040	7.3			
16	1430	6	191.00	85.00	_	17.5	1010	7.4			
JUL , 19		•,	171.00	03400		17.5	1010	, • <del>•</del>			
06		6	191.00	85.00		17.5	1150	7.1			_
AUG		_									
03 SEP , 198	92	6	191.00	85.00		17.5	1120	7.1			
03		6	191.00	85.00		18.0	1580				
JUN , 198	83										
13	1330	6	191.00	85.00	-	17.0	1800				
		CARBON		HARD-		MAGNE-		SODIUM	CHLO-	SOLIDS, RESIDUE	
DATE	TIME	DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	AD- SORP- TION RATIO (00931)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
		DIS- SOLVED (MG/L AS CO2)	NESS (MG/L AS CACO3)	NONCAR- BONATE (MG/L CACO3)	DIS- SOLVED (MG/L AS CA)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	SORP- TION RATIO	DIS- SOLVED (MG/L AS CL)	DEG. C DIS- SOLVED (MG/L)	DIS- SOLVED (UG/L AS FE)
MAY , 197		DIS- SOLVED (MG/L AS CO2)	NESS (MG/L AS CACO3)	NONCAR- BONATE (MG/L CACO3)	DIS- SOLVED (MG/L AS CA)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	SORP- TION RATIO	DIS- SOLVED (MG/L AS CL)	DEG. C DIS- SOLVED (MG/L)	DIS- SOLVED (UG/L AS FE)
MAY , 197		DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940)	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16	75  1330 1430	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940)	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16 16 JUL , 197	75  1330 1430	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940)	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16 JUL , 197 O6	1330 1430 76	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940)	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16 JUL , 197 06 SEP , 198	1330 1430 76 ——32	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940)	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16 JUL , 197 06 SEP , 198 03 JUN , 198	1330 1430 76 ———————————————————————————————————	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94 170 280	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16 JUL , 197 06 SEP , 198	1330 1430 76 ——32	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925)	DIS- SOLVED (MG/L AS NA) (00930)	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046)
MAY , 197 20 OCT 16 JUL , 197 06 SEP , 198 03 JUN , 198	1330 1430 76 ———————————————————————————————————	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR- BONATE (MG/L CACO3) (00902)	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925) 38	DIS- SOLVED (MG/L AS NA) (00930) 81	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94 170 280 330	DEG. C DIS- SOLVED (MG/L) (70300)	DIS- SOLVED (UG/L AS FE) (01046) 2700
MAY , 197 20 OCT 16 JUL , 197 06 SEP , 198 03 JUN , 198	1330 1430 76 ———————————————————————————————————	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)	NONCAR-BONATE (MG/L CACO3) (00902)  130 LOCAL NO	DIS- SOLVED (MG/L AS CA) (00915)	DIS- SOLVED (MG/L AS MG) (00925) 38	DIS- SOLVED (MG/L AS NA) (00930) 81	SORP— TION RATIO (00931)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94 170 280 330	DEG. C DIS- SOLVED (MG/L) (70300)  659	DIS- SOLVED (UG/L AS FE) (01046) 2700
MAY , 197 20 OCT 16 JUL , 197 06 SEP , 198 03 JUN , 198 13	1330 1430 76 — 32 — 33 1330	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)  460  NO. 179  FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	NONCAR-BONATE (MG/L CACO3) (00902)  130	DIS-SOLVED (MG/L AS CA) (00915)  120	DIS- SOLVED SOLVED (MG/L AS MG) (00925)  38  8DDD3 SIT  SPE- GIFIC CON- DIGT- ANCE (MS/cm)	DIS-SOLVED (MG/L AS NA) (00930)  81	SORP—TION RATIO (00931)  2  350911221  BICAR—BONATE FET—FLD (MG/L AS HCO3)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94 170 280 330 03 OWNER	DEG. C DIS- SOLVED (MG/L) (70300)  659 WAYNE R  CARBON DIOXIDE DIS- SOLVED (MG/L AS G02)	DIS- SOLVED (UG/L AS FE) (01046)  2700 OEDIGER  HARD- NESS (MG/L AS CACO3)
MAY , 197 20 OCT 16 JUL , 197 O6 SEP , 198 O3 JUN , 198	1330 1430 76 — 32 — 33 1330	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)  460  NO. 179  FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	NONCAR-BONATE (MG/L CACO3) (00902)  130 LOCAL NO ALLIVIAL  DEPTH OP WELL, TOTAL (FEET) (72008)	DIS-SOLVED (MG/L AS CA) (00915)  120	DIS- SOLVED SOLVED (MG/L AS MG) (00925)  38  8DDD3 SIT  SPE- GIFIC CON- DIGT- ANCE (MS/cm)	DIS-SOLVED (MG/L AS NA) (00930)  81	SORP—TION RATIO (00931)  2  350911221  BICAR—BONATE FET—FLD (MG/L AS HCO3)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94 170 280 330 03 OWNER	DEG. C DIS- SOLVED (MG/L) (70300)  659 WAYNE R  CARBON DIOXIDE DIS- SOLVED (MG/L AS G02)	DIS- SOLVED (UG/L AS FE) (01046)  2700 OEDIGER  HARD- NESS (MG/L AS CACO3)
MAY , 197 20 OCT 16 16 JUL , 197 06 SEP , 198 03 JUN , 198 13	1330 1430 76 — 32 — 33 1330	DIS- SOLVED (MG/L AS CO2) (00405)	NESS (MG/L AS CACO3) (00900)  460	NONCAR-BONATE (MG/L CACO3) (00902)  130	DIS-SOLVED (MG/L AS CA) (00915)  120	DIS- SOLVED SOLVED (MG/L AS MG) (00925)  38  8DDD3 SIT  SPE- GIFIC CON- DIGT- ANCE (MS/cm)	DIS-SOLVED (MG/L AS NA) (00930)  81	SORP—TION RATIO (00931)  2  350911221  BICAR—BONATE FET—FLD (MG/L AS HCO3)	DIS- SOLVED (MG/L AS CL) (00940) 190 72 94 170 280 330 03 OWNER	DEG. C DIS- SOLVED (MG/L) (70300)  659 WAYNE R  CARBON DIOXIDE DIS- SOLVED (MG/L AS G02)	DIS- SOLVED (UG/L AS FE) (01046)  2700 OEDIGER  HARD- NESS (MG/L AS CACO3)

WELL NO. 179 LOCAL NO. 04N02W28DDD3 SITE ID 345535091122103 OWNER - WAYNE ROEDIGER ALLUVIAL AQUIFER - CONTINUED

				ALLUVTA	. AQUIFER	- CONTIN	ED				
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
		(00902)	(00915)	(00925)	(00930)	(00932)	(00931)	(00935)	(00940)	(00945)	(00631)
FEB , 19	84 1645	320	130	33	550	72	12	7.6	960	•2	.10
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
FEB , 198 23	84 1645	.20	26	1980	1800	2600	400	.200	20	1900	7.2
		WEI.I	, NO. 180		. 04NO2W2 AQUIFER	9DBAL SIT	F. IN 3455	580911341	01 OWNER	- DR. MCG	RAW
DATE	TIME	MEDIUM	FLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
AUG , 197	74		( · • · · · · )	(,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	(,	(,	(,	,,		
07 JUL 197		6	-		255	18.0	2750	7.4	3	381	470
01 0CT		6	193.00	128			1680	7.7		390	480
01	0930	6	193.00	128		18.0	2780	7.6		330	400
DATE	TIME	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CAC03) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
AUG , 197	74 	0	29	130	0	35	9.3	530	90	21	7.3
JUL , 197	'5	0	15				-				
0CT 01	0930	0	16								
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (HG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
AUG , 197		RIDE, DIS- SOLVED (MG/L AS CL) (00940)	DIS+ SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHORUS, TOTAL (MG/L AS P) (00665)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	DIS- SOLVED (UG/L AS FE) (01046)	NESE, DIS- SOLVED (UG/L AS MN) (01056)
AUG , 197 07 JUL , 197	'4 	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLVED (MG/L AS SO4)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHORUS, TOTAL (MG/L AS P)	RIDE, DIS- SOLVED (MG/L AS F)	DIS- SOLVED (MG/L AS SIO2)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	DIS- SOLVED (UG/L AS FE)	NESE, DIS- SOLVED (UG/L AS MN)
AUG , 197	'4 	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	DIS+ SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHORUS, TOTAL (MG/L AS P) (00665)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	DIS- SOLVED (UG/L AS FE) (01046)	NESE, DIS- SOLVED (UG/L AS MN) (01056)

WELL NO. 181 LOCAL NO. 04N02W30ACA1 SITE ID 345609091144701 ALLIVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL,	1300	6	18/-00	17.0	160	4.5

WELL NO. 182 LOCAL NO. 04N02W30BAC2 SITE ID 345618091150902 OWNER - CITY OF BRINKLEY NO. 10 ALLUVIAL AQUIFER

DATE	TIME	:	MEDIUM	ELE OF L SURF. DATI (F' ABO' NGVI (7200	AND ACE UM T. VE D)	DEPTH OF WELL, TOTAL (FEET (72008	TEMI ATI	PER- URE (7 C) (10)	SPE- CIFI CON- DUCT ANCE ( µS/c	:C :- :m)	PH (STAN ARI UNITS (0040	) 5)	ALK LINI FIE (MG AS CAC (004	TY LD /L	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
SEP ,															
07	0930	1	6	180	•00	140		17.0	2	02	6	.6		85	100
DATE	TIME		CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARI DIOX: DIS SOLV (MG, AS CO	IDE S- VED /L O2)	HARD- NESS (MG/L AS CACO3 (00900	NONG BONA (HG	SS, CAR- ATE 7/L CO3)	CALCI DIS- SOLV (MG/ AS C	ED L	MAGN SIU DIS SOLV (MG/ AS M	M, ED L	SODI DIS SOLV (MG AS	ED /L NA)	PERCENT SODIUM (00932)
SEP ,	1983														
07	0930		0	40	ו	6	8	0	17		6.	1	6	•0	16
DATE	TIME		SODIUM AD- SORP- TION RATIO	POTA SIU DIS SOLV (MG) AS 8	JM, 5- 7ED /L	CHLO- RIDE, DIS- SOLVE (MG/L AS CL	SULI DIS D SOI (MO	3- LVED 3/L 304)	NITR GEN NO2+N DIS SOLV (MG/ AS N	03 ED L	FLUO RIDE DIS SOLV (MG/ AS F	ED L	SILI DIS- SOL (MG AS- SIO- (009	VED /L 2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
SEP ,	1983														
07	0930		.3	Ι.	, 4	4.3	1	.5	۲.	10	•	10	38	В	136
I	DATE	TIME	SUM CON TUE D SO (M	IDS, OF STI- NTS, IS- LVED G/L) 301)	SOL (UC	ON, IS- LVED G/L FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SO (M AS	IS- LVED G/L I)	SOI (110	IS- LVED I/L LI)	SOI (110 AS	RON, IS- LVED G/L B)	SO (M AS	MIDE IS- LVED G/L BR) 870)
	EP , 198														
1	07	0930		140	4	600	520		.004		<4		<20		.04

WELL NO. 183 LOCAL NO. 04N02W30BDA1 SITE ID 345612091150001 OWNER - JAMES C. TRICE ALLUVIAL AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	FLOW RATE (GPM) (00058)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)
JUL , 19	61									
14		6	185.00	100	650	17.0	165	7.4	5	69
DATE JUL , 196 14	TIME 51	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)
DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/1. AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JUL , 196	51	~		2.0	, .				F105	***
14		.3	1.2	2.0	7.6	.16	127	86	5400	550

### WELL NO. 184 LOCAL NO. 04N02W32ADA1 SITE ID 345519091132901 OWNER - LLOYD BREWER NO. 1 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	982	6	193.00	140	18.0	2200	580

### WELL NO. 185 LOCAL NO. 04N02W32DAD1 SITE ID 345502091062401 OWNER - LLOYD BREWER NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	182	б	192.00	18.0	1840	160
JUN , 19 21	1230 1230	6	192.00		1470	220

WELL NO. 186 LOCAL NO. 04N02W33ADC1 SITE ID 345509091122801 OWNER - BUDDY FITTS NO. 2 ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HC03) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)
AUG , 193											
03 JUN , 198		6	192.00	18.0	700						290
13 AUG	1530	6	192.00	17.0	730						
03	1030	6	192.00	17.5	720	7.3	360	400	0	32	310
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG., 197	1030		79	22	27		•7		26		
JUN , 198	33		/9	22	21	_	• /				
13 AUG	1530							-	34		
03	1030	0	85	24	31	18	.8	1.6	38	5.2	•65
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
AUG , 197	7 10 <b>3</b> 0			379						-	
AUG , 198	3			-					- <b>-</b>		
03	1030	•20	34	407	420	2000	360	.010	7	80	•25

WELL NO. 187 LOCAL NO. 04N02W33DDC1 SITE ID 345446091123101 OWNER - BUDDY FITTS NO. 1 ALLUVIAL ACUIFER

			OF LAND SURFACE DATUM		SPE- CIFIC CON-	CHLO- RIDE, DIS-
DATE	TIME	MEDIUM	(FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	DUCT- ANCE (µS/cm) (00095)	SOLVED (MG/L AS CL) (00940)
JUN , 19	183					
13	1515	6	190.00	17.0	770	47

#### WELL NO. 188 LOCAL NO. 04N02W34ACD1 SITE ID 345510091113701 ALLUVIAL AOUTFER

	(00405)	AS CO3) (00445)	AS HCO3) (00440)	AS CACO3) (00410)	ARD UNITS) (00400)	ANCE (µS/cm) (00095)	ABOVE NGVD) (72000)	MEDIUM	TIME	DATE
JUN , 1975 26 1015 6 205.00 692 7.4 322 390 0	25	0	390	322	7.4	692	205.00	6		•

ALLUVIAL AQUIFER

DATE	TIME	MED LUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
JUN , 19	75								
23	1015	6	205.00	702	7.6	328	400	0	16
26	1015	6	205.00	702					

WELL NO. 190 LOCAL NO. 04N02W34BAA1 SITE ID 345531091115201 OWNER - WAYNE KELLER ALLUVIAL AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
FEB , 19	184					
23	1730	6	193.00	47.00	1060	150

WELL NO. 191 LOCAL NO. 04N02W34CDB1 SITE ID 345451091120101 OWNER - BILL HENARD ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	982					
10 JUN , 19	183	6	206.00	17.0	700	20
13	1500	6	206.00	17.0	745	32

WELL NO. 192 LOCAL NO. 04NO2W35ABB1 SITE ID 345530091103701 OWNER - JOHNNY BELCHER, JR. ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATHM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	82					
09 JUN . 19		6	192.00	17.0	665	55
13	1145	6	192.00	17.0	820	34

WELL NO. 193 LOCAL NO. 04NO2W35BBB1 SITE ID 345531091111301 OWNER - KIRK FILES NO. 2 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
SEP , 19	982	6	195.00	17.0	560	42

WELL NO. 194 LOCAL NO. 04N02W35CBC1 SITE ID 345456091111501 OWNEP - GEORGE GIBBS ALLUVIAL AQUIFER

			ELEV. OF LAND SURFACE DATUM	DEPTH OF		SPE- CIFIC CON-	PH	BICAR- BONATE FET-FLD	CAR- BONATE
DATE	TIME	MEDIUM	(FT. ABOVE NGVD) (72000)	WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	DUCT- ANCE (µS/cm) (00095)	(STAND- ARD UNITS) (00400)	(MG/L AS HCO3) (00440)	FET-FLD (MG/L AS CO3) (00445)
JUL , 19	952								
11		6	196.00	122	17.0	442	8.4	240	12
09		6	196.00	122	17.0	658	7.4	410	0
AUG		,	104 00						
24		6	196.00	122	17.0	655	7.3	410	0
		CARBON		HARD-		MAGNE-	CHLO-		IRON,
		DIOXIDE	HARD-	NESS,	CALCIUM	SIUM,	RIDE,	SULFATE	TOTAL
		DIS-	NESS	NONCAR-	DIS-	DIS-	DIS-	DIS-	RECOV-
		SOLVED	(MG/L	BONATE	SOLVED	SOLVED	SOLVED	SOLVED	ERABLE
() A TOP	TIME	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(lic/r
DATE	IIME.	AS CO2)	CACO3)	CACO3) (00902)	AS CA) (00915)	AS MG) (00925)	AS CL) (00940)	AS SO4) (00945)	AS FE) (01045)
		(0040))	(00900)	(100902)	(100913)	(00923)	(00940)	(00945)	(1)[(145)
JUL., 19	152								
11		1.5	250	35			20	6.0	1700
09		26	320	0	92	23	2.0	17	2100
AUG									
24		33	330	0	130	1.4	21	13	1800

WELL NO. 195 LOCAL NO. 04NO2N36ARD1 SITE ID 345518091092301 OWNER - JOHNNY BELCHER, JR. ALLUVIAL ACHIFER

DATE	TIME.	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUN , 19	83 1225	6	193.00	17.0	815	36

WELL NO. 196 LOCAL NO. 04NO2W36DAB1 SITE ID 345459091091701 OWNER - DODSON JONES ALLUVIAL AQUIFER

DATE	TIM	Ε	MEDIUM	FLC RAT (GPM (10005	E ATU	RE C)	SPE- CIFI CON- DUCT ANCE (µS/C	IC - 1 F- (S' E 2	PH FAND- ARD (TS) (400)	COL (PL INU COB UNI (000	OR LIN AT- FI M- (M ALT A TS) CA	ITY FE ELD FE G/L ( S CO3) H	ICAR- ONATE T-FLD MG/L AS CO3) 0440)	CA BON FET- (MG AS C	ATE FLD /L 03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
JUL , 1 23	974 081	5	б	1040	1	7.0	8	334	7.1		3	390	480		0	60
ח	ATE	TIME	NE (M A CA	IG/L IS ICO3)	HARD- NESS, NONCAR- BONATE (MG/L CAC03) (00902)	CALC DIS- SOL (MG, AS (	VED /L CA)	MAGNE- SIUM, DIS- SOLVEI (MG/L AS MG) (00925)	SODI DIS SOLV (MC	ED (L (NA)	PERCENT SODIUM (00932)	SODIU AD- SORP- TION RATIO	S D SO (M AS	TAS- IUM, IS- LVED G/L K) 935)	(MC	DE, S- LVED S/L CL)
	T. , 197	74 0815		390	0	100		33	25	,	12	•	6	1.8	39	ı
p	ATE	TIME	DI SO (M AS	S- LVED G/L SO4)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS PHORI TOTA (MG) AS E	US, AL /L P)	FLUO- RIDE, DIS- SOLVER (MG/L AS F) (00950)		VED /L	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS SUM OF CONSTI THENTS DIS- SOLVE (MG/L (70301	- IR , D SO D (U	ON, IS- LVED G/L FE) 046)	NES DI SOL (UG	S- VED /L MN)
	L , 197			10	.36	.4	40 <b>0</b>	•20	3	4	473	48	n	2700	1	000

WELL NO. 197 LOCAL NO. 04NO3W13DAA1 SITE ID 345742091153201 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/cm)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
AUG , 19	83 12 <b>2</b> 5	6	192.00	17.0	125	7.2

WELL NO. 198 LOCAL NO. 04N03W25AAA1 SITE ID 345627091153401 OWNER - CARTER CO. ALLUVIAL AOULFER

DATE	тіме	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
AUG , 19	983 1305	6	186.00	17.0	190	7.5

WELL NO. 199 LOCAL NO. 04N03W36ABBI SITE ID 345533091160201 OWNER - CARTER CO. ALLUVIAL AOUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)

AUG , 1983 12... 1405 182.00 17.0 200

WELL NO. 200 LOCAL NO. 04N03W36BAB1 SITE ID 345533091161901 ALLUVIAL AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
JUL , 19	1200	6	180.00	17.0	220	4.9

WELL NO. 201 LOCAL NO. 04N03W36BBD1 SITE ID 345526091162101 OWNER - CARTER CO. ALLUVIAL AQUIFER.

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
AUG , 19	183 1405	6	180.00	17.0	(00095)	(00940)

WELL NO. 202 LOGAL NO. 05N02W34ACA1 SITE ID 350050091113101 ALLUVIAL AGUIFER

			ALLOVIAL ACC	JIFER	•				
	DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		
	JUL , 29	1983 • 1 <b>2</b> 00	6	197.00	18.0	450	9.0		
	WELL	NO. 203	LOCAL NO. 05		SITE ID	350050091	104201		
	DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCR (µ8/cm) (00095)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)		· •
	JПL , 29		6	195.00	17.5	410	6.7		
		NO. 204	LOCAL NO. 05					IER - R. OVE	RHOLT
			ALLUVIAL AQU						
те тіме	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH CI OF CO WELL, DU TOTAL AN (FEET) (µS	E- FIC N- PH CT- (STA CE AR /cm) UNIT 095) (004	ND- (MG D AS S) CAG	S DIS 6/L SOL (MG 103) AS	- DIS VED SOLV /L (MG/ CA) AS M	M, SODIUM, DIS- ED SOLVED (MG/L HG) AS NA)	SORP- TION RATIO
, 1955 —	6	192.00	86.00	137	6 <b>.8</b>	61 15	5.	7 5.5	.3
	WELL	NO. 205			SITE ID	350022091	175101 OWN	er - Cooper	'S FLYING SERVICE
DATE TIME	MEDI		AND FACE DEPTH CUM OF FT. WELL, DVE TOTAL (TD) (FEET)	FLOW RATE ( GPM)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANGE (uS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR LII (PLAT- F INUM- (I COBALT	LKA- NITY IELD MG/L AS ACO3) 0410)
JUL , 1961	- 6	190	.00 67.00	75	16.0	348	7.6	3	108
	BON FET- (MC	FLD BON		HARD- NESS (MG/L	HARD- NESS, NONCAR- BONATE	CALCIUM DIS- SOLVED	DIS- SOLVED	SODIUM, DIS- SOLVED	D CENT
DATE TIME	AS HC0 (004	3) AS C	03) AS CO2)	AS GACO3) (00900)	(MG/L CACO3) (00902)	(MG/L AS CA) (00915)	(MG/L AS MG) (00925)	AS NA) SC	RCENT ODIUM 0932)
JUL , 1961	•	130	0 5.3	110	5	27	11	13	20

DATE TIME

JUL , 1955

WELL NO. 205 LOCAL NO. 05N03W34DDC1 SITE ID 350022091175101 OWNER - COOPER'S FLYING SERVICE ALLUVIAL ACUIFER - CONTINUED

DATE TIME  •  JUL , 1961 14	SODIUM AD- SORP- TION RATIO (00931)	SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) 3.5		NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- THENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (HG/L AS MN) (01056)
DATE TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
AUG , 1952 13 09	6 6 6	207.00 207.00 207.00	250 250 250	18.0	799 1040 1030	8.1 7.5 7.4	 5	235 410 397	290 500 480
DATE TIME	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)
AUG , 1952 13 09	0 0 0	3.6 25 31	330 440 440	93 30 43	120 130	32 31	  58	22	1
DATE TIME	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- THENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
AUG , 1952 13 09	5.2	98 94 82	34 40 44	.68 .50 .32	.30	18	617	600	4100 3600 2700

WELL NO. 207 LOCAL NO. 03N02W10DBG4 SITE ID 345314091114701 OWNER - CITY OF BRINKLEY NO. 4 COCKFIELD AOUIFER

DATE	TIME	MEDIUM	ELE OF L SURF DAT (F ABO NGV (720	AND ACE UM T. VE D)	DEP OF WEL TOT (FE (720	TH C L, D AL A ET) (µ	PE- LFIC ON- UCT- NCE S/cm) DO95)	PH (STA AR UNIT (004	ND- D S)	ALKA LINIT FIEL (MG/ AS CACO (0041)	Y BOND FET- L (MC AS 3) HCC	;/L ; ;3)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
OCT , 1949	•						4.53				•		•
06 24		6 6	205 205		238 238		957 7 <b>6</b> 1		8.2		04 82	490 340	0 0
FEB 04	-	6	205	.00	238		842		8.1	3:	27	400	0
											NITRO-		
		DIO	RBON	HAR		HARD- NESS,	R1	ilo- Ide,			GEN, NITRATE	TO'	ON, TAL
			IS- LVED	NES (MG		NONCAR		IS- DLVED	DI SO	s- Lved	DIS- SOLVED		COV- ABLE
		( M	G/L	AS		(MG/L	()	4G/L	(M	G/L	(MG/L	( U	G/L
DATE	TIME.		CO2)	CAC (009		CAC03 (00902		5 GL) 0940)		SO4) 945)	AS N) (00618)		FE) 045)
0 <b>CT</b>	1949	,											
06.		-			310		) 6	58		22	.18		670
24 FEB		-	3.4		300	1	5 6	58		44	.66	:	3500
04		-	5.0		340	1	, ,	70		30	.68		6300

### WELL NO. 208 LOCAL NO. 01N03W22BAC1 SITE ID 344127091184401 OWNER - CITY OF CLARENDON SPARTA AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (UMHOS) (00095)	PH (STAND- ARD UNITS) (00400)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
JUL , 19 17	46 —	6	170.00	678	676	7.5	260	0	13
DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MC) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
JUL , 19	46 —	67	0	18	5.4	120	79	7	4.8
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (HG/L AS FE) (01045)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)
JUL , 194	46	89	1.5	•00	11	379	380	1200	600

WELL NO. 209 LOCAL NO. 01N03W22BAC2 SITE ID 344126091184301 OWNER - CITY OF CLARENDON SPARTA AGUIFER

	rime	OF SUR DA ( MEDIUM AR NO	LAND LAND FACE DEF TUM OF FT. WEL OVE TOT VD) (FE	LL, TEMP CAL ATU CET) (DEG	RE ANC C) (µS/	IC - PF T- (ST/ E AF cm) UNI1	H (PAND- IN RD CO TS) UN	UM- (MC BALT AS	TTY BON ELD FET- E/I, (MC E AS CO3) HCC	(MG/L 03) AS CO3)
DEC , 1949		0 17	0.00 68	17						
09		ő			0.5					
09		6		- 20	5 67	7 7.	.5	5 21	. 2	160 0
DEC , 1949	TIME	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
DATE	TIME.	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	(MG/L AS SO4)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
07 09		- . 86	5.0	 •18	.40	4.3	389	380		500 770

## WELL NO. 210 LOCAL NO. 03N02W10DBB1 SITE ID 345315091114501 OWNER - CITY OF BRINKLEY NO. 5 SPARTA ADULFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DHCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HC03) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)
OCT , 19	49									
06		6	205.00	390		1410		404	490	0
24		6	205.00	390	18.0	2930	7.4	399	490	0
		CARBON		HARD-		MAGNE-			SODIUM	POTAS-
		DIOXIDE	HARD-	NESS,	CALCIUM	STUM,	SODIUM,		AD-	SIUM,
		DIS-	NESS	NONCAR-	DIS-	DIS-	DIS-		SORP-	DIS-
		SOLVED	(MG/L	BONATE	SOLVED	SOLVED	SOLVED		TION	SOLVED
					( / .	1110/2	1			120012
OATE	TIME	(MG/1.	AS	(MG/L	(MG/L	(MG/L	(MG/L	PERCENT	RATIO	(MG/L
DATE	TIME	(MG/L AS CO2) (00405)	AS CACO3) (00900)	(MG/L CACO3) (00902)	(MG/L AS CA) (00915)	(MG/L AS MG) (00925)	(MG/L AS NA) (00930)	PERCENT SODIUM (00932)	(00931)	(MG/L AS K) (00935)
DATE		AS CO2)	CACO3)	CACO3)	AS CA)	AS MG)	AS NA)	SODTIIM		AS ()
		AS CO2)	CACO3)	CACO3)	AS CA)	AS MG)	AS NA)	SODTIIM		AS ()

WELL NO. 210 LOCAL NO. 03N02W10DBB1 SITE ID 345315091114501 OWNER - CITY OF BRINKLEY NO. 5 SPARTA AGUIFER - CONTINUED

DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- THENTS, DIS- SOLVED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
OCT , 194 06 24	.9 	(00940) 220 850	8.0 7.4	.18	(00950) - - 10	(00955)	(70300)  1810	1900	17000 290	700

## WELL NO. 211 LOCAL NO. 03N02W10DBC3 SITE ID 345313091114601 OWNER - CITY OF BRINKLEY NO. 3 SPARTA AQUIFER

DATE	TIME	MEDIUM (	EMPER- E ATURE A DEG C) (1	DUCT- (S INCE 48/cm) UN	LI PH F TAND- ( ARD ITS) C	NITY BO IELD FET MG/L (I AS A ACO3) HO	F-FLD BC 4G/L FET AS (P CO3) AS	CAR- DIC DNATE I I-FLD SC MG/L (1 CO3) AS	OLS- NE OLVED (M 1G/L A CO2) CA	G/L
MAR , 1950		6	19.0	1840	7.5	377	460	0	23	130
DATE	TIME	HARD- NESS, NONCAR- BONATE (MG/L) CACO3	SOLVED (MG/L ) AS CA)	DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	
MAR , 08	1950	(	35	10	400	86	16	5.0	410	
DATE	TIME	SULFATE DIS- SOLVEI (MG/L AS SO4) (00945)	DIS- SOLVED (MG/L AS N)	FLUO- RIDE, DIS-	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	
MAR ,	1950	11	.20	.30	15	1090	1100	360	0	

WELL NO. 212 LOCAL NO. 03N02W12CBC1 SITE ID 345313091101401 OWNER - USGS SPARTA AOULTER

DATE	тіме	MEDIUM	PLEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	WIF TO (F	TAL FEET)	TEMPER- ATURE (DEG C) (00010)	C Di Al	PE- IFIC ON- UCT- NCE 8/cm)	(ST. A		COLOR (PLAT- INUM- COBALT UNITS) (00080	LI - F ( f ) C	LKA- NITY IELD MG/L AS AGO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
MAR , 196		,	104 00											
15	0824	6	186.00	42		19.0		1810		7.7	1			420
15	1210 1700	6 6	186.00	42		19.0		1820						
15 15	2150	6	186.00 186.00	42 42		19.0 19.0		1920 1950			_			
16	2130	6	100.00	42		19.0		2040		7.3	17		354	430
16	0600	6	186.00	42	20	19.0		2010					3.74	
OCT , 198		•	100100	~-	• • • • • • • • • • • • • • • • • • • •			20,20						
13	<b>-</b>	6	186.00	42	0.	18.5		1950						
SEP , 198	3					•								
08	1145	6	186.00	42	:0	19.0		1710		7.3			310	360
DATE	TIME	CA BON FET- (MG AS C	R- DIO: ATE D: FLD SOI /L (MC D3) AS C		HARD- NESS (MG/I AS CACO:	NONC L BONA (MC 3) CAC	SAR- TE (/L (O3)	CALCI DIS- SOLV (MG/ AS C	ED L A)	MAGNI SIUI DIS- SOLVI (MG/I AS MG	M, SOE - DI ED SOE L (N G) AS	OIUM, (S- .VED (G/L (S NA) (930)	PERC SOD (009)	LUM
MAR ,														
15				.3		50	0	43		12	33			82
16			0	34	16	50	0	43		13	37	0		82
SEP ,														••
()8	1145		0 2	9	13	50	0	42		11	29			80
DATE	TIME	SOD AI SORI TIC RAT	D- SI P- DI DN SOL IO (MG AS	K)	CHLO- RIDE, DIS- SOLVE (MG/L AS CL	SULF DIS D SOL (MG	- VED /L O4)	NITRO GEN NITRA DIS- SOLVI (MG/I AS N	re Ed L	NITRO GEN, NO2+NO DIS- SOLVE (MG/I AS N) (00631	FL 3 RI ED SO (M	.UO- DE, DIS- DLVED RG/L F)	SILIC DIS- SOLV (MG/ AS SIO2 (0095	- /ED /L
MAR ,	1961													
15		13	2 6	.3	380		.0			-		.60	۶	3.6
15				_	400						-			
15	1700				410					-				
15					430					-	-			
16		13	3 7	. 1	440		.0	• 3	25	-	-	•60	7	.3
16					430			•		-	-			
OCT ,					460			_		_	_			
SEP ,					400				_	_	_			
08		11	. 4	.7	380		1.8			<.1	0	.30	10	)
DATE	TIME	SOLII RESII AT 18 DEG. DIS SOLV (MG/	OUE SUM 10 CONS 1 C TUEN 1- DI VED SOL	OF TI- TS, S- VED	IRON, DIS- SOLVE (UG/L AS FE	D SOL	E, S- VED /L	IODIDE DIS- SOLVI (MG/I AS I)	D	LITHIU DIS- SOLVE (UG/L AS LI	n 30 SO 11)	RON, IS- LVED G/L B)	BROMI DIS SOLV (MG/ AS F	ED L
		(7030			(01046			(71865		(01130		020)	(7187	
		•	*											•
MAR ,						_								
15	0824			990		0		-		-	-			
16 SEP ,	1983	12	20 1	100	7	ი		-	-	-	-			
08		9	52	920	280	0	180	.12	0.	2	1	960	2.	0 -

WELL NO. 213 LOCAL NO. 04N02W28DDD4 SITE ID 345535091122104 OWNER - WAYNE ROEDIGER SPARTA AGUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)
FEB , 19	984									
23	1630	6	192.00	408	18.0	3720	7.0	75	320	0
		CALCIUM DIS- SOLVED (MG/L	MAGNE- SIUM, DIS- SOLVED (MG/L	SODIUM, DIS- SOLVED (MG/L	PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L	CHLO- RIDE, DIS- SOLVED (MG/L	SULFATE DIS- SOLVED (MG/L	GEN, NO2+NO3 DIS- SOLVED (MG/L
DATE	TIME	AS CA) (00915)	AS MG) (00925)	AS NA) (00930)	SODIUM (00932)	(00931)	AS K) (00935)	AS CL) (00940)	AS SO4) (00945)	AS N) (00631)
FEB , 19	984			-						
23	1630	87	25	700	82	18	6.7	1100	<.2	.11
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	IODIDE, DIS- SOLVED (MG/L AS I) (71865)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)
FEB , 19	19.6									
23	1630	.20	13	2250	800	140	.240	60	1500	8.2

WELL NO. 214 LOCAL NO. 04N02W30BAC1 SITE ID 345618091150901 OWNER - CITY OF BRINKLEY NO. 8 SPARTA AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)
SEP , 198	13								
07	1645	6	180.00	345	18.0	425	7.8	180	220
			CARBON		HARD-		MAGNE-		
		CAR-	DIOXIDE	HARD-	NESS,	CALCIUM	SIUM,	SODIUM,	
		BONATE	DIS-	NESS	NONCAR-	DIS-	DIS-	DIS-	
		FET-FLD	SOLVED	(MG/L	BONATE	SOLVED	SOLVED	SOLVED	
		(MG/L	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L	PERCENT
DATE	TIME	AS CO3)	AS CO2)	CAC03)	CAC03)	AS CA)	AS MG) (00925)	AS NA)	SODIUM (00932)
		(00445)	(00405)	(00900)	(00902)	(00915)	(00925)	(00930)	(101932)
SEP , 198	3								
07	1645	0	5.5	3	0	.82	.17	91	98

WELL NO. 214 LOCAL NO. 04N02W30BACI SITE ID 345618091150901 OWNER - CITY OF BRINKLEY NO. 8 SPARTA ADULTER - CONTINUED

DATE	TIME	:	SODIUM AD- SORP- TION RATIO (00931)	POTAL SIUI DIS- SOLV (MG/I AS K (0093)	M, RID - DIS ED SOL L (MG	DE, SU S- D LVED S G/L ( CL) AS	LFATE IS- OLVED MG/L SO4) 0945)	GE NO2+ DI	NO3 RI S- E VED SO G/L (M N) AS	UIO- DE, DIS- DIS- LVED (G/L F)	SILICA DIS- SOLVE (MG/L AS SIO2) (00955	AT 180 D DEG. ( DIS- SOLVEI (MG/L)	é c
SEP , 1	983 1645		25	1.	ı 22	:	3.2	<	.10	.50	16	265	5
D.	ate	TIME	SUM CON TUE D SO (M	IDS, OF STI- NTS, IS- LVED G/L) 301)	IRON, DIS- SOLVED (UG/L AS FE) 01046)	MANGA NESE, DIS- SOLVE (UG/L AS MN	100 0 0 SO (M	DIDE, DIS- DIVED GG/L G I)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	SOL (UC AS	IS- LVED S/L B)	ROMIDE DIS- SOLVED (MG/L AS BR) 71870)	
	P , 198	3 1645		<b>24</b> 0	140	2	2	.002	<4		550	.27	

WELL NO. 215 LOCAL NO. 05N02W31DCB1 SITE ID 350028091145601 OWNER - CITY OF COTTON PLANT MEMPHIS AQUIFER

DATE	TIME	MEDIUM	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (uS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR-BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
MAY , 19	46									
16 25		6 6	193.00	250	229 224	7.4 8.4	118 121	140 140	0 4	9.1 .9
DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
MAY , 194	46									
16 25		100 110	0	27 	7.9 	8.7	16	-4	2.4	1.8 1.8
D <b>AT</b> E.	TIME	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	ALUM- INIM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)
MAY , 194	6		22	00	20	150	150	200	(10	/00
25		.5 1.0	.05	.00	28	152	150	200 160	640 830	400

WELL NO. 216 LOCAL NO. 05N02W31DCB2 SITE ID 350028091145401 OWNER - CITY OF COTTON PLANT MEMPHIS ADULIFER

DATE	TIME	MEDIUM	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD UNITS) (00400)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
MAR , 19	956									
08 10		6 6	17.0 20.0	232 239	7.5 7.8	5 0	120 125	150 150	0	7.3 3.8
DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	PERCENT SODIUM (00932)	SODIUM AD— SORP— TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
MAR , 19	956									
08 10		100 120	0	30 25	7.3 13	9.0 7.6	16 12	.4	1.3 1.2	2.5 4.5
DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUR AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
MAR , 19 08 10	- 	.8 .0	•20 •20	.30 .30	6.3 19	151 154	130 150	· 0 460	770 <del></del>	20
		WELL NO.		L NO. 04N TOCH AQUI		SITE ID	345510091	113703 OW	NER - J.	P. SMITH
			co#.	_	A7 W	)_ BTC	4.0	CAR	nov	

DATE	TIME	MEDIUM	SPE- CIFIC CON- DUCT- ANCE (µS/cm) (00095)	PH (STAND- ARD NITS) (00400)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	BICAR- BONATE FET-FLD (MG/L AS HCO3) (00440)	CAR- BONATE FET-FLD (MG/L AS CO3) (00445)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	HARD- NESS (MG/L AS CACO3) (00900)
APR , 19	50								
09		6	53000	7.0	41	<b>5</b> 0	0	7.9	6700
		HARD-		MAGNE-			SODIUM	POTAS-	CHLO-
		NESS, NONCAR-	CALCIUM DIS-	SIUM,	SODIUM,		AD-	SIUM,	RIDE,
		BONATE	SOLVED	DIS- SOLVED	DIS- SOLVED		SORP- TION	DIS- SOLVED	DIS- SOLVED
		(MG/L	(MG/L	(MG/L	(MG/L	PERCENT	RATIO	(MG/L	(MG/L
DATE	TIME	CACO3)	AS CA)	AS MG)	AS NA)	SODIUM		AS K)	AS CL)
		(00902)	(00915)	(00925)	(00930)	(00932)	(00931)	(00935)	(00940)
APR , 19	<b>5</b> 0								
09		6700	1800	570	11000	78	61	120	22000

WELL NO. 217 LOCAL NO. 04N02W34ACD3 SITE ID 345510091113703 OWNER - J. P. SMITH NACATOCH ADULIFER - CONTINUED

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUH OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	
APR , 19	50	100	1.4	.10	7.4	36700	35000	34000	23000	