HYDROLOGIC DATA FOR AQUIFERS IN PHILADELPHIA, PENNSYLVANIA

by Gary N. Paulachok, Charles R. Wood, and Linda J. Norton

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(In pocket)

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CONVERSION FACTORS

Data given in this report are in inch-pound units. To convert to the International System of units (SI), the following factors are used:

Multiply inch-pound unit	By	To obtain SI unit
inch (in)	25.40	millimeter (mm)
foot (ft)	0.3048	meter (m)
gallon per minute (gal/min)	0.06308	liter per second (L/s)
gallon per minute per foot [(gal/min)/ft]	0.2070	liter per second per meter [(L/s)/m]
square mile (mi^2)	2.590	square kilometer (km^2)

Temperature Conversion

Temperature in degrees Celsius (°C) is converted to degrees Fahrenheit (°F) by the equation:

$$°F = (9/5)°C + 32$$

Conversion of Concentration Units

By multiplying the concentration of chemical species in milligrams per liter (MG/L, mg/L) or micrograms per liter (UG/L) by the appropriate factor given below, concentration in milliequivalents per liter (me/L) is obtained.

Ion	me/L = mg/L x	Ion	me/L = mg/L x
*Al	0.11119	K	0.02557
*B	0.27750	*Li	0.14411
*Ba	0.01456	Mg	0.08226
Br	0.01251	*Mn	0.03640
Ca	0.04990	Na	0.04350
Cl	0.02821	NO_2	0.02174
*Cr	0.05770	NO_3	0.01613
*Cu	0.03148	*Pb	0.00965
F	0.05264	PO_4	0.03159
*Fe^{2+}	0.03581	SO_4	0.02082
*Fe^{3+}	0.05372	*Sr	0.02283
HCO_3	0.01639	*Zn	0.03060

*Concentrations given in this report are in micrograms per liter; multiply micrograms per liter value by factor and divide result by 1,000.

HYDROLOGIC DATA FOR AQUIFERS IN PHILADELPHIA, PENNSYLVANIA

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ABSTRACT

Selected data on the ground-water resources of Philadelphia, Pennsylvania, are presented in this report. Information including water levels and data on aquifers is tabulated for 828 wells and 3 sumps. Chemical analyses are given for 1,467 water samples obtained from 205 sites and include 103 analyses for trace elements and 68 analyses for volatile organic compounds. An index of geophysical logs including gamma ray, neutron, caliper, fluid conductivity, fluid velocity, single-point resistance, spontaneous potential, and temperature determinations made in 51 wells is also presented. Data-collection sites are shown on a 1:50,000 scale location map.

INTRODUCTION

This report presents selected hydrologic data collected for several investigations of the ground-water resources of Philadelphia, Pennsylvania. The purpose of the report is to provide a convenient reference for information on historical and current ground-water conditions in Philadelphia.

Some data in this report appear in earlier publications. A report by Hall (1934), based on a reconnaissance of southeastern Pennsylvania, contains records of 58 wells in Philadelphia and presents chemical analyses of samples from two of those wells. A comprehensive report on the ground-water resources of the Coastal Plain of southeastern Pennsylvania by Greenman and others (1961) presents records of 509 wells in Philadelphia and gives results of 646 laboratory inorganic determinations on water samples from some of those wells.

Many data contained herein were collected for a study conducted during 1978-82 by the U.S. Geological Survey, in cooperation with the City of Philadelphia Water Department. The data-collection program for that study consisted of well inventory, water-quality sampling, and geophysical well logging. The objectives of the study were to inventory and update existing information and obtain current information on local ground-water conditions.

ACKNOWLEDGMENTS

The authors acknowledge the cooperation of the individuals and industry representatives who provided essential information and permitted access to their sites. Special acknowledgment is made to municipal officials and personnel from the Pennsylvania Department of Transportation, Publicker Industries, Inc., the Southeastern Pennsylvania Transportation Authority, and the U.S. Naval Base at Philadelphia, for their generous cooperation and valuable assistance.

DESCRIPTION OF AREA

The city of Philadelphia has an area of 134.6 square miles in the Piedmont and Coastal Plain physiographic provinces of southeastern Pennsylvania (fig. 1). The Piedmont lies in a broad area northwest of the Fall Line, whereas the Coastal Plain occupies a narrow band along the Delaware River. The Fall Line demarcates the landward edge of the Coastal Plain.

Philadelphia is densely populated and extensively urbanized. According to the U.S. Census, the population in 1980 was 1.7 million, or approximately 12,600 persons per square mile. Residential neighborhoods and commercial and industrial sites account for 74 percent of the area, whereas the remainder is used for recreation or resource production (Segal, D., Philadelphia City Planning Commission, oral commun., 1982).

DESCRIPTION OF AQUIFERS

Philadelphia is underlain by crystalline rocks of the Piedmont and by the younger unconsolidated sediments of the Coastal Plain. The generalized surface geology is shown in figure 1. The crystalline rocks form an aquifer of local importance; the Coastal Plain sediments comprise the principal aquifers.

The crystalline rocks consist chiefly of schist of the Wissahickon Formation of Late Proterozoic and early Paleozoic age, lesser amounts of quartzite of the Chickies Formation of Early Cambrian age, and scattered masses of gneissose rocks of uncertain age having granitic to gabbroic composition. These rocks crop out in the Piedmont and their surface slopes southeastward, forming the basement beneath the Coastal Plain sediments.

The deepest Coastal Plain sediments in Pennsylvania are of Cretaceous age and are known regionally as the Potomac Group and the Raritan and Magothy Formations. In Philadelphia, the Cretaceous sediments belong chiefly to the Raritan Formation. The Magothy Formation has not been identified in Pennsylvania; some Potomac Group sediments, however, may occur there (Farlekas, G. M., U.S. Geological Survey, oral commun., 1983).

The Potomac Group and Raritan Formation are composed of interbedded gravel, sand, silt, and clay units which are at or near the surface along the Delaware River in Pennsylvania and New Jersey. These sediments comprise the Potomac-Raritan-Mogothy aquifer system, which in Philadelphia has been subdivided into the following units: lower sand, lower clay, middle sand, middle clay, upper sand, and upper clay. In much of their outcrop area, the Cretaceous sediments are overlain by Pleistocene sediments, chiefly the informally named "Trenton gravel" of Owens and Minard (1979).

The Potomac-Raritan-Magothy aquifer system is equivalent to the Raritan Formation of Greenman and others (1961). The terminology "lower, middle, and upper" units of the Potomac-Raritan-Magothy aquifer system in Pennsylvania has been adopted for use by the U.S. Geological Survey. However, individual geologic units may not be continuous or correlatable with similar units in

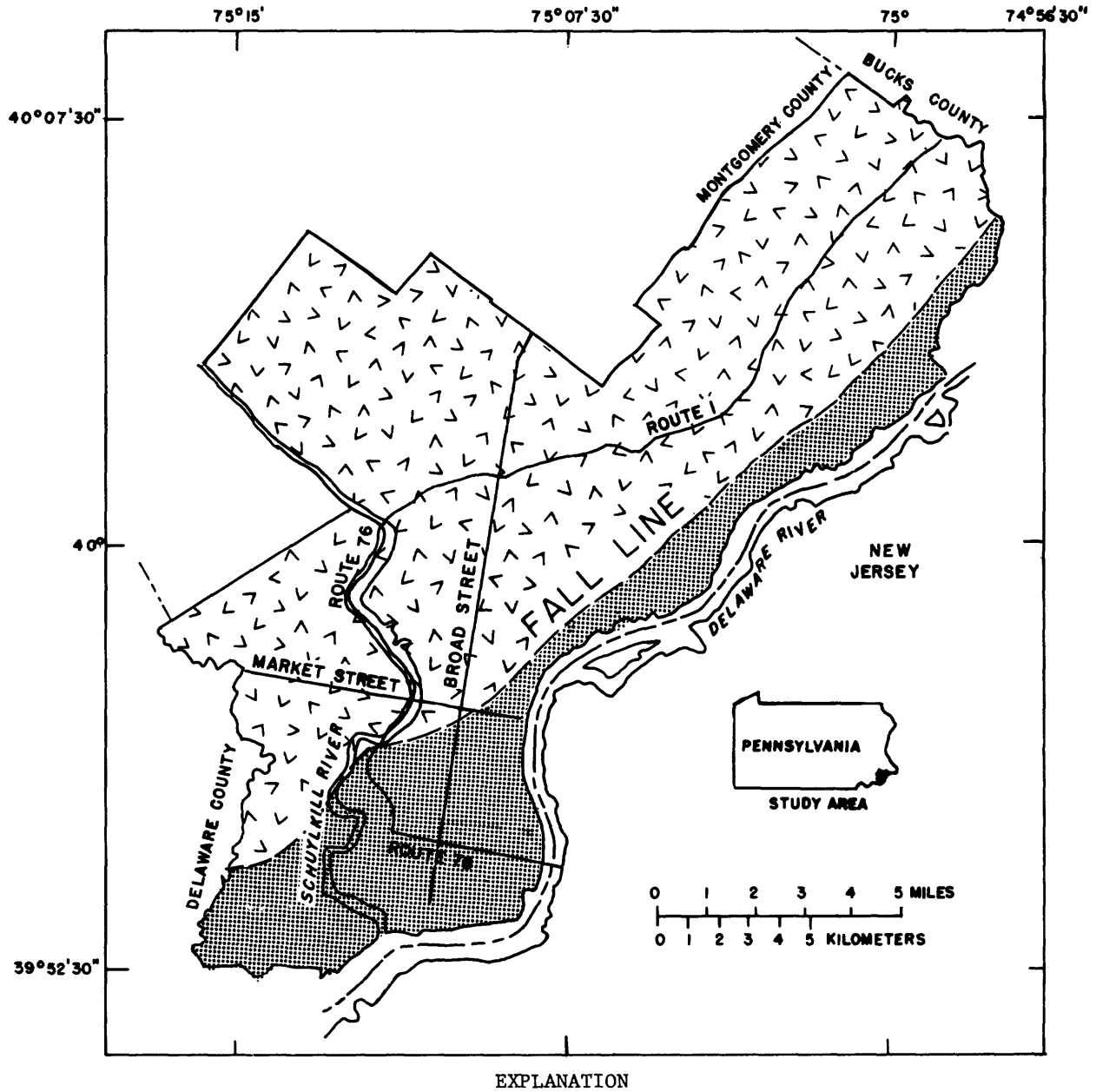


Figure 1.--City of Philadelphia showing physiographic provinces and generalized surface geology.

adjacent states. The Trenton gravel is equivalent to the Pleistocene sediments of Wisconsin age described by Greenman and others (1961).

For detailed descriptions of the geology and hydrology of aquifers in Philadelphia and vicinity, the interested reader is referred to reports by Greenman and others (1961), Biesecker and others (1968), and Owens and Minard (1979).

THE DATA BASE

The aquifer codes for geologic units used in this report are given in table 1. Information on construction, aquifer, yield, water level, and other details for 828 wells and 3 sumps is presented in table 2. Figure 2 shows the locations of wells used for water-level observation during 1979-81. Hydrographs for those wells are shown in figures 3 and 4.

Additional data on ground-water levels in Philadelphia are given in other reports. A program for the systematic measurement of water levels in selected wells began in 1943, and the annual water-level data for 1943-74 are published in the following U.S. Geological Survey Water-Supply Papers (WSP):

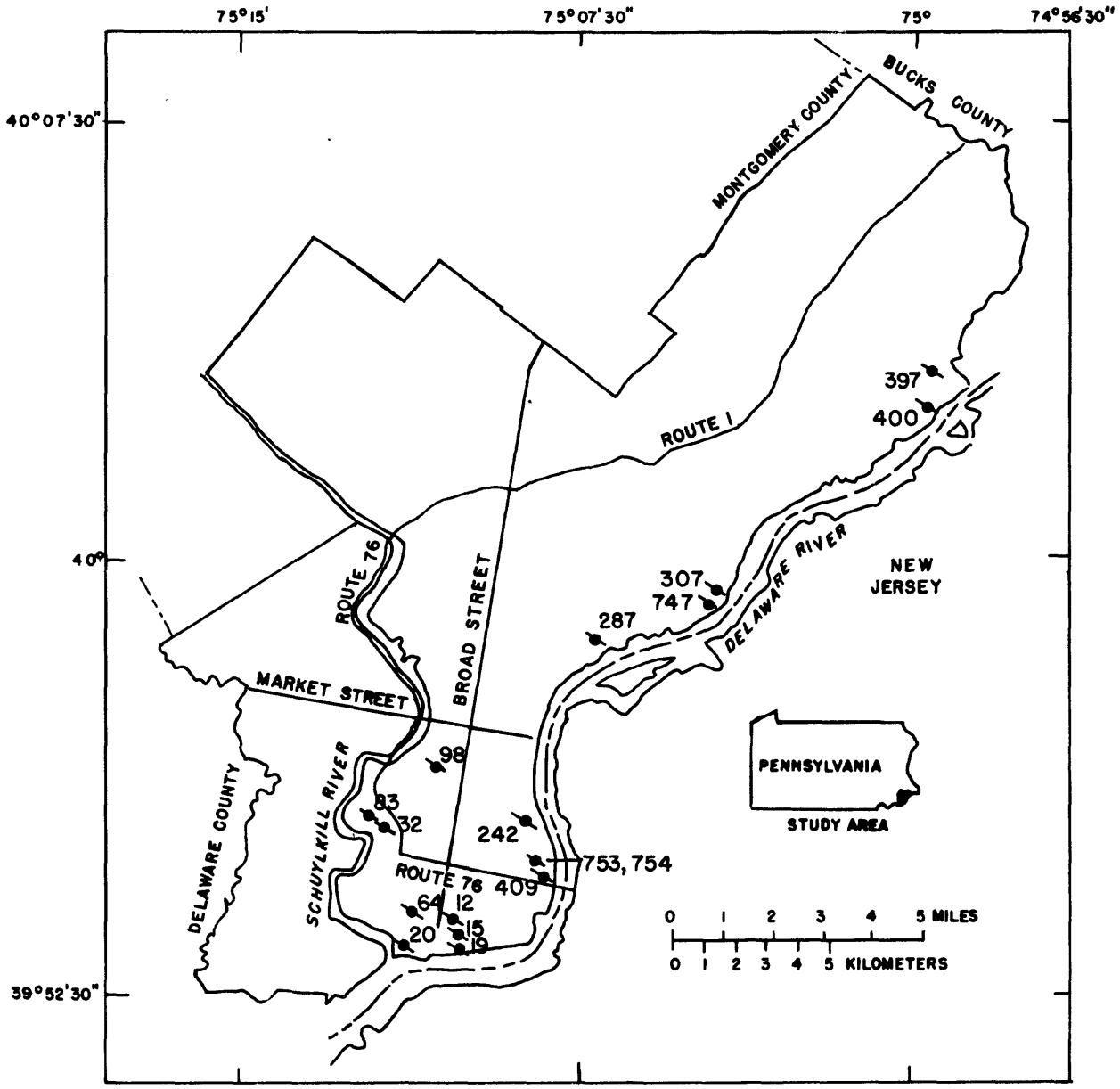
Calendar Year	WSP No.	Calendar Year	WSP No.	Calendar Year	WSP No.
1943	986	1949	1156	1955	1404
1944	1016	1950	1165	1956-57	1537
1945	1023	1951	1191	1958-62	1782
1946	1071	1952	1221	1963-67	1977
1947	1096	1953	1265	1968-72	2140
1948	1126	1954	1321	1973-74	2164

Since 1975, water levels in Philadelphia County well number 12 (PH-12) have been published annually by the U.S. Geological Survey in "Water Resources Data for Pennsylvania, Volume 1, Delaware River Basin."

Water-quality data are tabulated as common ions including nitrate (table 3), nutrients except nitrate (table 4), trace elements and gross organic measures (table 5), and volatile organic compounds (table 6).

The index of geophysical logs is given in table 7. Gamma ray, neutron, caliper, fluid conductivity, fluid velocity, single-point resistance, spontaneous potential, and temperature logs of 51 wells in Philadelphia are on file and available for public inspection at the U.S. Geological Survey office, Harrisburg, Pennsylvania.

The site-location map (plate 1) shows points at which hydrologic data were collected. Inset maps show locations in areas where sites are closely spaced.



EXPLANATION

98 Location of observation well and local well number

Figure 2.--Location of observation wells.

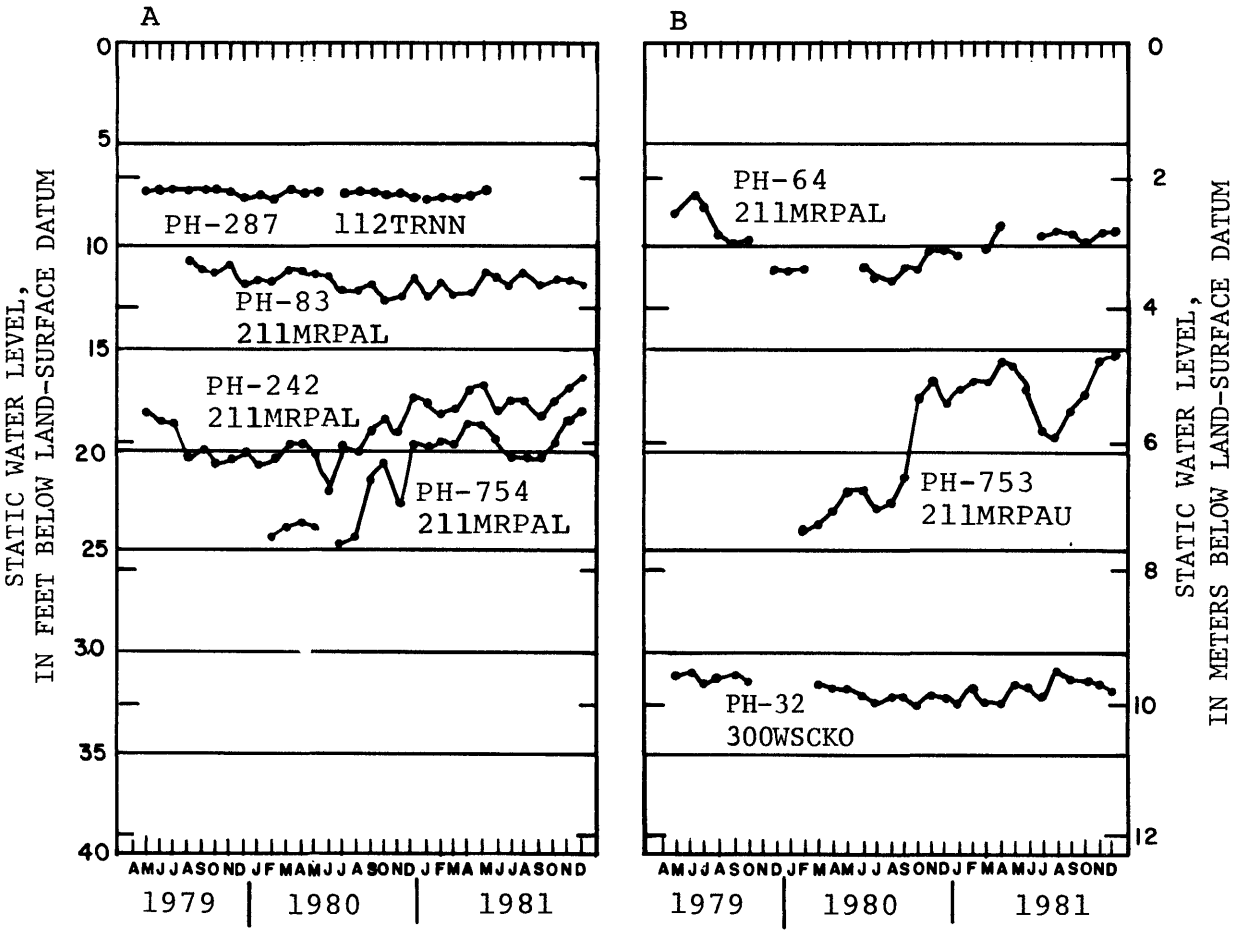


Figure 3.--Monthly water levels in selected wells: (A) PH-287, PH-83, PH-242, and PH-754; (B) PH-64, PH-753, and PH-32.

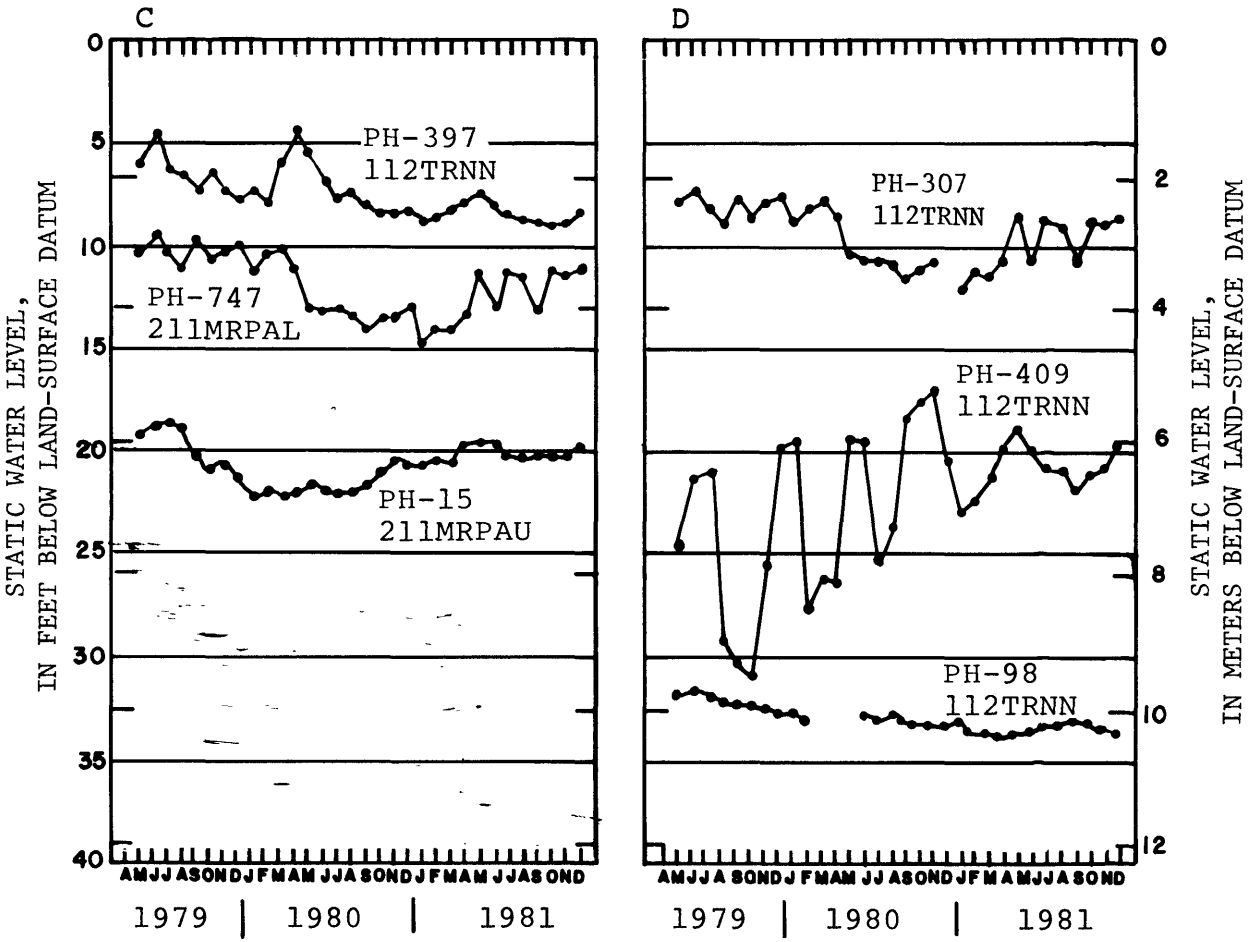


Figure 3.--Monthly water levels in selected wells: (C) PH-397, PH-747, and PH-15; (D) PH-307, PH-409, and PH-98.--continued.

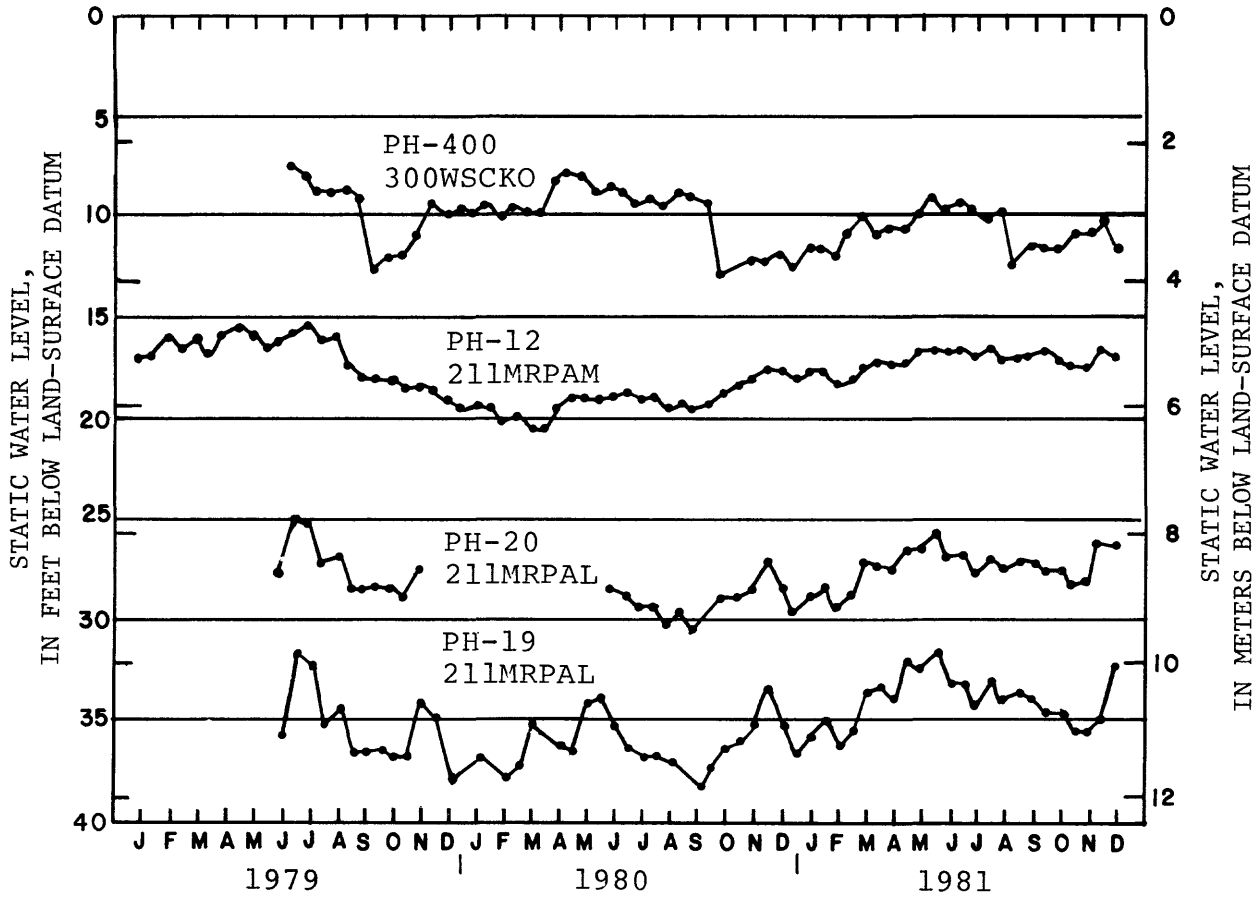


Figure 4.--Lowest water level at mid-month and end-of-month in selected wells: PH-400, PH-12, PH-20, and PH-19.

SITE IDENTIFICATION SYSTEM

The well-numbering system used in this report consists of a local well number and a site identification number. The local number has two parts. The first part is a two-letter abbreviation that identifies the county in which the well is located. All wells mentioned in this report are in Philadelphia county and are identified by the abbreviation "PH". The second part is a sequential number assigned when the well was originally inventoried.

Drainage sumps have been assigned a local identifier and a site identification number. The local identifier consists of the names of the intersecting streets nearest the site or the name of the structure at which the sump is located.

The site identification number has 15 digits and is based on the grid system of latitude and longitude. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote the degrees, minutes, and seconds of longitude, and the last 2 digits denote the sequential number. The sequential number is assigned to distinguish among [illegible] located within a common 1-second grid block of latitude and longitud[illegible]

DRILLER'S LICENSE NUMBER

The driller's license numbers given in the records of wells and sumps (table 2) are listed below. The number identifies the individual or company that constructed the well.

Driller's License Number	Well Driller
-204	Thomas B. Harper Philadelphia, PA
-214	Byer and Kluntz Catasauqua, PA
-221	Philadelphia Drilling Co. Philadelphia, PA
-239	Harris Harman Well Co.
-261	Robbins
-387	John Rulon
-388	P. H. and J. Conlan
-389	Quinn and Herron
-390	Doyle and Co.
-391	W. H. Kelsey
-392	Andrew Flemstrom
-393	Norman Cook
-394	Sutton and Stephenson
-395	F. W. Tunnell and Co. Philadelphia, PA
-396	Orcutt
-397	Flaghouse
-398	W. C. Barr
-452	Griffin Well Point
0111	Anthony Dominiani, Jr. Newportville, PA

Driller's License Number	Well Driller
0226	William Stothoff Co. Flemington, NJ
0231	Sprague & Henwood, Inc. Scranton, PA
0248	Thomas G. Keyes Malvern, PA
0249	Ridpath & Potter Co., Inc. Blue Bell, PA
0297	Artesian Well Drilling Co. Morton, PA.
0330	W. Rollin Raab Churchville, PA
0331	Joseph J. Guenthoer Feasterville, PA
0399	John O'Donnell & Son Jenkintown, PA
0404	A. C. Schultes & Sons Woodbury, NJ
0413	Rulon & Cook, Inc. Trevose, PA
0424	Layne-New York Co., Inc. Pittsburgh, PA
0503	J. F. Alexander & Co. Paoli, PA
0508	William W. Haldeman Cornwells Heights, PA
0514	F. L. Bollinger Blue Bell, PA
0561	Kohl Bros., Inc. Myerstown, PA

GEOLOGIC NAMES AND AQUIFER CODES

Table 1 lists the names of the geologic units in which the wells and sumps are finished, and the corresponding aquifer codes. The codes have seven or eight characters and consist of two or three parts. The first part has three numeric characters and identifies the era, system, or series of the geologic unit. The second part, or next four characters, is a mnemonic for the name of the geologic unit. The third part is a single character that denotes the lithology or stratigraphic position of the geologic unit. The aquifer codes appear in the column "Geologic Unit" in the records of wells and sumps (table 2), ground-water quality tables (tables 3-6), and index of geophysical logs (table 7).

Table 1.-- Names and aquifer codes for geologic units

Era, System, or Series	Geologic Unit	Aquifer Code
Pleistocene	"Trenton gravel"	112TRNN
Upper Cretaceous	Potomac-Raritan-Magothy aquifer system	211MRPA
	Potomac-Raritan-Magothy aquifer system, upper sand unit	211MRPAU
	Potomac-Raritan-Magothy aquifer system, middle sand unit	211MRPAM
	Potomac-Raritan-Magothy aquifer system, lower sand unit	211MRPAL
Lower Paleozoic and upper Proterozoic	Wissahickon Formation, oligoclase-mica schist	300WSCKO
Lower Cambrian	Chickies Formation	377CCKS
Unknown	Gabbro and gabbroic gneiss	000GBBR
	Granite gneiss	000GRGS
	Hornblende gneiss	000HBLD

AGENCY CODES

The agency codes used in the ground-water quality tables (tables 3-6) are listed below. These numerical codes identify the agencies that performed the laboratory analyses.

Agency Code Number	Agency
704	U.S. Navy Laboratory, Philadelphia
1028	U.S. Geological Survey, Pennsylvania Laboratories
42010	City of Philadelphia Water Department Laboratories
80010	U.S. Geological Survey Central Laboratory, Atlanta, Georgia
84240	U.S. Geological Survey Atlanta Central Laboratory and City of Philadelphia Water Department Laboratories

SELECTED REFERENCES

Biesecker, J. E., Lescinsky, J. B., and Wood, C. R., 1968, Water resources of the Schuylkill River Basin: Pennsylvania Dept. Forests and Waters, Bull. 3, 198 p.

Greenman, D. W., Rima, D. R., Lockwood, W. N., and Meisler, Harold, 1961, Ground-water resources of the Coastal Plain area of southeastern Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Water Resources Report 13, 375 p.

Hall, G. M., 1934, Ground water in southeastern Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Water Resources Report 2, 255 p.

Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, [2d ed.]: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

Owens, J. P., and Minard, J. P., 1979, Upper Cenozoic sediments of the lower Delaware Valley and the northern Delmarva Peninsula, New Jersey, Pennsylvania, Delaware, and Maryland: U.S. Geological Survey Professional Paper 1067-D, 47 p.

U.S. Environmental Protection Agency, 1977, Quality criteria for water: U.S. Government Printing Office, Washington, D.C., 256 p.

U.S. Geological Survey, annually, 1961-74, Water resources data for Pennsylvania, Part I, surface water records.

___, annually, 1975 to date, Water resources data for Pennsylvania, Volume 1, Delaware River Basin.

TABLES 2 THROUGH 7

TO FOLLOW

TABLE 2.-- RECORDS OF WELLS AND SUMPS

EXPLANATION OF CODES. CODES FOR DRILLER'S LICENSE NUMBER ARE GIVEN IN THE TEXT; GEOLOGIC UNIT CODES ARE GIVEN IN TABLE 1.

METHOD CONSTRUCTED: A, AIR ROTARY; B,BORED OR AUGERED; C, CABLE TOOL; D, DUG; H, HYDRAULIC ROTARY; V, DRIVEN.

FINISH: G, SCREEN WITH GRAVEL PACK; O, OPEN END; P, PERFORATED OR SLOTTED; S, SCREEN; T, SAND POINT; W, WALLED; X, OPEN HOLE.

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
PH-1	395334075100901	U S NAVY	0424	05/ /1940	C	S	211MRPAL	238
2	395329075101201	U S NAVY	0424	07/ /1940	C	S	211MRPAL	243
3	395328075102901	U S NAVY	-239	05/ /1941	C	S	211MRPAL	268
4	395328075103401	U S NAVY	-239	02/ /1941	C	S	211MRPAL	267
5	395323075110801	U S NAVY	0424	04/21/1942	C	S	211MRPAL	203
6	395348075105901	U S NAVY	0424	06/20/1942	C	S	211MRPAL	193
7	395321075091101	U S NAVY	0424	01/23/1943	C	S	211MRPAL	228
8	395316075103101	U S NAVY	0424	1944	C	S	211MRPAL	254
9	395343075113001	U S NAVY	0424	05/ /1942	C	S	211MRPAL	--
10	395334075100701	U S NAVY	0424	08/ /1945	C	S	211MRPAM	146
11	395345075102901	U S NAVY	0424	09/ /1944	C	S	211MRPAM	237
12	395342075102101	U S NAVY	0424	11/15/1944	C	S	211MRPAM	110
13	395332075102501	U S NAVY	0424	11/25/1944	C	S	112TRNN	73
14	395336075101301	U S NAVY	0424	07/ /1945	C	S	112TRNN	70
15	395326075101501	U S NAVY	0424	09/ /1945	C	S	211MRPAU	82
16	395336075102701	U S NAVY	0424	09/ /1945	C	S	112TRNN	84
17	395349075100201	U S NAVY	0424	09/18/1945	C	S	112TRNN	73
18	395349075100202	U S NAVY	-387	02/08/1946	C	S	211MRPAL	218
19	395314075101001	U S NAVY	-387	04/02/1946	C	S	211MRPAL	274
20	395316075104901	U S NAVY	-387	05/14/1946	C	S	211MRPAL	266
21	395329075100201	U S NAVY	0424	09/ /1945	C	--	112TRNN	91
22	395310075115001	U S NAVY	0297	07/ /1944	C	S	112TRNN	127
23	395327075103401	U S NAVY	-388	1897	C	X	300WSCKO	--
24	395328075103301	U S NAVY	-204	12/ /1899	C	X	300WSCKO	--
25	395318075093901	U S NAVY	--	01/05/1953	C	S	211MRPAL	254
26	395346075102801	U S NAVY	0404	09/05/1952	H	S	211MRPAL	237
27	395315075100701	U S NAVY	0404	10/24/1952	H	S	211MRPAL	--
28	395349075101801	U S NAVY	0404	10/06/1952	H	S	211MRPAL	250
29	395324075133301	CONRAIL	-204	1918	C	S	112TRNN	--
30	395248075134201	PHILA AIRPORT	0424	08/ /1938	C	S	211MRPAM	198
31	395450075123301	WFIL TRANSMISSION STATION	0249	01/05/1938	C	S	112TRNN	--
32	395522075115901	PHILA GAS WORKS	--	1915	C	X	300WSCKO	--
33	395409075120201	CONRAIL	0249	12/26/1940	C	S	211MRPAL	100
34	395349075115401	CONRAIL	-204	1906	C	X	300WSCKO	--
35	395431075124501	GULF OIL CORP	0231	09/ /1936	C	S	112TRNN	106
36	395415075123401	GULF OIL CORP	0231	09/ /1936	C	S	112TRNN	81
37	395409075123201	GULF OIL CORP	-387	09/ /1936	C	S	211MRPAL	90
38	395424075124401	GULF OIL CORP	0231	09/ /1936	C	S	112TRNN	90
39	395416075124601	GULF OIL CORP	0231	1936	C	S	112TRNN	73
40	395429075123301	GULF OIL CORP	-387	10/01/1936	C	S	112TRNN	79
41	395422075123001	GULF OIL CORP	0231	1936	C	S	112TRNN	70
42	395410075120701	GULF OIL CORP	-387	08/ /1936	C	X	300WSCKO	108
43	395410075120702	GULF OIL CORP	-387	01/ /1946	C	S	211MRPAL	--
44	395410075120703	GULF OIL CORP	-387	03/ /1946	C	S	211MRPAL	--
45	395432075100601	COX, S	--	1935	D	W	112TRNN	--
46	395435075112801	BROOKE, H	-204	1914	C	S	211MRPAL	--
47	395553075102101	ABBOTTS DAIRIES	-204	1906	C	X	300WSCKO	--
48	395553075102102	ABBOTTS DAIRIES	0297	1925	C	S	211MRPAL	--
49	395553075102103	ABBOTTS DAIRIES	-204	1929	C	X	300WSCKO	--
50	395553075102104	ABBOTTS DAIRIES	0424	07/28/1944	C	S	211MRPAL	117

USE OF SITE: O, OBSERVATION; T, TEST; U, UNUSED; W, WITHDRAWAL; Z, DESTROYED.

USE OF WATER: A, AIR CONDITIONING; D, DEWATERING; E, POWER GENERATION; F, FIRE PROTECTION; H, DOMESTIC; I, IRRIGATION; N, INDUSTRIAL; Q, AQUACULTURE; R, RECREATION; T, INSTITUTIONAL; U, UNUSED; Z, OTHER.

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAMETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
233	207	12	11.24	19.00	05/ /1940	730	12.0	U	U	PH-1
232	207	12	11.25	18.00	07/ /1940	730	13.0	U	U	2
268	238	12	11.72	25.47	10/31/1978	860	48.0	U	U	3
267	237	12	11.40	25.80	10/31/1978	800	30.0	U	U	4
173	148	12	14.76	28.41	11/01/1978	735	14.0	U	U	5
163	138	12	10.19	19.22	10/31/1978	725	12.0	U	U	6
204	189	12	11.93	31.50	01/23/1943	710	5.7	Z	U	7
230	200	12	11.81	33.72	10/31/1978	745	24.0	U	U	8
140	--	8	10	--	--	--	--	Z	U	9
140	133	16	11.70	29.19	10/31/1978	350	5.6	U	U	10
104	--	8	8.41	17.96	10/31/1978	350	6.0	Z	U	11
101	--	8	8.64	17.37	10/22/1978	20	4.7	O	U	12
59	50	8	9.93	25.90	11/25/1944	98	13.0	Z	U	13
56	46	3	10.18	18.50	11/01/1978	5.8	1.1	T	U	14
69	59	3	10.37	19.06	11/01/1978	--	--	T	U	15
62	52	3	9.13	28.50	09/12/1945	--	--	Z	U	16
53	43	3	11.06	4.00	09/18/1945	--	--	T	U	17
211	206	8	10.90	31.30	04/27/1953	--	--	T	U	18
247	242	6	8.68	35.15	11/01/1978	18	10.0	T	U	19
240	235	8	13	28.19	11/01/1978	20	1.2	T	U	20
56	46	3	11	--	--	--	--	Z	U	21
103	66	10	7.61	19.13	07/ /1944	--	--	Z	U	22
600	260	10	10	--	--	25	--	Z	U	23
906	260	10	10	28.00	12/ /1899	53	--	Z	U	24
229	199	12	8.5	31.67	10/31/1978	1200	12.0	U	U	25
208	176	12	10	45.00	09/05/1952	831	18.0	Z	U	26
245	214	12	9.5	47.00	10/24/1952	636	23.0	U	U	27
206	176	12	10	34.00	10/06/1952	996	24.0	U	U	28
49	41	8	10	8.00	1918	50	--	Z	U	29
125	105	10	12	12.25	08/ /1938	870	36.0	Z	U	30
73	62	6	5	9.00	01/05/1938	50	50.0	Z	U	31
360	132	6	33.6	29.39	11/15/1978	19	4.3	U	U	32
91	74	6	11	6.33	12/26/1940	170	5.6	Z	U	33
154	100	6	8	20.35	04/30/1953	6.0	--	Z	U	34
106	--	2	8.10	--	--	--	--	Z	U	35
81	--	2	12.10	--	--	--	--	Z	U	36
90	--	6	8.10	--	--	--	--	Z	U	37
90	--	2	7.60	--	--	--	--	Z	U	38
73	--	2	8.10	--	--	--	--	Z	U	39
79	--	6	8.10	--	--	--	--	Z	U	40
70	--	2	10.10	--	--	--	--	Z	U	41
98	88	6	16.30	--	--	100	--	Z	U	42
82	72	6	10.40	11.88	11/08/1978	310	18.0	W	N	43
82	72	6	10.50	11.60	11/08/1978	420	44.0	W	N	44
36	36	--	8	36.00	--	1	--	Z	U	45
123	72	8	19	25.00	1914	75	--	Z	U	46
386	129	6	28	37.00	1906	40	--	Z	U	47
102	--	10	28	27.00	1925	225	--	Z	U	48
587	160	8	25	27.00	1929	200	--	Z	U	49
98	83	10	27	28.26	05/05/1953	115	2.8	Z	U	50

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
51	395518075112001	JARDIN BRICK CO	-389	1906	C	X	300WSCKO	--
52	395518075111901	JARDIN BRICK CO	-389	1908	C	X	300WSCKO	--
53	395517075112001	JARDIN BRICK CO	-389	1923	C	X	300WSCKO	--
54	395555075111101	AMERICAN ICE CO	0297	1916	C	P	112TRNN	90
55	395606075115701	EDMUND WEBSTERS BRICKYARD	-204	1897	C	S	211MRPAL	232
56	395606075111401	FLEISHER IND CENTER	-204	1919	C	X	300WSCKO	--
57	395604075111301	FLEISHER IND CENTER	-204	1919	C	X	300WSCKO	--
58	395605075111201	FLEISHER IND CENTER	-204	1920	C	X	300WSCKO	--
59	395613075115401	PROGRESSIVE FURNITURE CO	0297	1934	C	O	211MRPAL	--
60	395612075115701	COCA-COLA BOTTLING CO	0249	05/27/1936	C	X	300WSCKO	--
61	395404075104101	ROOSEVELT PARK	0297	1919	C	S	211MRPAL	199
62	395401075104401	ROOSEVELT PARK	0297	1919	C	S	211MRPAL	--
63	395408075104001	ROOSEVELT PARK	0297	1919	C	S	211MRPAL	--
64	395403075104901	ROOSEVELT PARK	0297	1919	C	S	112TRNN	184
65	395402075104201	ROOSEVELT PARK	0249	1952	C	O	112TRNN	--
66	395444075115901	PRINTZ DEGREASING CO	-204	1903	C	X	300WSCKO	--
67	395429075114801	ATLANTIC REFINING CO	0297	1915	C	S	112TRNN	--
68	395512075113601	ATLANTIC REFINING CO	--	--	C	S	211MRPAL	100
69	395510075114501	ATLANTIC REFINING CO	--	1937	C	S	211MRPAL	104
70	395513075113901	ATLANTIC REFINING CO	--	--	C	S	211MRPAL	92
71	395449075120101	ATLANTIC REFINING CO	--	--	C	--	--	--
72	395454075121101	ATLANTIC REFINING CO	--	--	C	--	--	--
73	395541075121101	ATLANTIC REFINING CO	--	1921	C	S	112TRNN	607
74	395530075122401	ATLANTIC REFINING CO	--	1921	C	X	300WSCKO	503
75	395538075121101	ATLANTIC REFINING CO	--	--	C	S	112TRNN	101
76	395535075121401	ATLANTIC REFINING CO	--	1904	C	S	112TRNN	--
77	395529075122301	ATLANTIC REFINING CO	--	--	C	X	300WSCKO	--
78	395526075121001	ATLANTIC REFINING CO	--	--	C	--	112TRNN	--
79	395529075115601	ATLANTIC REFINING CO	--	--	C	--	112TRNN	--
80	395515075113401	ATLANTIC REFINING CO	0297	1930	C	S	211MRPAL	150
81	395514075113301	ATLANTIC REFINING CO	0424	1925	C	S	112TRNN	93
82	395528075122101	ATLANTIC REFINING CO	--	1933	D	S	112TRNN	68
83	395533075120901	ATLANTIC REFINING CO	0249	02/15/1946	C	S	211MRPAL	78
84	395536075121201	ATLANTIC REFINING CO	0249	07/30/1948	C	S	112TRNN	78
85	395426075103801	U S NAVAL HOSPITAL	0424	08/07/1942	C	S	211MRPAL	147
86	395429075105001	U S NAVAL HOSPITAL	0424	09/11/1942	C	S	211MRPAL	151
87	395503075105601	GEORGE YOUNG CO	-204	1912	C	X	300WSCKO	--
88	395520075115001	MIRTO CULLET SUPPLY CO	0297	1933	C	O	112TRNN	--
89	395614075120301	FAMOUS STATE FAIR PRODUCT	0249	04/24/1951	C	X	300WSCKO	--
90	395614075121401	ZUCKERMAN & HONICKMAN INC	-389	1904	C	X	300WSCKO	--
91	395622075112902	HENRY BOWER CHEMICAL MFG	-387	05/ /1930	C	S	211MRPAL	--
92	395622075112901	HENRY BOWER CHEMICAL MFG	0297	1934	C	O	211MRPAL	100
93	395623075113001	HENRY BOWER CHEMICAL MFG	0297	01/ /1946	C	S	211MRPAL	100
94	395630075113101	HYMAN BRODSKY & SON CORP	0297	1929	C	O	211MRPAL	65
95	395627075112901	VICTOR DAIRIES INC	0249	03/19/1938	C	X	300WSCKO	--
96	395609075112601	EARL THEATER	0424	08/03/1940	C	S	112TRNN	78
97	395619075110801	AMERICAN ICE CO	-204	1902	C	X	300WSCKO	--
98	395622075104101	SALINI BROS IRON WORKS	--	1905	C	S	112TRNN	--
99	395617075102401	I J HORSTMANN & SONS	-390	1922	D	W	112TRNN	--
100	395617075102301	I J HORSTMANN & SONS	0249	10/ /1938	C	S	112TRNN	--
101	395621075110601	PA RANGE & BOILER CO	-387	12/ /1940	C	X	300WSCKO	--
102	395616075101902	AMERICAN ICE CO	-204	1904	C	S	211MRPAL	--
103	395616075101901	AMERICAN ICE CO	-204	1904	C	S	112TRNN	--
104	395615075102001	AMERICAN ICE CO	-204	1906	C	S	112TRNN	--
105	395615075102002	AMERICAN ICE CO	0297	1916	C	X	300WSCKO	--
106	395630075120901	PHILA ABATTOIR CO	-387	02/ /1931	C	X	300WSCKO	--
107	395546075110701	BREEZE THEATER	--	--	C	S	112TRNN	--
108	395529075101401	BROADWAY THEATER	0424	07/01/1937	C	S	112TRNN	127
109	395632075121601	OSCAR MAYER & CO	-204	1914	C	X	300WSCKO	--
110	395631075121701	OSCAR MAYER & CO	-204	1919	C	O	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
215	96	6	30	--	--	70	--	Z	U	51
240	90	6	30	--	--	60	--	Z	U	52
250	96	6	30	--	--	50	--	Z	U	53
90	70	6	35	20.00	--	50	--	Z	U	54
68	--	8	33	--	--	--	--	Z	U	55
1405	85	10	37	27.00	1919	15	--	Z	U	56
580	83	8	37	20.00	1919	60	--	Z	U	57
490	80	8	37	22.00	1920	18	--	Z	U	58
58	58	12	35	19.00	1934	180	--	Z	U	59
383	50	8	35	24.00	05/27/1936	120	2.0	Z	U	60
176	--	6	15	31.36	11/19/1943	--	--	Z	U	61
185	--	6	8	--	--	100	--	Z	U	62
185	--	6	5.6	12.68	11/01/1978	100	--	U	U	63
82	--	6	3.0	9.40	11/01/1978	100	--	U	U	64
71	71	6	8	18.30	05/26/1952	50	3.8	Z	U	65
253	106	6	15	14.00	1903	60	--	Z	U	66
74	--	6	28	35.35	11/24/1943	100	--	Z	U	67
97	77	16	29	--	--	--	--	Z	U	68
101	81	16	31.7	20.00	08/17/1937	300	20.0	Z	U	69
85	62	24	32	--	--	--	--	Z	U	70
--	--	--	15	--	--	--	--	Z	U	71
--	--	--	20	--	--	--	--	Z	U	72
76	54	12	16	21.00	08/15/1952	201	9.3	Z	U	73
76	66	16	11	--	--	--	--	Z	U	74
--	--	--	18	--	--	--	--	Z	U	75
95	--	6	30	--	--	325	--	Z	U	76
104	--	18	17	18.74	10/02/1953	--	--	Z	U	77
96	--	--	15	--	--	--	--	Z	U	78
94	--	--	20	--	--	--	--	Z	U	79
--	95	16	33	34.00	06/11/1953	30	--	Z	U	80
90	56	26	29	19.00	08/17/1937	300	20.0	Z	U	81
68	62	60	13	6.50	08/17/1937	200	6.7	Z	U	82
78	60	10	14.6	10.61	11/02/1978	614	19.0	U	U	83
78	58	12	25	23.00	07/30/1978	300	30.0	Z	U	84
132	107	10	10	28.24	07/11/1956	440	18.0	Z	U	85
142	117	10	8.0	10.22	11/01/1978	560	28.0	U	U	86
612	153	8	22.7	22.30	11/15/1978	120	--	U	U	87
66	66	6	33	32.00	1933	45	--	Z	U	88
230	54	8	29.7	20.71	12/05/1978	80	--	U	U	89
300	18	8	18.1	9.89	12/05/1978	78	1.5	U	U	90
130	79	10	30	34.00	05/20/1930	185	6.9	Z	U	91
80	80	12	31	33.00	1934	115	--	Z	U	92
100	80	8	30	19.70	--	50	--	Z	U	93
65	65	8	13	11.00	1929	300	--	Z	U	94
490	21	8	20	19.00	03/19/1938	10	0.1	U	U	95
51	41	8	40	34.00	08/03/1940	114	16.0	Z	U	96
487	72	8	39	40.00	1902	75	--	Z	U	97
54	--	8	41.8	32.45	11/06/1978	25	0.7	U	U	98
60	60	48	37	32.00	1953	250	--	U	U	99
67	52	10	36.9	30.00	10/25/1938	110	6.5	W	N	100
78	--	6	41	--	--	12	--	Z	U	101
120	90	6	35	26.50	1904	176	--	Z	U	102
59	49	6	35	24.00	1904	30	--	Z	U	103
78	58	8	35	27.00	1906	100	--	Z	U	104
146	96	10	35	33.00	1916	200	--	Z	U	105
31	--	16	20	4.56	12/05/1978	60	--	U	U	106
70	60	8	32	41.20	08/17/1950	47	--	Z	U	107
100	88	8	25	41.25	07/01/1937	200	5.5	Z	U	108
47	11	6	10	20.00	1914	50	--	Z	U	109
40	40	8	10	18.00	1919	37	--	Z	U	110

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
111	395630075121701	OSCAR MAYER & CO	-204	1919	C	X	300WSCKO	--
112	395633075110401	U S NAVAL HOME	0424	1941	C	S	112TRNN	69
113	395640075105501	U S NAVAL HOME	0424	1941	C	S	112TRNN	71
114	395634075110701	U S NAVAL HOME	0424	1941	C	S	112TRNN	56
115	395648075110701	STANDARD ICE CO	-204	1906	C	X	300WSCKO	--
116	395648075110901	STANDARD ICE CO	-204	1906	C	X	300WSCKO	--
117	395647075110901	STANDARD ICE CO	-204	1906	C	X	300WSCKO	--
118	395647075110801	STANDARD ICE CO	-204	1906	C	X	300WSCKO	--
119	395708075103801	HILLMAN MEDICAL CENTER	-204	1917	C	X	300WSCKO	--
120	395648075110301	SLATER SYSTEM INC	0249	11/ /1946	C	X	300WSCKO	--
121	395637075100801	ROYAL THEATER	-387	1937	C	S	112TRNN	--
122	395645075100701	PHILA WIRELESS TECH INST	0249	05/20/1947	C	X	300WSCKO	--
123	395701075095301	LAFAYETTE HOTEL	-204	1937	C	X	300WSCKO	--
124	395534075110601	PRESIDENT CATERERS	0249	06/ /1936	C	S	211MRPAL	--
125	395558075100801	SOUTHERN THEATER	0249	04/03/1937	C	S	211MRPAL	--
126	395523075093301	YORK WOMENS CLOTHING	0297	1936	C	S	211MRPAL	--
127	395534075092601	DISCOUNT PLYWOOD CO	0249	03/03/1936	C	S	211MRPAL	--
128	395448075085101	A & P FOOD STORES	0404	11/15/1946	C	S	211MRPAL	--
129	395553075094101	GENERAL BAKING CO	-204	1904	C	S	211MRPAL	--
130	395508075082901	QUAKER CITY COLD STORAGE	0249	08/11/1926	C	S	211MRPAL	--
131	395556075094601	MOYAMENSING PRISON	0249	06/07/1929	C	X	300WSCKO	--
132	395557075093901	BELLS BEVERAGES	0297	1933	C	S	211MRPAL	--
133	395600075093301	PHILA ICE CREAM CO	0297	1935	C	S	211MRPAL	--
134	395543075100801	SAVOIA THEATER	0424	06/11/1937	C	S	211MRPAL	--
135	395657075100401	RACQUET CLUB	--	1907	C	X	300WSCKO	--
136	395656075100401	RACQUET CLUB	--	1907	C	X	300WSCKO	--
137	395353075093901	CONRAIL	0424	1919	C	S	211MRPAL	--
138	395353075094201	CONRAIL	0424	1919	C	S	211MRPAL	--
139	395352075094001	CONRAIL	0424	01/12/1940	C	S	211MRPAL	186
140	395352075094301	CONRAIL	0424	05/22/1941	C	S	211MRPAL	193
141	395457075085401	LIQUID CARBONIC CORP	0249	07/22/1950	C	S	112TRNN	185
142	395459075085401	LIQUID CARBONIC CORP	--	--	C	--	--	--
143	395444075083801	GENERAL COLD STORAGE	0424	08/16/1928	C	S	211MRPAL	185
144	395437075084001	GENERAL COLD STORAGE	0424	07/25/1928	C	S	211MRPAL	185
145	395446075083901	GENERAL COLD STORAGE	0424	07/18/1946	C	S	211MRPAL	160
146	395454075085901	BEST MARKETS	0404	11/ /1943	C	S	211MRPAL	--
147	395453075085601	BEST MARKETS	0404	08/13/1943	C	S	211MRPAL	--
148	395453075085401	BEST MARKETS	0404	05/ /1939	C	S	211MRPAL	--
149	395436075090901	CONRAIL	-204	1910	C	S	211MRPAL	--
150	395345075084601	CONRAIL	0249	01/21/1929	C	S	211MRPAL	--
151	395345075084501	CONRAIL	0249	09/23/1929	C	S	112TRNN	--
152	395346075084401	CONRAIL	0424	04/06/1936	C	S	211MRPAL	237
153	395433075082601	CONRAIL	0249	08/16/1941	C	S	211MRPAL	200
154	395531075090301	GIORGIO, JOSEPH	0297	1932	C	S	211MRPAM	--
155	395531075090201	GIORGIO, JOSEPH	--	1946	C	--	211MRPA	--
156	395532075090501	S PHILA BEEF CO	-261	1938	C	S	211MRPAL	--
157	395609075093101	AMERICAN ICE CO	-204	1909	C	S	211MRPAL	--
158	395608075093101	AMERICAN ICE CO	-204	1909	C	S	211MRPAL	--
159	395613075094801	AMERICAN ICE CO	0297	1930	C	S	211MRPAL	--
160	395612075094801	AMERICAN ICE CO	0297	1931	C	S	211MRPAL	--
161	395613075094401	PENN PAPER & STOCK CO	-204	1902	C	X	300WSCKO	--
162	395615075095001	WYETH INC	0297	1935	C	S	211MRPAL	--
163	395615075095101	WYETH INC	-387	09/ /1943	C	S	112TRNN	--
164	395615075095401	F H LEVEY CO	0297	1930	C	S	211MRPAL	--
165	395618075095201	WILLIAMS, JOHN	-204	1907	C	X	300WSCKO	--
166	395547075091101	MT SINAI HOSPITAL	0297	11/04/1937	C	S	211MRPAL	111
167	395629075095401	CONSUMERS BREWING CO	-204	1904	C	S	112TRNN	--
168	395629075095402	CONSUMERS BREWING CO	-204	1915	C	S	112TRNN	--
169	395629075095403	TRAINER BREWING CO	--	1933	C	S	112TRNN	--
170	395618075092301	ITALIA THEATER	0249	02/22/1941	C	S	211MRPAL	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
102	38	8	10	18.00	1919	--	--	Z	U	111
--	--	8	38	40.00	1941	--	--	Z	U	112
--	--	8	38	39.00	1941	--	--	Z	U	113
--	--	8	40	39.00	1941	--	--	Z	U	114
310	50	8	10	6.00	1906	1.0	--	Z	U	115
128	14	8	10	10.00	1906	4.0	--	Z	U	116
409	--	8	10	10.00	1906	25	--	Z	U	117
280	42	8	10	6.00	1906	100	--	Z	U	118
620	100	8	32	25.00	1917	60	--	Z	U	119
366	33	8	26.8	16.17	12/06/1978	36	--	U	U	120
58	--	8	40	--	--	--	--	Z	U	121
285	101	6	36	36.62	07/11/1947	20	0.2	U	U	122
484	--	8	25	--	--	60	--	Z	U	123
86	65	8	32.6	29.08	08/28/1979	90	3.2	U	U	124
101	80	8	25	43.00	04/03/1937	57	1.7	Z	U	125
108	--	8	20	--	--	150	--	U	U	126
95	72	8	25.2	27.10	11/15/1978	100	4.3	U	U	127
180	140	8	12	50.00	11/15/1946	1200	20.0	U	U	128
270	188	10	25	25.00	1904	100	--	Z	U	129
169	139	10	11	18.00	08/11/1926	550	28.0	Z	U	130
600	124	8	25	30.00	06/07/1929	16	0.2	Z	U	131
81	--	8	25	41.48	03/02/1954	35	--	Z	U	132
80	--	8	25	39.00	1935	120	--	Z	U	133
86	66	8	25	25.50	07/11/1937	250	25.0	Z	U	134
500	--	8	38.1	30.68	12/06/1978	50	--	U	U	135
500	--	8	38.1	31.55	12/06/1978	50	--	U	U	136
169	--	6	8	22.00	04/22/1936	215	7.8	Z	U	137
187	--	6	8	23.50	04/22/1936	287	11.0	Z	U	138
179	159	8	20	29.00	01/12/1940	300	13.0	Z	U	139
183	165	8	20	27.00	05/22/1941	482	18.0	Z	U	140
73	53	8	10	33.00	07/22/1950	500	65.0	Z	U	141
--	--	--	13	--	--	500	--	Z	U	142
159	143	10	10	24.00	08/16/1928	630	12.0	Z	U	143
161	136	10	11	23.00	07/25/1928	770	27.0	Z	U	144
139	124	10	9	49.00	07/18/1946	500	18.0	Z	U	145
171	140	8	13	62.00	11/ /1943	400	--	Z	U	146
172	146	12	12	50.00	08/13/1943	500	--	Z	U	147
168	137	12	12	48.00	05/ /1939	800	10.0	Z	U	148
149	138	4.50	9	7.00	1910	10	--	Z	U	149
189	172	12	20	25.00	01/21/1929	750	17.0	Z	U	150
89	64	8	20	25.00	09/23/1929	150	--	Z	U	151
199	179	16	10	26.00	04/06/1936	730	20.0	Z	U	152
149	141	8	10	41.00	08/16/1941	6.0	0.5	Z	U	153
76	73	8	17	19.00	1932	100	--	Z	U	154
--	--	--	17	--	--	--	--	Z	U	155
112	--	8	17	30.00	1944	250	--	Z	U	156
65	55	6	27	25.00	1909	100	--	Z	U	157
65	55	6	27	25.00	1909	100	--	Z	U	158
81	--	16	27	34.00	1930	300	--	Z	U	159
82	--	16	27	34.00	1931	250	--	Z	U	160
263	37	8	27	--	--	15	--	Z	U	161
73	--	12	35	37.16	10/13/1953	150	--	Z	U	162
50	45	8	28	--	--	150	--	Z	U	163
85	65	12	28	15.00	1930	210	18.0	Z	U	164
350	110	6	28	--	--	25	--	Z	U	165
110	100	4.50	22	37.00	11/21/1938	40	--	Z	U	166
48	27	6	31	10.00	1904	75	--	Z	U	167
48	--	6	31	10.00	1915	50	--	Z	U	168
60	57	8	31	35.00	1933	150	--	Z	U	169
93	73	8	31	36.00	02/22/1941	84	7.0	Z	U	170

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
171	395601075084001	P C TOMSON INC	-387	07/ /1916	C	S	211MRPAL	--
172	395609075084701	BROWNS FROSTED FOODS	0249	02/14/1939	C	S	211MRPAL	105
173	395613075090601	HAPS ICE CREAM CO	-387	05/ /1938	C	S	211MRPAL	--
174	395642075093801	GLADSTONE HOTEL	-204	--	C	X	300WSCKO	576
175	395636075093101	C E JOHNSON & CO	0297	1915	C	S	112TRNN	--
176	395638075083601	QUAKER CITY COLD STORAGE	0249	02/ /1927	C	S	211MRPAL	--
177	395637075083701	QUAKER CITY COLD STORAGE	0297	1930	C	S	211MRPAL	--
178	395636075083701	QUAKER CITY COLD STORAGE	0297	1930	C	S	211MRPAL	235
179	395626075083801	AMERICAN BAG & PAPER CO	--	1940	C	--	--	--
180	395623075085001	SKLAROFF & SONS	0249	09/10/1913	C	S	211MRPAL	119
181	395631075085001	ABBOTTS DAIRIES	-204	1911	C	S	211MRPAL	--
182	395632075085101	ABBOTTS DAIRIES	0297	1915	C	S	211MRPAL	--
183	395632075084901	ABBOTTS DAIRIES	0297	1918	C	S	211MRPAL	--
184	395632075084801	ABBOTTS DAIRIES	0297	1940	C	S	211MRPAL	--
185	395633075085001	ABBOTTS DAIRIES	0297	1940	C	S	211MRPAL	--
186	395652075095301	JOHN BARTRAM HOTEL	-204	--	C	X	300WSCKO	--
187	395643075084501	NATIONAL PUBLISHING CO	-387	05/ /1923	C	S	112TRNN	--
188	395653075093101	HORN & HARDART	-387	1925	C	X	300WSCKO	--
189	395658075092001	CONTINENTAL HOTEL	-204	--	C	X	300WSCKO	--
190	395653075090901	CURTIS PUBLISHING CO	--	1914	C	S	211MRPAL	--
191	395650075084101	GROSS BLDG	-204	1903	C	X	300WSCKO	--
192	395643075092201	PA HOSPITAL	0297	1926	C	S	112TRNN	--
193	395705075094601	JOHN WANAMAKER & SON	0249	05/21/1937	C	X	300WSCKO	--
194	395654075093601	SAULLS LAUNDRY	-391	--	C	S	300WSCKO	--
195	395659075095001	WITHERSPOON BUILDING	--	--	C	X	300WSCKO	--
196	395701075095101	WESTERN SAVINGS BLDG	-396	1902	C	X	300WSCKO	750
197	395654075094201	CAMAC TURKISH BATHS INC	0249	07/30/1934	C	X	300WSCKO	--
198	395701075093801	GREENFIELD BUILDING	-204	1910	C	X	300WSCKO	--
199	395705075093901	PHILA SAVINGS FUND SOC	0231	1931	C	X	300WSCKO	--
200	395706075094001	PHILA SAVINGS FUND SOC	0231	1931	C	X	300WSCKO	--
201	395701075083201	GIRARD PACKING CO	0249	01/24/1939	C	S	211MRPAL	66
202	395702075083201	GIRARD PACKING CO	0297	1943	C	S	211MRPAL	--
203	395702075083001	GIRARD PACKING CO	0297	02/ /1954	C	S	211MRPAL	170
204	395711075082601	LUMMIS & CO	-204	1918	C	S	211MRPAL	--
205	395711075082701	NATIONWIDE FURNITURE RENT	0249	08/ /1928	C	S	211MRPAL	--
206	395718075082601	WILDSTEIN & CO	0249	07/20/1948	C	S	211MRPAL	--
207	395716075085301	WHITMAN & SON	-204	1906	C	X	300WSCKO	--
208	395715075085001	WHITMAN & SON	-204	1910	C	S	211MRPAL	--
209	395715075083901	LONERGAN CO	-389	1910	C	X	300WSCKO	--
210	395717075084001	H O WILBUR & SONS	-204	1904	C	X	300WSCKO	--
211	395719075094401	GILBERT BLDG	-204	1911	C	X	300WSCKO	--
212	395728075090501	HYGEIA ICE CO	-392	1895	C	X	300WSCKO	--
213	395727075090501	HYGEIA ICE CO	-389	1911	C	X	300WSCKO	--
214	395741075093601	STAINLESS STEEL SALES	-387	03/ /1920	C	X	300WSCKO	--
215	395737075092301	UNDERWOOD CORP	-204	1910	C	X	300WSCKO	--
216	395736075091901	ARMOUR & CO	-389	1907	C	X	300WSCKO	--
217	395738075091301	QUAKER SALAD CO	-389	1908	C	X	300WSCKO	--
218	395737075091401	HELWIG SILK CO	-389	1910	C	X	300WSCKO	--
219	395731075090801	KINGAN & CO	-389	1910	C	S	112TRNN	--
220	395731075090802	KINGAN & CO	-389	1910	C	S	112TRNN	--
221	395731075090803	KINGAN & CO	-389	1910	C	S	112TRNN	--
222	395731075090804	KINGAN & CO	-389	1910	C	S	112TRNN	--
223	395733075093201	WOLF BROS	-204	1907	C	X	300WSCKO	--
224	395730075085001	BETZ BREWERY	-204	--	C	X	300WSCKO	--
225	395734075085401	CRESCENT INK & COLOR CO	-221	07/ /1949	C	X	300WSCKO	--
226	395732075083701	MATTHEWS, CHARLES J	-389	1906	C	X	300WSCKO	--
227	395731075083801	MATTHEWS, CHARLES J	-389	1907	C	X	300WSCKO	--
228	395741075083301	SWEETIE BEVERAGES	--	06/10/1937	C	X	300WSCKO	--
229	395750075093201	UNION TRACTION CO	-204	1894	C	X	300WSCKO	--
230	395744075093101	BILGRAM GEAR & MACHINE	-204	1910	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
200	138	6	15	35.00	07/ /1916	150	--	Z	U	171
105	84	8	22	24.00	02/14/1939	--	--	Z	U	172
86	--	6	31	--	--	--	--	Z	U	173
250	--	6	37	31.00	1893	85	4.2	Z	U	174
84	--	10	35	29.00	1915	100	--	Z	U	175
88	--	6	10	10.00	02/ /1927	350	--	Z	U	176
78	63	12	10	17.00	01/08/1938	350	15.0	Z	U	177
104	89	8	10	12.91	05/19/1954	150	--	Z	U	178
--	--	--	20	--	--	--	--	Z	U	179
119	52	6	32	40.00	09/10/1913	50	--	U	U	180
77	--	10	33.0	32.10	11/07/1978	200	--	U	U	181
94	--	10	30	32.00	1915	100	--	Z	U	182
88	--	10	30	32.00	1918	150	--	Z	U	183
80	--	10	32.0	29.90	11/07/1979	--	--	U	U	184
86	--	10	29	38.00	08/ /1952	250	--	Z	U	185
525	--	8	42	--	--	70	--	Z	U	186
31	--	4	21	--	--	--	--	Z	U	187
400	--	6	35	35.10	01/14/1954	75	--	Z	U	188
240	--	8	35	--	--	40	--	Z	U	189
500	--	8	29	31.49	01/14/1954	150	--	U	U	190
251	113	8	19	12.00	1903	42	--	Z	U	191
50	--	4.50	35	17.00	1926	10	--	Z	U	192
190	--	6	45	46.00	05/21/1937	5.5	0.0	Z	U	193
266	--	8	35	28.00	1890	110	--	Z	U	194
442	--	6	45	37.00	03/19/1979	80	--	U	U	195
312	--	--	47.3	45.50	12/06/1978	47	--	U	U	196
500	66	8	40	39.50	07/30/1934	5.0	0.1	Z	U	197
200	36	6	41	6.00	1910	30	--	Z	U	198
487	49	10	45	36.00	1931	350	--	U	U	199
494	49	10	45.4	43.07	12/06/1978	300	3.8	U	U	200
64	51	8	12	--	--	105	--	Z	U	201
62	54	8	12	19.00	--	75	5.4	Z	U	202
67	--	12	10	11.23	10/06/1954	240	--	Z	U	203
74	--	8	10	13.00	1918	60	--	Z	U	204
61	42	8	14.96	11.88	08/22/1979	79	17.0	W	F	205
61	40	8	10.55	7.87	11/09/1978	275	--	U	U	206
498	71	6	35	47.00	1906	3.0	--	Z	U	207
67	57	6	35	--	--	25	--	Z	U	208
200	70	8	35	22.00	1910	30	--	Z	U	209
363	67	8	34	16.00	1904	56	--	Z	U	210
340	53	8	42	22.00	1911	125	--	Z	U	211
400	20	8	35	32.00	1895	70	--	Z	U	212
227	42	8	38	29.00	1911	48	--	Z	U	213
210	--	6	50	--	--	--	--	Z	U	214
172	6	6	40	3.00	1910	3.0	--	Z	U	215
300	28	8	39	26.00	1907	100	--	Z	U	216
135	36	6	37	40.00	1908	40	--	Z	U	217
250	35	8	37	40.00	1910	47	--	Z	U	218
38	38	8	32	32.00	1910	15	--	Z	U	219
38	38	8	32	32.00	1910	15	--	Z	U	220
38	38	8	32	32.00	1910	15	--	Z	U	221
38	38	8	32	32.00	1910	15	--	Z	U	222
317	78	8	40	22.00	1907	26	--	Z	U	223
1000	--	10	27	--	--	100	--	Z	U	224
260	112	6	30	18.00	07/ /1949	86	1.2	Z	U	225
200	42	6	27	15.48	12/07/1978	100	--	Z	U	226
200	42	6	25	14.00	1907	100	--	Z	U	227
500	--	--	33	31.05	08/12/1943	60	1.5	Z	U	228
2031	15	8	55	12.00	1894	50	--	Z	U	229
529	--	6	50	25.82	11/04/1953	25	--	Z	U	230

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
231	395750075083501	ORTLIEB BREWING CO	--	--	D	W	112TRNN	--
232	395750075083401	ORTLIEB BREWING CO	-204	--	D	W	112TRNN	--
233	395753075083401	ORTLIEB BREWING CO	-204	--	D	W	112TRNN	--
234	395515075090301	MORGENTHALER BROS	0297	1917	C	S	211MRPAL	--
235	395515075090302	MORGENTHALER BROS	0297	1920	C	S	211MRPAL	--
236	395515075090303	MORGENTHALER BROS	0297	1924	C	S	211MRPAL	--
237	395515075090304	MORGENTHALER BROS	0297	1928	C	S	211MRPAL	--
238	395515075090305	MORGENTHALER BROS	0297	1932	C	S	211MRPAL	--
239	395515075090306	MORGENTHALER BROS	0297	1933	C	S	211MRPAL	--
240	395515075090307	MORGENTHALER BROS	0297	10/ /1945	C	P	211MRPAL	155
241	395523075083801	SPATOLA-THOMPSON INC	0297	1934	C	S	211MRPAL	--
242	395523075083901	SPATOLA-THOMPSON INC	0297	1939	C	S	211MRPAL	--
243	395754075083701	PHILA DAIRY PRODUCTS CO	--	--	D	W	112TRNN	--
244	395753075083901	HESS BREWING CO	-204	1911	C	X	300WSCKO	285
245	395753075083902	PHILA DAIRY PRODUCTS CO	--	1938	C	X	300WSCKO	--
246	395556075085601	QUAKER MAID DAIRIES	-387	1932	C	S	211MRPAL	--
247	395554075085601	QUAKER MAID DAIRIES	0297	1940	C	S	211MRPAL	--
248	395536075084901	MC CAHAN SUGAR REFINERY	0297	1912	C	S	211MRPAL	--
249	395542075084901	CROWN PAPER BOARD CO	-393	1940	C	S	211MRPAL	156
250	395542075085001	CROWN PAPER BOARD CO	-204	1925	C	S	211MRPAL	--
251	395542075090101	QUAKER CITY DAIRY CO	0297	1915	C	S	211MRPAL	--
252	395805075081901	C SCHMIDT & SONS INC	0249	06/10/1949	C	S	112TRNN	--
253	395803075082201	C SCHMIDT & SONS INC	0249	08/26/1949	C	X	300WSCKO	--
254	395806075082001	C SCHMIDT & SONS INC	--	--	D	W	112TRNN	--
255	395726075082201	GOLIN, A	--	02/19/1949	C	S	211MRPAL	--
256	395730075084501	E HUBSCHMAN & SONS	0249	06/03/1937	C	S	211MRPAL	253
257	395735075082101	PHILA COLD STORAGE CO	-204	1909	C	S	112TRNN	--
258	395735075082102	PHILA COLD STORAGE CO	-204	1909	C	S	112TRNN	--
259	395735075082103	PHILA COLD STORAGE CO	-204	1909	C	S	112TRNN	--
260	395735075082104	PHILA COLD STORAGE CO	-204	1909	C	S	112TRNN	--
261	395735075082105	PHILA COLD STORAGE CO	0297	1915	C	S	112TRNN	--
262	395735075082106	PHILA COLD STORAGE CO	0297	1917	C	S	112TRNN	--
263	395735075082107	PHILA COLD STORAGE CO	0297	1917	C	S	112TRNN	--
264	395735075082108	PHILA COLD STORAGE CO	0297	1917	C	S	112TRNN	--
265	395735075082109	PHILA COLD STORAGE CO	0297	1935	C	S	112TRNN	--
266	395805075092001	SHARPLESS, P E	-389	1909	C	X	300WSCKO	--
267	395759075081001	NICHOLSON FILE CO	--	--	C	X	300WSCKO	--
268	395800075080801	NICHOLSON FILE CO	--	--	C	X	300WSCKO	--
269	395759075080901	NICHOLSON FILE CO	0297	11/01/1941	C	X	300WSCKO	--
270	395759075080601	NICHOLSON FILE CO	0297	11/20/1941	C	X	300WSCKO	--
271	395753075075701	PA SUGAR CO	-204	1912	C	X	300WSCKO	--
272	395753075075702	PA SUGAR CO	-204	1912	C	X	300WSCKO	--
273	395753075075703	PA SUGAR CO	-204	1912	C	X	300WSCKO	--
274	395749075075901	PA SUGAR CO	0249	07/22/1931	C	X	300WSCKO	--
275	395747075075601	PA SUGAR CO	0249	12/26/1945	C	X	300WSCKO	--
276	395806075080001	STOCKWELL RUBBER CO	0297	1938	C	X	300WSCKO	--
277	395806075075201	HOPPLE PRINTING CO	-387	01/ /1946	C	X	300WSCKO	--
278	395758075082401	AMERICAN STORES CO	0297	1919	C	S	112TRNN	--
279	395756075082501	AMERICAN STORES CO	0297	1920	C	S	112TRNN	--
280	395811075080901	SHEARERS DAIRIES INC	0297	1930	C	S	112TRNN	--
281	395812075080901	SHEARERS DAIRIES INC	0249	04/18/1952	C	S	112TRNN	--
282	395813075083201	LOUIS BURK INC	-204	1904	C	X	300WSCKO	--
283	395813075083501	DEGREGORIO, ANTHONY	-387	04/ /1916	C	X	300WSCKO	--
284	395733075091801	NATIONAL CHEMICAL LABS	--	1900	C	X	300WSCKO	--
285	395732075091901	NATIONAL CHEMICAL LABS	-387	10/ /1935	C	X	300WSCKO	--
286	395835075071101	FRANKFORD PARAFFIN MFG CO	0297	1939	C	S	112TRNN	--
287	395836075071201	FRANKFORD PARAFFIN MFG CO	0297	03/ /1954	C	S	112TRNN	--
288	395838075070901	NATIONAL LEAD CO	-394	05/ /1919	D	W	112TRNN	--
289	395825075070801	CRAMP SHIPBUILDING CO	-204	1918	C	X	300WSCKO	--
290	395715075093401	WILSON, DAVID	-204	1909	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
40	40	60	36.0	25.27	12/08/1978	--	--	U	U	231
40	40	60	36.0	26.64	12/08/1978	--	--	U	U	232
40	40	60	32.0	16.72	12/08/1978	--	--	U	U	233
170	160	8	12	22.00	1917	300	--	Z	U	234
164	154	10	12	23.00	1920	275	--	Z	U	235
160	150	10	12	22.00	1924	350	--	Z	U	236
164	154	10	12	23.00	1928	500	--	Z	U	237
158	148	10	12	44.91	05/13/1944	--	--	Z	U	238
168	158	10	12	23.00	1933	275	--	Z	U	239
154	124	10	12	--	--	350	--	Z	U	240
151	--	8	13	18.70	11/16/1978	300	--	U	U	241
165	145	8	12.2	21.05	02/15/1979	300	8.9	U	U	242
33	33	82	32	--	--	--	--	Z	U	243
181	51	8	35	30.00	1911	104	--	Z	U	244
500	--	12	35	22.78	12/10/1953	--	--	Z	U	245
72	61	8	25	31.00	12/29/1934	85	--	Z	U	246
109	--	8	24	--	--	100	--	Z	U	247
117	--	6	15	13.00	1912	190	--	Z	U	248
--	136	8	13	36.00	06/01/1944	200	50.0	Z	U	249
108	--	8	13	18.00	1925	125	--	Z	U	250
109	--	8	18	10.00	1915	100	--	Z	U	251
36	19	12	18	16.00	06/10/1949	144	7.8	Z	U	252
1000	60	8	18	17.00	08/26/1949	48	0.3	Z	U	253
38	38	96	20	21.02	05/13/1954	--	--	Z	U	254
61	40	8	10	8.00	02/19/1949	105	--	Z	U	255
62	51	8	25	14.00	06/03/1937	--	--	Z	U	256
27	10	8	15	2.00	1909	100	--	Z	U	257
27	10	8	15	2.00	1909	100	--	Z	U	258
27	10	8	15	2.00	1909	100	--	Z	U	259
27	10	8	15	2.00	1909	100	--	Z	U	260
62	--	6	15	5.00	1915	80	--	Z	U	261
49	--	8	15	5.00	1917	100	--	Z	U	262
50	--	8	15	5.00	1917	90	--	Z	U	263
51	--	8	15	5.00	1917	150	--	Z	U	264
50	--	10	15	--	--	--	--	Z	U	265
169	45	6	52	28.00	1909	35	--	Z	U	266
340	--	6	14	--	--	--	--	Z	U	267
340	--	6	14	--	--	65	--	Z	U	268
400	62	8	14	--	--	50	--	Z	U	269
245	65	8	14	--	--	350	--	Z	U	270
64	52	8	10	30.00	1912	16	--	Z	U	271
69	58	8	10	30.00	1912	10	--	Z	U	272
215	67	6	10	--	--	44	--	Z	U	273
390	126	8	8	12.00	07/22/1931	225	--	Z	U	274
400	72	10	13	22.13	12/26/1945	57	0.5	Z	U	275
85	65	8	21	28.00	1938	275	--	Z	U	276
225	33	8	22	17.15	12/12/1978	90	1.1	U	U	277
21	--	6	17	--	--	35	--	Z	U	278
26	--	6	18	--	--	100	--	Z	U	279
30	--	--	18	14.00	1930	60	--	Z	U	280
38	27	8	18	14.00	04/18/1952	98	--	U	U	281
750	54	10	23	18.00	09/14/1949	72	0.6	Z	U	282
380	25	8	21.9	10.36	01/18/1979	70	--	W	I	283
300	--	8	25	--	--	100	--	U	U	284
524	--	8	25	--	--	--	--	Z	U	285
17	--	4	13.7	7.39	12/14/1978	5.0	--	U	U	286
17	13	6	13.8	7.52	12/14/1978	35	0.6	U	U	287
22	22	168	15	10.25	12/14/1978	150	13.5	U	U	288
247	14	8	12	11.00	1918	64	--	Z	U	289
348	11	8	45	44.02	02/25/1954	7.0	--	U	U	290

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	METHOD FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
291	395709075093601	CONRAIL	-204	1910	C	X	300WSCKO	--
292	395709075093401	SMITH, E P	-204	1910	C	X	300WSCKO	--
293	395710075091501	STRAWBRIDGE & CLOTHIER	-204	1917	C	X	300WSCKO	--
294	395706075091501	STRAWBRIDGE & CLOTHIER	--	1934	C	S	112TRNN	--
295	395801075090601	MERCK & CO	-204	1911	C	X	300WSCKO	--
296	395758075090701	MERCK & CO	-204	1921	C	X	300WSCKO	--
297	395813075090601	CUDAHY PACKING CO	--	--	C	X	300WSCKO	--
298	395814075090401	SWIFT & CO	0297	1925	C	X	300WSCKO	--
299	395745075093401	PARKWAY BAKING CO	0249	11/11/1931	C	X	300WSCKO	--
300	395723075093601	GODFREY ROLLER CO	-387	01/06/1950	C	X	300WSCKO	--
301	395902075054201	NEATSFOOT OIL REF CORP	--	--	C	X	300WSCKO	--
302	395901075054001	NEATSFOOT OIL REF CORP	0249	06/27/1940	C	S	211MRPAL	--
303	395902075053501	JACOB H BRODSKY & SON	0249	06/05/1940	C	X	300WSCKO	--
304	395915075054401	ALDAN RUBBER CO	-387	06/20/1939	C	X	300WSCKO	--
305	395904075053801	DILL & COLLINS	-204	1902	C	X	300WSCKO	500
306	395856075054101	MUTUAL RENDERING CO	0297	1924	C	S	112TRNN	--
307	395926075040401	LIBERTY CORP	-204	1903	C	S	112TRNN	--
308	395903075055001	ENTERPRISE GREASE CO	0297	1928	C	S	112TRNN	--
309	395905075054901	RICHMOND MACHINE CO	0297	1942	C	X	300WSCKO	--
310	395910075054201	PHILLIPS HARDWARE SUPPLY	--	--	C	X	300WSCKO	--
311	395910075054202	PHILLIPS HARDWARE SUPPLY	-387	06/ /1944	C	S	112TRNN	--
312	395854075051901	PHILA GAS WORKS	-204	1903	C	X	300WSCKO	--
313	395853075051101	M L SHOEMAKER & CO	-204	1905	C	S	211MRPAL	--
314	395853075051102	M L SHOEMAKER & CO	-204	1905	C	S	211MRPAL	407
315	395853075051103	M L SHOEMAKER & CO	-204	1912	C	S	211MRPAL	500
316	395926075042201	AMER SMELTING & REF	0249	08/12/1914	C	X	300WSCKO	--
317	395930075042501	AMER SMELTING & REF	--	1920	C	X	300WSCKO	--
318	395943075052501	F W TUNNELL & CO	--	--	C	X	300WSCKO	--
319	395942075052501	F W TUNNELL & CO	--	--	D	W	112TRNN	--
320	395943075052401	F W TUNNELL & CO	-395	--	D	W	112TRNN	--
321	395939075052601	F W TUNNELL & CO	0424	04/ /1937	C	S	112TRNN	49
322	395939075052401	F W TUNNELL & CO	-395	1945	D	W	112TRNN	--
323	395925075041001	ATLANTIC METALS CORP	--	--	C	X	300WSCKO	--
324	400006075034301	ROHM AND HAAS CO	0424	05/07/1934	C	S	211MRPAL	--
325	400014075034401	ROHM AND HAAS CO	0424	05/14/1934	C	S	211MRPAL	--
326	400013075035001	ROHM AND HAAS CO	0424	05/21/1934	C	S	211MRPAL	--
327	400015075040101	ROHM AND HAAS CO	0424	05/25/1934	C	S	211MRPAL	--
328	400039075035001	SIMONDS ABRASIVES CO	0249	1918	C	X	300WSCKO	--
329	400029075042601	DELTA FILE WORKS	0249	07/19/1935	C	X	300WSCKO	--
330	395943075054701	REID METAL REFINING CO	--	--	C	X	300WSCKO	--
331	400214075023001	MAYFAIR THEATER	0249	08/13/1936	C	X	300WSCKO	--
332	400006075051501	BERS & CO	-387	05/ /1941	C	X	300WSCKO	--
333	400011075050801	LOUIS J GEDICKE & SONS	0249	08/04/1933	C	X	300WSCKO	--
334	400024075044901	WHITING-PATTERSON CO INC	-204	1918	C	X	300WSCKO	--
335	400024075045101	WHITING-PATTERSON CO INC	0249	02/20/1942	C	X	300WSCKO	--
336	400032075043201	BLUMENTHAL BROS	0297	1916	C	X	300WSCKO	--
337	400031075043601	BLUMENTHAL BROS	0297	1918	C	X	300WSCKO	--
338	400031075043301	BLUMENTHAL BROS	0249	12/09/1935	C	X	300WSCKO	--
339	400059075044801	QUAKER MAID DAIRIES	-387	04/ /1919	C	X	000HBLD	--
340	400101075044701	QUAKER MAID DAIRIES	-387	05/ /1928	C	X	000HBLD	--
341	400041075031401	QUAKER RUBBER CORP	0249	05/28/1936	C	S	211MRPAL	--
342	400044075031501	QUAKER RUBBER CORP	0249	09/09/1947	C	X	300WSCKO	--
343	400045075031601	QUAKER RUBBER CORP	0249	05/21/1936	C	S	112TRNN	--
344	400029075044901	WARD CHOCOLATE CO	0249	01/ /1950	C	X	300WSCKO	--
345	400039075031201	QUAKER RUBBER CORP	0424	03/16/1953	C	S	211MRPAL	--
346	400106075025401	LINEAR INC	0297	1920	C	X	300WSCKO	--
347	400105075025501	LINEAR INC	0297	1952	C	X	300WSCKO	--
348	400101075030301	CRYSTAL SOAP & CHEM	-204	1918	C	S	112TRNN	75
349	400035075031701	HELWIG DYEING CORP	-389	1913	C	X	300WSCKO	--
350	400037075033601	FRANKFORD ARSENAL	-204	1907	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
244	85	8	45	23.00	1910	60	--	Z	U	291
240	28	10	45	33.00	1910	--	--	Z	U	292
735	80	8	38	45.27	03/12/1954	55	--	Z	U	293
62	55	12	38	47.85	03/04/1954	104	--	Z	U	294
281	22	6	40	34.00	1911	70	--	Z	U	295
287	29	6	40	18.00	1921	5.0	--	Z	U	296
135	--	8	50	14.55	05/12/1954	--	--	Z	U	297
200	--	6	45	13.00	--	25	--	Z	U	298
650	38	8	53	26.52	07/01/1981	37	0.3	U	U	299
278	150	6	47.4	41.18	12/07/1978	1.0	5.0	W	N	300
400	--	8	9.7	7.55	12/15/1978	10	--	U	U	301
65	55	6	12	9.65	07/15/1953	70	--	Z	U	302
275	109	8	12	11.00	06/05/1940	150	2.1	Z	U	303
300	150	8	14	--	--	50	--	Z	U	304
130	116	4	13	15.00	1902	125	--	Z	U	305
72	--	8	10	8.22	07/16/1953	350	--	Z	U	306
55	41	8	10.0	8.78	08/30/1979	53	9.1	U	U	307
55	50	6	12	9.00	1928	90	--	Z	U	308
70	--	8	11.8	4.90	12/14/1978	--	--	U	U	309
180	--	8	12.4	9.00	01/18/1979	10	0.2	U	U	310
53	--	8	12.4	--	--	--	--	U	U	311
430	63	6	8	10.00	1903	9.0	--	Z	U	312
74	64	8	8	6.00	1905	125	--	Z	U	313
60	50	8	8	9.00	1905	75	--	Z	U	314
60	50	8	8	6.00	1912	135	--	Z	U	315
200	82	8	8	4.00	08/12/1914	60	--	Z	U	316
400	--	6	8	--	--	--	--	Z	U	317
400	--	--	18	--	--	--	--	Z	U	318
22	22	60	18	7.00	--	--	--	Z	U	319
40	40	138	18	--	--	300	--	Z	U	320
45	30	12	20	12.95	09/28/1953	263	25.0	Z	U	321
44	44	102	18	11.30	09/28/1953	--	--	Z	U	322
110	--	6	10	12.00	08/31/1953	--	--	Z	U	323
67	--	6	11	20.00	05/07/1934	--	--	Z	U	324
80	--	6	10	20.00	05/14/1934	--	--	Z	U	325
65	--	6	18	20.00	05/21/1934	--	--	Z	U	326
44	--	6	10	8.00	05/25/1934	--	--	Z	U	327
254	--	8	25	16.23	07/24/1953	--	--	Z	U	328
156	32	6	20	16.92	08/12/1953	50	2.9	Z	U	329
--	--	--	18	--	--	--	--	Z	U	330
410	37	8	93	12.00	08/13/1936	10	--	Z	U	331
150	30	8	10	8.13	07/29/1953	--	--	Z	U	332
94	27	6	20	12.90	08/11/1953	10	2.0	Z	U	333
182	80	8	26	22.00	1918	50	--	Z	U	334
752	113	6	27	20.00	02/20/1942	64	0.4	Z	U	335
511	14	6	25	17.00	1916	42	--	Z	U	336
244	19	8	30	18.00	1918	8.0	--	Z	U	337
342	28	8	25	40.00	12/09/1935	45	0.9	Z	U	338
916	47	8	60	23.25	08/31/1953	5.0	--	Z	U	339
77	--	8	60	26.00	07/28/1953	--	--	Z	U	340
42	24	16	10	8.00	05/28/1936	120	--	Z	U	341
501	69	8	15	12.00	09/09/1947	100	1.3	Z	U	342
31	11	16	15	5.00	05/21/1936	200	21.0	Z	U	343
250	44	8	30	12.97	01/30/1953	128	0.7	W	N	344
48	--	8	8	10.00	03/16/1953	125	4.5	Z	U	345
181	20	8	30	10.00	1920	20	--	Z	U	346
420	--	--	30	--	--	65	0.9	Z	U	347
33	--	6	30	10.44	08/04/1953	38	--	Z	U	348
226	65	8	8	19.00	1913	200	--	Z	U	349
82	59	8	15	20.00	1907	6.0	--	Z	U	350

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	METHOD FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
351	400034075032801	INTERNATIONAL SHOE CO	0297	1929	C	S	211MRPAL	--
352	400032075032401	INTERNATIONAL SHOE CO	0297	10/ /1932	C	X	300WSCKO	--
353	400037075033001	INTERNATIONAL SHOE CO	0297	02/ /1933	C	P	112TRNN	--
354	400031075032401	INTERNATIONAL SHOE CO	0297	11/06/1934	C	X	300WSCKO	--
355	400106075024301	DODGE STEEL CO	-204	1903	C	X	300WSCKO	--
356	400104075024001	DODGE STEEL CO	-204	1906	C	X	300WSCKO	--
357	400133075015901	ARMAK CHEMICAL CO	0226	11/ /1942	C	X	300WSCKO	--
358	400135075020401	U S RUBBER CO	-393	1938	C	X	300WSCKO	--
359	400104075024401	DODGE STEEL CO	--	--	C	X	300WSCKO	--
360	400122075014401	L MARTIN CO INC	0297	1935	C	S	112TRNN	--
361	400052075025901	L BLUMBERG & SON INC	0249	05/27/1943	C	P	112TRNN	42
362	400045075033101	MULHOLLAND-HARPER CO	0249	11/27/1935	C	X	300WSCKO	--
363	400018075042401	ALLIED CHEMICAL CORP	-387	05/ /1935	C	S	112TRNN	--
364	400019075042001	ALLIED CHEMICAL CORP	-387	05/ /1935	C	S	112TRNN	--
365	400018075041901	ALLIED CHEMICAL CORP	-387	06/ /1935	C	S	112TRNN	--
366	400021075041401	ALLIED CHEMICAL CORP	-387	09/ /1933	C	S	112TRNN	--
367	400022075041201	ALLIED CHEMICAL CORP	0297	1938	C	S	112TRNN	--
368	400006075051101	CTI TRUCKING	--	--	D	W	112TRNN	--
369	400004075051101	JOS BERLINER CO	--	--	C	X	300WSCKO	--
370	400034075043601	BLUE MAGIC INC	0249	06/02/1950	C	X	300WSCKO	--
371	400129075031101	MAGNOLIA CEMETERY	-204	1923	C	X	300WSCKO	--
372	400127075013201	PA FORGE CO	0249	11/25/1941	C	S	211MRPAL	137
373	400122075012901	PA FORGE CO	0249	02/05/1942	C	S	211MRPAL	--
374	400122075012401	PA FORGE CO	0424	03/16/1942	C	S	211MRPAL	--
375	400150075050501	GALAXY CATERERS	--	06/10/1936	C	X	300WSCKO	--
376	395956075053201	GEORGE SALL METALS CO	0249	04/01/1952	C	S	112TRNN	--
377	395948075052901	INDEPENDENT MFG CO	--	1927	C	X	300WSCKO	--
378	400036075045901	GLOBE MFG CO	-204	1905	C	X	300WSCKO	--
379	400032075045601	GLOBE DYE WORKS CO	-204	1895	C	X	300WSCKO	--
380	400119075043601	AQUARIUM BAR	-221	01/25/1949	C	X	000HBLD	--
381	400057075050301	AMERICAN ICE CO	-204	1904	C	X	000HBLD	--
382	400219075013102	WILLIAM M FROST & CO	-204	1912	C	X	300WSCKO	--
383	400219075013101	WILLIAM M FROST & CO	-204	1912	C	X	300WSCKO	--
384	395906075055701	RICHMOND LUMBER CO	-387	10/ /1923	C	X	300WSCKO	--
385	395938075060101	LIQUID CARBONIC CORP	-204	1920	C	X	300WSCKO	--
386	395938075060102	SEVEN UP BOTTLING CO	-387	05/ /1943	C	X	300WSCKO	--
387	395933075055601	JACOB STERN & SONS INC	0297	1933	C	O	211MRPAL	--
388	395928075062501	GOLDMAN PAPER CO	-387	1915	C	X	300WSCKO	--
389	395859075055201	GENERAL SMELTING CO	-387	08/ /1931	C	S	112TRNN	--
390	395858075055101	GENERAL SMELTING CO	-387	10/19/1946	C	S	112TRNN	--
391	395926075063501	BREHM & STEHLE	-204	1904	C	X	300WSCKO	--
392	395935075063401	PHILA RUST PROOF CO	0249	05/08/1940	C	X	300WSCKO	--
393	395937075063401	PHILA RUST PROOF CO	-387	11/ /1941	C	X	300WSCKO	--
394	395938075062501	SCHOLLER BROS INC	0249	08/21/1947	C	X	300WSCKO	--
395	395938075062301	SCHOLLER BROS INC	0297	1951	C	X	300WSCKO	--
396	400312074592801	FAIRMOUNT PARK COMM	--	--	D	W	112TRNN	--
397	400308074592201	FAIRMOUNT PARK COMM	--	--	D	W	112TRNN	--
398	400230075004101	JAMES D MORRISSEY INC	-387	08/25/1950	C	X	300WSCKO	--
399	400315074540501	PA RAILROAD	-204	1895	C	X	300WSCKO	--
400	400227074593801	PHILA DEPT OF RECREATION	0226	1898	C	X	300WSCKO	--
401	395513075084401	INOLEX CORP	0297	1919	C	S	211MRPAL	--
402	395512075084801	INOLEX CORP	0297	1923	C	S	211MRPAL	--
403	395435075080301	PUBLICKER INDUSTRIES INC	--	1928	C	--	211MRPAL	--
404	395433075080401	PUBLICKER INDUSTRIES INC	--	08/01/1928	C	--	211MRPAL	--
405	395432075080802	PUBLICKER INDUSTRIES INC	--	--	C	--	--	--
406	395432075080801	PUBLICKER INDUSTRIES INC	--	--	C	--	--	--
407	395431075075701	PUBLICKER INDUSTRIES INC	0424	06/09/1937	C	S	211MRPAL	196
408	395433075080001	PUBLICKER INDUSTRIES INC	-387	06/02/1939	C	S	211MRPAL	--
409	395428075081402	PUBLICKER INDUSTRIES INC	-387	02/ /1940	C	S	112TRNN	--
410	395428075081401	PUBLICKER INDUSTRIES INC	-387	06/19/1940	C	S	211MRPAL	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
36	--	8	13	20.00	1929	250	--	Z	U	351
344	--	8	8	31.00	11/06/1934	125	0.8	Z	U	352
41	22	16	15	--	--	140	6.4	Z	U	353
330	--	8	5	21.00	11/06/1934	125	0.7	Z	U	354
300	34	6	20	19.00	1903	60	--	Z	U	355
317	29	6	18	12.00	1906	78	--	Z	U	356
201	34	8	20	13.73	02/03/1954	60	2.0	U	U	357
260	60	8	35	18.56	09/01/1953	300	--	Z	U	358
305	--	6	22	22.00	05/14/1937	48	--	Z	U	359
38	--	12	10	9.25	01/10/1946	20	--	Z	U	360
38	17	12	14	10.00	05/27/1943	181	15.0	Z	U	361
305	67	8	26	24.00	11/27/1935	92	7.7	Z	U	362
42	--	12	10	--	--	175	--	U	U	363
40	--	12	10	--	--	200	--	Z	U	364
40	--	12	9	--	--	200	--	Z	U	365
32	--	14	10	--	--	450	--	Z	U	366
34	24	12	9	28.00	1938	225	--	Z	U	367
25	--	20	15	4.64	12/28/1978	--	--	U	U	368
100	--	6	10	--	--	--	--	Z	U	369
575	132	6	31	37.00	06/02/1950	31	0.4	Z	U	370
120	31	8	50	20.00	1923	18	--	Z	U	371
40	29	10	10	6.00	11/25/1941	35	1.9	Z	U	372
47	37	16	8	8.00	02/05/1942	310	12.0	Z	U	373
42	32	10	5	10.50	01/25/1954	230	12.0	Z	U	374
400	--	--	90	19.56	09/10/1953	40	0.6	U	U	375
37	22	8	26	8.00	04/01/1952	40	1.6	Z	U	376
300	--	6	18	--	--	--	--	Z	U	377
100	--	6	29	12.00	1905	40	--	Z	U	378
335	--	6	28	--	--	250	--	Z	U	379
80	60	6	55	11.60	12/20/1978	40	8.0	U	U	380
127	53	8	60	20.00	1904	30	--	Z	U	381
51	16	6	40	25.00	1912	20	--	Z	U	382
118	16	6	40	25.00	1912	58	--	Z	U	383
342	--	8	15	--	--	--	--	Z	U	384
160	15	8	19	20.00	1920	40	--	Z	U	385
175	49	10	19	--	--	40	--	Z	U	386
50	--	6	17	15.00	1933	20	--	Z	U	387
553	--	8	20.1	12.05	12/18/1978	100	--	U	U	388
55	45	10	10	--	--	700	--	Z	U	389
46	36	10	10	10.00	10/19/1946	--	--	Z	U	390
206	53	8	20	27.00	1904	100	--	Z	U	391
478	185	6	25	15.00	05/08/1940	45	--	Z	U	392
500	--	6	25	--	--	19	--	Z	U	393
505	47	8	23	25.00	08/21/1947	22	0.1	Z	U	394
583	--	8	28.7	19.60	12/18/1978	55	--	W	N	395
27	27	72	73.0	23.56	01/04/1979	--	--	U	U	396
17	17	60	45.2	7.48	01/04/1979	75	68.0	U	U	397
213	40	6	33.3	11.51	01/03/1979	35	0.5	U	U	398
215	20	6	25	18.00	1895	30	--	Z	U	399
139	--	8	15.1	8.84	01/04/1979	17	2.0	U	U	400
186	--	12	14	--	--	600	--	U	U	401
164	160	12	14	20.00	1923	380	--	U	U	402
--	--	--	8	--	--	--	--	U	U	403
--	--	--	5	25.00	08/01/1928	280	--	Z	U	404
--	--	--	8	--	--	--	--	Z	U	405
--	--	--	8	--	--	--	--	U	U	406
189	159	18	8	50.00	08/21/1937	1030	25.0	W	N	407
194	154	10	6.0	68.00	06/02/1939	1050	27.0	U	U	408
90	70	12	8.8	26.09	01/25/1979	400	--	U	U	409
152	--	16	8	78.50	06/19/1940	800	--	Z	U	410

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER.	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
411	395434075080701	PUBLICKER INDUSTRIES INC	0424	03/15/1941	C	S	112TRNN	87
412	395431075080301	PUBLICKER INDUSTRIES INC	0424	07/18/1941	C	S	112TRNN	96
413	395433075075701	PUBLICKER INDUSTRIES INC	0424	10/19/1942	C	S	112TRNN	80
414	395426075081001	PUBLICKER INDUSTRIES INC	0424	12/03/1942	C	S	112TRNN	87
415	395430075081001	PUBLICKER INDUSTRIES INC	0424	01/22/1943	C	S	211MRPAU	93
416	395428075075901	PUBLICKER INDUSTRIES INC	0424	07/08/1943	C	S	112TRNN	90
417	395429075080301	PUBLICKER INDUSTRIES INC	0424	10/04/1943	C	S	211MRPAL	172
418	395434075081101	PUBLICKER INDUSTRIES INC	0424	11/19/1943	C	S	211MRPAL	155
419	395432075080501	PUBLICKER INDUSTRIES INC	0424	02/01/1944	C	S	211MRPAL	167
420	395426075080101	PUBLICKER INDUSTRIES INC	0424	10/03/1944	C	S	211MRPAL	171
421	395415075080901	PUBLICKER INDUSTRIES INC	0424	05/ /1945	C	S	112TRNN	116
422	395410075081101	PUBLICKER INDUSTRIES INC	0424	06/18/1945	C	S	112TRNN	112
423	395431075082401	PUBLICKER INDUSTRIES INC	0424	08/04/1945	C	S	211MRPAL	192
424	395428075075902	PUBLICKER INDUSTRIES INC	0424	02/23/1943	C	S	112TRNN	--
425	395434075081001	CARGILL INC	-387	09/ /1926	C	S	211MRPAL	--
426	395436075080901	CARGILL INC	-387	01/05/1945	C	S	211MRPAL	--
427	395528075082601	BAUGH & SONS CO	0297	1912	C	S	211MRPAL	--
428	395529075082601	BAUGH & SONS CO	0297	1912	C	S	211MRPAL	--
429	395530075082701	BAUGH & SONS CO	0297	1913	C	S	211MRPAL	--
430	395539075084001	CROWN PAPER BOARD CO	0424	06/05/1952	C	S	211MRPAL	160
431	395533075083801	PHILA EXTRACTING CO	-204	1909	C	S	211MRPAL	122
432	395508075084901	INOLEX CORP	-204	1914	C	X	300WSCKO	--
433	395510075084802	INOLEX CORP	0297	1914	C	S	211MRPAL	--
434	395508075084701	INOLEX CORP	0297	1927	C	S	211MRPAL	--
435	395509075084801	INOLEX CORP	0249	05/30/1934	C	S	211MRPAL	--
436	395510075084801	INOLEX CORP	0297	1941	C	S	211MRPAL	--
437	395523075085001	INDIA REFINING CO	0297	1918	C	S	211MRPAL	--
438	395549075092401	STRATFORD THEATER	-387	06/ /1937	C	S	211MRPAL	--
439	395516075092501	ACADEMY THEATER	0249	05/10/1938	C	S	211MRPAL	--
440	395517075092401	JACKSON THEATER	0249	05/07/1936	C	S	112TRNN	--
441	395434075140601	PA FLEX MTL TUBING CO	-204	1918	C	X	300WSCKO	--
442	395430075135501	HOG ISLAND LUMBER CO	--	12/02/1946	C	X	300WSCKO	--
443	395326075140201	DEPALMA, ALFONSO	0249	04/18/1952	C	S	211MRPAL	--
444	395333075144301	HODGES RECORD CO	0249	12/16/1952	C	X	300WSCKO	--
445	395341075143201	PENN CITY NAT OIL CO	0297	1933	C	S	112TRNN	--
446	395344075142801	AMERICAN IRON WORKS	-387	12/ /1923	C	S	112TRNN	--
447	395524075131101	REGAL PETROLEUM PROD CO	0249	10/24/1947	C	X	300WSCKO	--
448	395451075143801	MC LOUGLIN BROS	0297	1944	C	X	300WSCKO	--
449	395457075145001	FELS & CO	-204	1902	C	X	300WSCKO	--
450	395458075144901	FELS & CO	-204	1905	C	X	300WSCKO	--
451	395518075085001	PUBLICKER INDUSTRIES INC	0424	12/08/1933	C	S	211MRPAL	170
452	395519075084401	PUBLICKER INDUSTRIES INC	0424	12/30/1933	C	S	211MRPAL	164
453	395517075084401	PUBLICKER INDUSTRIES INC	-387	02/ /1940	C	S	211MRPAL	--
454	395518075084601	PUBLICKER INDUSTRIES INC	0424	07/01/1941	C	S	112TRNN	75
455	395517075085101	PUBLICKER INDUSTRIES INC	0249	08/ /1941	C	S	211MRPAL	--
456	395518075085201	PUBLICKER INDUSTRIES INC	0249	10/31/1941	C	S	211MRPAL	--
457	395525075084501	PUBLICKER INDUSTRIES INC	0424	10/02/1941	C	S	211MRPAL	152
458	395515075085001	PUBLICKER INDUSTRIES INC	0424	06/05/1944	C	S	211MRPAL	168
459	395521075084501	PUBLICKER INDUSTRIES INC	0424	06/05/1944	C	S	211MRPAL	162
460	395513075085201	PUBLICKER INDUSTRIES INC	0249	02/12/1945	C	S	211MRPAL	--
461	395535075084101	PUBLICKER INDUSTRIES INC	0297	1913	C	S	112TRNN	--
462	395535075084102	PUBLICKER INDUSTRIES INC	0297	1913	C	S	112TRNN	--
463	395535075084103	PUBLICKER INDUSTRIES INC	0297	1913	C	S	211MRPAL	--
464	395535075084104	PUBLICKER INDUSTRIES INC	0297	1913	C	S	211MRPAL	--
465	395536075084301	PUBLICKER INDUSTRIES INC	-387	09/ /1925	C	S	211MRPAL	--
466	395534075084001	PUBLICKER INDUSTRIES INC	-387	07/ /1926	C	S	211MRPAL	--
467	395534075084301	PUBLICKER INDUSTRIES INC	-387	10/ /1933	C	S	211MRPAL	--
468	395558075084501	PUBLICKER INDUSTRIES INC	0249	10/16/1942	C	S	211MRPAL	--
469	395525075082101	PUBLICKER INDUSTRIES INC	0424	10/21/1948	C	S	211MRPAM	133
470	395527075083601	PUBLICKER INDUSTRIES INC	0424	--	C	S	--	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
82	62	18	5.4	27.00	01/31/1979	1300	33.0	U	U	411
85	65	18	10	25.46	01/25/1979	1370	31.0	W	N	412
76	56	18	10	22.05	01/31/1979	1000	26.0	W	N	413
83	63	16	10	28.45	01/25/1979	980	33.0	W	N	414
92	72	16	8	34.00	01/22/1943	850	22.0	W	N	415
89	69	16	10	14.23	01/31/1979	1000	30.0	W	N	416
165	145	10	5.3	30.77	11/14/1978	726	16.0	W	N	417
149	129	10	3.9	30.45	01/31/1979	776	17.0	W	N	418
155	135	10	5.7	92.00	05/21/1944	744	19.0	W	N	419
164	149	10	8	90.00	10/18/1944	709	23.0	W	N	420
96	76	16	8	25.00	06/18/1945	660	14.0	Z	U	421
107	87	16	8	25.00	06/18/1945	750	12.0	Z	U	422
191	171	10	8	82.00	08/04/1945	300	4.0	Z	U	423
82	67	16	10	37.00	02/23/1943	302	11.0	Z	U	424
182	--	6	8	--	--	--	--	Z	U	425
178	158	10	10	93.00	01/05/1945	500	29.0	Z	U	426
133	--	8	8	9.00	1912	200	--	Z	U	427
140	--	8	8	12.00	1912	150	--	Z	U	428
140	--	8	8	18.00	1913	150	--	Z	U	429
118	108	10	13.7	32.00	06/05/1952	530	20.0	W	N	430
120	110	6	11	13.50	1909	75	--	Z	U	431
890	190	8	14	80.00	1914	5.0	--	Z	U	432
190	--	10	14	13.00	1914	550	42.0	Z	U	433
168	--	12	11	30.00	1927	695	--	Z	U	434
158	133	10	14	68.00	05/30/1934	500	71.0	Z	U	435
175	--	12	11.7	20.97	11/16/1978	400	11.0	U	U	436
150	109	8	11	20.00	1918	200	--	Z	U	437
86	--	8	24	--	--	--	--	Z	U	438
132	101	8	17	26.00	05/10/1938	420	10.0	Z	U	439
82	62	8	17	25.50	05/07/1936	105	--	Z	U	440
620	42	8	10	--	--	60	--	Z	U	441
97	--	6	10	16.00	12/02/1946	1.5	0.0	Z	U	442
78	68	6	8	11.08	04/18/1952	20	--	Z	U	443
200	66	8	5	9.00	12/16/1952	60	1.0	Z	U	444
38	--	4.50	5	23.00	1933	20	--	Z	U	445
62	--	12	5	8.50	05/26/1954	--	--	Z	U	446
351	22	8	20	4.00	10/24/1947	153	2.0	Z	U	447
120	--	6	50	--	--	27	--	U	U	448
560	50	8	20	4.09	09/15/1953	100	--	U	U	449
562	50	8	20	1.24	11/02/1978	12	--	U	U	450
154	124	14	11	17.34	11/14/1978	1080	25.0	Z	U	451
160	130	14	11	18.16	02/01/1979	1100	37.0	Z	U	452
159	--	12	13	19.78	02/01/1979	--	--	Z	U	453
50	40	18	13	17.40	02/01/1979	21	7.1	Z	U	454
155	96	8	13	16.96	02/01/1979	--	--	Z	U	455
156	--	10	13	68.00	10/31/1941	--	--	Z	U	456
139	119	12	11	70.00	10/02/1941	620	14.0	Z	U	457
152	127	10	11	77.00	06/05/1944	715	16.0	Z	U	458
157	127	10	11	19.37	02/01/1979	743	21.0	Z	U	459
172	151	10	13	80.00	02/12/1945	375	6.4	Z	U	460
60	--	8	12	12.00	1913	75	--	Z	U	461
60	--	6	12	15.00	1913	75	--	Z	U	462
112	--	8	12	15.00	1913	120	--	Z	U	463
112	--	8	12	15.00	1913	125	--	Z	U	464
157	--	8	14	--	--	500	--	Z	U	465
165	--	8	14.3	21.90	02/01/1979	700	--	U	U	466
140	113	10	13	--	--	1350	--	Z	U	467
113	89	10	15.9	17.16	12/04/1978	230	4.1	U	U	468
128	118	10	10	16.89	11/14/1978	750	16.0	Z	U	469
--	--	--	10	19.48	11/14/1978	--	--	Z	U	470

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	METHOD FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
471	395515075084601	INOLEX CORP	--	--	C	S	211MRPAL	--
472	395513075084501	INOLEX CORP	0424	1950	C	S	211MRPAL	--
473	395514075084601	INOLEX CORP	0249	02/21/1953	C	S	211MRPAL	--
474	395520075090401	JERRY THEATER	0249	05/14/1938	C	S	211MRPAL	--
475	395511075095501	COLONIAL THEATER	0249	06/03/1936	C	S	211MRPAL	--
476	395723075103301	FLEISCHMANNS BAKERY INC	0249	10/05/1937	C	X	300WSCKO	--
477	395759075110201	PHILA AQUARIUM	-387	12/ /1925	C	X	300WSCKO	--
478	395744075100101	U S MINT	-389	1906	C	X	300WSCKO	--
479	395801075095501	A F BORNOT & BROS	-204	1902	C	X	300WSCKO	--
480	395754075094401	LANARD & AXILBUND INC	-204	1910	C	X	300WSCKO	--
481	395739075104401	FORD & KENDIG CO	-204	1906	C	X	300WSCKO	--
482	395745075105201	STRATTON ICE CO	-204	1909	C	X	300WSCKO	--
483	395758075104101	AMERICAN ICE CO	-204	1904	C	X	300WSCKO	--
484	395745075095001	BALDWIN LOCOMOTIVE WORKS	-204	1906	C	X	300WSCKO	--
485	395743075100101	BALDWIN LOCOMOTIVE WORKS	-204	1906	C	X	300WSCKO	--
486	395801075101601	POTTS ICE CREAM CO	--	--	C	X	300WSCKO	--
487	395811075103801	J BOWER & CO	-204	--	C	X	300WSCKO	--
488	395836075105101	TURNER & WESCOTT INC	0297	1927	C	X	300WSCKO	--
489	395835075103001	FREIHOFER BAKING CO	-204	--	C	X	300WSCKO	--
490	395714075102601	MASTBAUM THEATER	-387	01/ /1929	C	X	300WSCKO	--
491	395658075113401	UNIVERSITY OF PA	-204	1902	C	X	300WSCKO	--
492	395639075122401	BREYER ICE CREAM CO	-387	1923	C	X	300WSCKO	--
493	395610075122501	CITY OF PHILA	-389	1905	C	X	300WSCKO	--
494	395608075124401	JOS RYERSON & SON INC	-204	1902	C	X	300WSCKO	--
495	395607075124501	JOS RYERSON & SON INC	-204	1906	C	X	300WSCKO	--
496	395648075134101	SELBY BATTERSBY & CO	--	--	C	X	300WSCKO	--
497	395643075141201	EAGLE ICE & COAL CO	-389	1911	C	X	300WSCKO	--
498	395721075143901	VICTOR RUG CLEANERS	0297	1926	C	X	300WSCKO	--
499	395546075142301	HEBREW MUT BURIAL ASSOC	0249	06/17/1952	C	X	300WSCKO	--
500	395546075141001	MT MORIAH CEMETERY	--	--	D	W	300WSCKO	--
501	395733075105901	PA RAILROAD	-204	1917	C	X	300WSCKO	--
502	395732075105901	PA RAILROAD	-204	1917	C	X	300WSCKO	--
503	395714075105907	PA COLD STORAGE	-204	1913	C	X	300WSCKO	--
504	395717075110301	D B MARTIN CO	-204	1907	C	X	300WSCKO	--
505	395716075110301	D B MARTIN CO	-204	1907	C	X	300WSCKO	--
506	395713075110701	ABBOTTS DAIRIES	-204	1912	C	X	300WSCKO	--
507	395712075110601	ABBOTTS DAIRIES	-204	1914	C	X	300WSCKO	--
508	395713075110401	ABBOTTS DAIRIES	-204	1918	C	X	300WSCKO	--
509	395708075110601	HAJOCA CORP	0249	07/08/1946	C	X	300WSCKO	--
510	395717075120101	HAMILTON COURT HOTEL	-387	--	C	X	300WSCKO	--
511	395728075124401	THE ARENA	--	08/ /1920	C	X	300WSCKO	--
512	395731075130201	BELMONT LABORATORIES	0249	05/20/1946	C	X	300WSCKO	--
513	395749075113801	STEVENS CONFECTIONERS	0297	1913	C	X	300WSCKO	--
514	395750075114201	UNIQUE THEATER	-387	03/ /1939	C	X	300WSCKO	--
515	395753075121801	WILLIAM PENN THEATER	-204	1910	C	X	300WSCKO	--
516	395804075124501	PHILA DAIRY PRODUCTS CO	-204	08/ /1917	C	X	300WSCKO	--
517	395820075130201	E W WOOLMAN DAIRY	-204	1903	C	X	300WSCKO	--
518	395827075115801	SMITH ALE BREWING CO	-204	1904	C	X	300WSCKO	--
519	395828075124901	AMERICAN ICE CO	-204	1903	C	X	300WSCKO	--
520	395826075124701	AMERICAN ICE CO	-204	1903	C	X	300WSCKO	--
521	395829075131201	STD ROLLER BEARING CO	-204	1906	C	X	300WSCKO	--
522	395834075132801	MINTER BROS	-387	10/ /1932	C	X	300WSCKO	--
523	395737075132801	HANSCOM BROS INC	0249	12/ /1952	C	X	300WSCKO	--
524	395812075134001	NATHAN SCHWARTZ & SONS INC	-221	1950	C	X	300WSCKO	--
525	395812075134101	NATHAN SCHWARTZ & SONS INC	-221	1950	C	X	300WSCKO	--
526	395737075140101	GENERAL BAKING CO	0297	1922	C	X	300WSCKO	--
527	395751075140801	AMERICAN ICE CO	0249	05/25/1934	C	X	300WSCKO	--
528	395901075140501	AMERICAN STORES CO	0297	1950	C	X	300WSCKO	--
529	395901075140502	AMERICAN STORES CO	0297	1950	C	X	300WSCKO	--
530	395901075140503	AMERICAN STORES CO	0297	1950	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
159	133	10	10	70.00	11/21/1946	366	14.0	Z	U	471
165	--	10	13	--	--	--	--	Z	U	472
175	150	10	13	46.00	02/21/1953	246	4.8	Z	U	473
130	112	8	16	38.00	05/14/1938	367	--	Z	U	474
103	86	10	17	24.00	06/03/1936	144	4.9	U	U	475
271	20	8	20	30.00	10/05/1937	5.5	0.1	Z	U	476
497	--	8	20	10.00	12/ /1925	28	--	Z	U	477
1000	--	8	65	3.00	1906	5.0	--	Z	U	478
200	31	8	85	18.00	1902	50	--	Z	U	479
757	--	8	66	23.47	12/11/1978	35	--	U	U	480
42	37	8	20	16.00	1906	10	--	Z	U	481
150	43	8	15	10.00	1909	65	--	Z	U	482
410	20	8	50	30.00	1904	40	--	Z	U	483
402	75	8	60	22.00	1906	100	--	Z	U	484
425	65	8	60	6.00	1906	7.0	--	Z	U	485
--	--	6	90	3.60	06/09/1954	--	--	W	N	486
495	--	6	100	--	--	60	--	Z	U	487
202	20	6	100	20.00	1927	10	--	Z	U	488
510	85	8	100	20.00	1904	100	--	Z	U	489
484	--	12	30	--	--	--	--	Z	U	490
370	10	6	40	30.00	1902	3.0	--	Z	U	491
393	--	--	40	20.00	1923	100	--	Z	U	492
442	28	8	15	5.00	1905	100	--	Z	U	493
200	9	8	40	25.00	1902	40	--	Z	U	494
528	--	8	40	--	--	50	--	Z	U	495
114	--	8	100	--	--	40	--	Z	U	496
300	17	8	85	28.00	1941	15	--	Z	U	497
308	15	8	105	19.00	1926	35	--	Z	U	498
103	33	6	70	12.00	06/17/1952	7.0	--	Z	U	499
42	42	72	80	6.49	01/16/1979	--	--	U	U	500
44	31	6	20	12.00	1917	60	--	Z	U	501
375	35	6	20	12.00	1917	55	--	Z	U	502
300	50	8	20	15.00	1913	100	--	Z	U	503
191	27	8	25	7.00	1907	5.0	--	Z	U	504
400	25	8	25	6.00	1907	25	--	Z	U	505
94	40	8	25	17.00	1912	12	--	Z	U	506
601	20	8	25	17.00	1914	57	--	Z	U	507
805	42	8	25	50.00	1918	100	--	Z	U	508
63	42	8	20	16.00	07/08/1946	71	4.5	Z	U	509
450	--	6	100	22.84	10/27/1954	70	--	Z	U	510
518	21	8	80	9.00	08/ /1920	22	--	Z	U	511
203	24	10	80	10.00	05/20/1946	25	--	Z	U	512
200	18	6	105	30.00	1913	3.0	--	Z	U	513
150	--	8	105	--	--	--	--	Z	U	514
212	9	8	110	19.00	1910	6.0	--	Z	U	515
170	13	10	105	19.82	10/28/1954	--	--	Z	U	516
242	20	6	100	16.00	1903	10	--	Z	U	517
450	41	8	80	50.00	1904	15	--	Z	U	518
475	21	8	120	30.00	1903	4.0	--	Z	U	519
500	26	8	120	30.00	1903	1.0	--	Z	U	520
352	25	8	110	15.00	1906	40	--	Z	U	521
500	--	8	115	--	--	9.0	--	Z	U	522
600	53	8	100	18.00	01/13/1953	191	3.7	Z	U	523
426	--	8	95	0.10	--	75	--	Z	U	524
200	--	8	95	--	--	50	--	Z	U	525
1193	30	8	100	17.00	1922	6.0	--	Z	U	526
350	33	8	110	16.00	05/25/1934	46	0.3	Z	U	527
400	--	8	190	--	--	140	--	Z	U	528
300	--	--	190	--	--	100	--	Z	U	529
500	--	--	190	--	--	25	--	Z	U	530

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
531	395829075161701	WPEN TRANSMISSION STATION	0249	03/18/1941	C	X	000GBBR	--
532	395840075162201	CITY LINE CENTER THEATRE	0249	09/30/1947	C	X	000GBBR	--
533	395842075161801	CITY LINE CENTER THEATRE	0249	1948	C	X	000GBBR	--
534	395910075144601	OVERBROOK WATER CO	-204	1895	C	X	000GRGS	--
535	395911075144401	OVERBROOK WATER CO	-204	1895	C	X	000GRGS	--
536	395923075150001	OVERBROOK WATER CO	-204	1895	C	X	000GRGS	--
537	395909075145201	OVERBROOK WATER CO	-204	1895	C	X	000GRGS	--
538	395933075133301	HACHIK BLEACH CO	--	1934	C	X	300WSCKO	--
539	395949075140701	BLACK HORSE HOTEL	-204	1910	C	X	000GRGS	--
540	400217075142101	FIBREFLEX PACKING & MFG CO	0249	03/29/1948	C	X	300WSCKO	--
541	400145075135801	NATIONAL MILLING & CHEM CO	-204	1931	C	X	300WSCKO	--
542	400144075135601	NATIONAL MILLING & CHEM CO	-221	01/ /1954	C	X	300WSCKO	--
543	400140075135101	MRS PAULS KITCHENS INC	-221	05/21/1952	C	X	300WSCKO	--
544	400119075130401	G J LITTLEWOOD & SON INC	-204	1907	C	X	300WSCKO	--
545	400206075131001	ENDRIKAT, FRED	0249	11/11/1944	C	X	300WSCKO	--
546	400151075131201	ROXBOROUGH THEATER	0249	03/11/1937	C	X	300WSCKO	--
547	400502075132301	MORRIS, JOHN T	-204	1915	C	X	300WSCKO	--
548	400513075134601	MT ST JOSEPH CONVENT	0249	03/31/1942	C	X	377CCKS	--
549	400440075134601	FAIRMOUNT PARK COMM	-221	12/ /1953	C	X	300WSCKO	--
550	400424075104901	IVY HILL CEMETERY	-204	1906	C	X	300WSCKO	--
551	400428075104301	IVY HILL CEMETERY	-204	1918	C	X	300WSCKO	--
552	400318075100501	ZIEGER & SONS INC	0249	03/ /1920	C	X	300WSCKO	--
553	400341075092201	THERESA FRIEDMAN & SONS	--	--	C	X	300WSCKO	--
554	400400075084701	ERLEN THEATER	-387	06/ /1935	C	X	300WSCKO	--
555	400336075083801	NORTHWOOD CEMETERY	-204	1904	C	X	300WSCKO	--
556	400257075092901	FRANKLIN WOOLEN CO	--	--	C	X	300WSCKO	--
557	400240075112701	GERMANTOWN STEAM CO	-204	1907	C	X	300WSCKO	--
558	400241075112601	GERMANTOWN STEAM CO	-204	1907	C	X	300WSCKO	--
559	400228075101601	AXFORD MILLS	-204	1928	C	X	300WSCKO	--
560	400219075103601	UNION PREMIER FOODS	0399	1938	C	X	300WSCKO	--
561	400207075102201	CHELTEN ICE CO	-204	1915	C	X	300WSCKO	--
562	400147075085201	READING CO	-204	1914	C	X	300WSCKO	--
563	400124075090601	STENTON PARK DAIRY	-389	1918	C	X	300WSCKO	--
564	400144075093301	E J BRACH & SONS INC	0249	07/13/1935	C	X	300WSCKO	--
565	400143075093201	DEWITT P HENRY CO	0249	07/27/1938	C	X	300WSCKO	--
566	400142075093401	DEWITT P HENRY CO	0249	09/24/1938	C	X	300WSCKO	--
567	400124075094201	STAPLES, JOHN	--	1912	C	X	300WSCKO	300
568	400100075092201	JOHN J FELIN & CO	-204	1905	C	X	300WSCKO	--
569	400101075092101	JOHN J FELIN & CO	-204	1914	C	X	300WSCKO	--
570	400100075092401	JOHN J FELIN & CO	-204	1918	C	X	300WSCKO	--
571	400103075092001	JOHN J FELIN & CO	0297	1933	C	X	300WSCKO	--
572	400102075092101	JOHN J FELIN & CO	-204	1934	C	X	300WSCKO	--
573	400057075091901	PULASKI HALL ASSOC	-221	04/ /1950	C	X	300WSCKO	--
574	400104075095401	MIDVALE STEEL CO	-392	02/ /1899	C	X	300WSCKO	--
575	400048075101001	MIDVALE STEEL CO	-204	1909	C	X	300WSCKO	--
576	400042075101901	AMERICAN PULLEY CO	-204	1906	C	X	300WSCKO	187
577	400048075101502	AMERICAN PULLEY CO	-204	1910	C	X	300WSCKO	--
578	400036075111601	HOHENADEL BREWERY INC	-204	1910	C	X	300WSCKO	--
579	400037075111701	HOHENADEL BREWERY INC	-204	1915	C	X	300WSCKO	--
580	400038075111901	HOHENADEL BREWERY INC	-204	1915	C	X	300WSCKO	--
581	400147075105601	DELMAR-MORRIS APTS	-204	1908	C	X	300WSCKO	--
582	400105075112301	KELLY, JOHN	-387	07/ /1943	C	X	300WSCKO	--
583	400026075112101	RIDGE INDUST PROPERTIES	-204	1902	C	X	300WSCKO	--
584	400010075110501	SUN CHEMICAL CO	-221	01/ /1954	C	X	300WSCKO	--
585	400020075105001	KRAFT FOODS INC	0249	04/23/1940	C	X	300WSCKO	--
586	400034075101501	THE BUDD CO	-204	1914	C	X	300WSCKO	--
587	400036075115101	MERCK & CO	-204	1911	C	X	300WSCKO	--
588	400036075115102	MERCK & CO	-204	1912	C	X	300WSCKO	--
589	400019075100101	VERMONT MARBLE CO	-387	08/ /1913	C	X	300WSCKO	--
590	400018075095501	GROSS MILK CO	-387	1912	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
100	22	6	238	24.00	03/19/1941	10	0.2	W	H	531
28	18	8	202	12.68	05/01/1979	100	9.5	U	U	532
160	--	8	225	11.12	05/01/1979	45	--	U	U	533
284	15	6	200	26.00	1895	48	--	Z	U	534
150	15	6	210	24.00	1895	34	--	Z	U	535
155	18	6	210	27.00	1895	45	--	Z	U	536
160	16	6	210	25.00	1895	25	--	Z	U	537
300	--	8	200	16.92	12/14/1978	20	--	U	U	538
77	48	6	250	15.00	1910	40	--	Z	U	539
127	32	6	170	25.28	01/08/1979	5.0	0.1	U	U	540
510	10	8	40	15.58	11/24/1954	2.0	--	U	U	541
275	--	8	40	11.42	01/09/1979	25	--	U	U	542
500	40	8	30	7.90	01/09/1979	38	0.3	U	U	543
384	5	8	55	8.00	1907	3.0	--	Z	U	544
245	50	6	286	24.00	11/11/1944	25	0.3	U	U	545
255	--	8	270	19.00	03/11/1937	1.0	0.0	Z	U	546
407	20	8	220	18.98	11/26/1954	67	--	U	U	547
252	55	10	172	45.00	03/31/1942	82	82.0	W	T	548
200	24	6	195	29.07	01/29/1979	10	0.2	W	H	549
171	30	6	372	18.75	01/09/1979	2.0	--	W	I	550
101	28	6	380	34.00	1918	10	--	Z	U	551
143	--	8	305	17.78	01/09/1979	25	0.4	U	U	552
306	--	10	265	20.00	03/15/1951	14	0.2	Z	U	553
510	--	6	240	--	--	--	--	Z	U	554
80	32	6	230	25.00	1904	12	--	Z	U	555
240	--	6	215	1.90	11/26/1954	55	--	Z	U	556
159	15	8	240	--	--	16	--	Z	U	557
355	15	8	240	--	--	36	--	Z	U	558
180	17	6	210	15.00	1928	3.0	--	Z	U	559
778	25	8	240	22.00	1938	50	--	Z	U	560
330	8	8	220	24.00	1915	52	--	Z	U	561
117	20	8	120	21.00	1914	8.0	--	Z	U	562
200	23	6	105	16.00	1918	45	--	Z	U	563
250	7	8	175	20.00	07/13/1935	65	--	W	N	564
286	32	8	175	42.15	11/26/1954	10	0.2	Z	U	565
430	12	8	175	24.00	09/24/1938	33	0.4	Z	U	566
275	36	8	140	10.96	01/10/1979	--	--	U	U	567
506	16	8	130	32.35	11/29/1954	60	--	Z	U	568
251	20	8	130	30.00	1914	60	--	Z	U	569
605	30	8	130	28.00	1918	60	--	Z	U	570
360	46	8	130	--	--	46	--	Z	U	571
220	15	8	130	--	--	50	--	Z	U	572
295	30	8	140	35.00	04/ /1950	55	0.9	W	T	573
916	--	6	140	--	--	60	--	Z	U	574
301	46	8	140	25.00	1909	7.5	--	Z	U	575
172	23	8	140	21.78	12/01/1954	73	--	Z	U	576
350	23	8	140	22.00	1910	50	--	Z	U	577
252	40	8	130	65.00	1910	80	--	Z	U	578
302	21	8	130	--	--	30	--	U	U	579
200	30	8	130	--	--	28	--	Z	U	580
204	27	8	220	17.00	1908	40	--	Z	U	581
185	27	6	220	--	--	--	--	Z	U	582
500	18	8	45	10.00	1902	30	--	Z	U	583
729	31	8	110	18.69	01/09/1979	32	0.2	W	N	584
256	28	6	120	29.00	04/ /1940	36	0.2	U	U	585
419	22	8	120	14.05	01/10/1955	90	--	U	U	586
181	26	8	40	15.00	05/19/1941	60	0.4	Z	U	587
242	29	8	40	15.00	1912	130	--	Z	U	588
502	16	8	140	--	--	25	--	Z	U	589
225	25	7	130	12.30	01/10/1979	65	--	U	U	590

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
591	400012075095801	WESTMORELAND CHEM CO	-387	12/ /1912	C	X	300WSCKO	--
592	400009075095501	STEEL HEDDLE MFG CO	-387	04/ /1920	C	X	300WSCKO	--
593	400008075095901	HORNUNG BREWERY	0249	01/28/1944	C	X	300WSCKO	--
594	400003075094701	FREIHOFER BAKING CO	-387	04/ /1927	C	X	300WSCKO	--
595	400005075095801	SOCIETA DI MUTUA SOCCORSO	0249	--	C	X	300WSCKO	--
596	395954075100401	HOLLYWOOD THEATER	0249	05/05/1936	C	X	300WSCKO	--
597	395942075093601	TRI-STATE DISTRIBUTORS	-204	1910	C	X	300WSCKO	--
598	395939075094201	PUBLICKER INDUSTRIES INC	-204	--	C	X	300WSCKO	--
599	395939075094202	PUBLICKER INDUSTRIES INC	-204	1909	C	X	300WSCKO	--
600	395910075105001	PHILA DEPT OF STREETS	0297	1937	C	X	300WSCKO	--
601	395925075103802	PHILA BUTCHERS ASSOC	-389	1909	C	X	300WSCKO	--
602	395925075103801	PHILA BUTCHERS ASSOC	-389	1910	C	X	300WSCKO	--
603	395859075110101	AMERICAN ICE CO	-204	1908	C	X	300WSCKO	--
604	395859075110102	AMERICAN ICE CO	-204	1908	C	X	300WSCKO	--
605	395847075110901	PENN ALCHEMY CORP	0249	08/27/1934	C	X	300WSCKO	--
606	395847075110701	PENN ALCHEMY CORP	0249	11/12/1934	C	S	112TRNN	43
607	395845075104002	SUPPLEE MILK CO	0297	1913	C	X	300WSCKO	--
608	395845075104001	SUPPLEE MILK CO	0297	1913	C	X	300WSCKO	--
609	395843075103801	BOOS DAIRY	0297	1921	C	X	300WSCKO	--
610	395834075093501	UPHOLSTERERS INT UNION	-221	11/18/1953	C	X	300WSCKO	--
611	395714075090401	U S CARBON & RIBBON CO	-387	04/ /1952	C	X	300WSCKO	--
612	395736075092201	CHARLES F MAY CO	-387	09/02/1949	C	X	300WSCKO	--
613	395854075075901	HARBISONS DAIRIES	-204	1906	C	X	300WSCKO	--
614	395853075075801	HARBISONS DAIRIES	-387	08/ /1916	C	X	300WSCKO	--
615	395853075073901	STRAUBMULLER BREWING	-389	1906	C	X	300WSCKO	--
616	395857075074001	WALTER HARDWARE	-387	1934	C	X	300WSCKO	--
617	395901075075001	D GOLDENBERG INC	-387	06/ /1932	C	X	300WSCKO	--
618	395905075075001	HART & FOSTER CO	--	1914	C	X	300WSCKO	--
619	395925075070301	KEMPER FURNITURE CO	0508	1948	C	X	300WSCKO	--
620	395933075065701	ATLANTIC ICE CO	-204	1906	C	X	300WSCKO	--
621	395935075062901	MASLAND DURALEATHER CO	--	1904	C	X	300WSCKO	--
622	395932075063201	MASLAND DURALEATHER CO	0297	1937	C	X	300WSCKO	--
623	395940075063001	THOMAS WOLSTENHOLME CO	-204	1907	C	X	300WSCKO	--
624	395957075055301	SCHLICHTER JUTE CORDAGE CO	-204	1914	C	X	300WSCKO	--
625	395956075055301	SCHLICHTER JUTE CORDAGE CO	--	--	C	X	300WSCKO	--
626	395955075055101	SCHLICHTER JUTE CORDAGE CO	--	--	C	X	300WSCKO	--
627	400007075054801	W E HULTQN DYEING CO	-204	1909	C	X	300WSCKO	--
628	400013075055801	JAMES LEES & SONS	-204	1906	C	X	300WSCKO	--
629	400023075054001	HARBISONS DAIRIES	-387	04/05/1921	C	X	300WSCKO	--
630	400022075053901	HARBISONS DAIRIES	-387	12/03/1921	C	X	300WSCKO	--
631	395830075091501	SUPPLEE MILK CO	-389	--	C	X	300WSCKO	--
632	395837075091401	GORDON-DAVIS LINEN SUPPLY	--	--	C	X	300WSCKO	--
633	395821075082302	C A SCHOFIELD CO	-204	1919	C	X	300WSCKO	--
634	395821075082301	C A SCHOFIELD CO	-204	--	C	X	300WSCKO	--
635	395829075080901	MILLSIDE DAIRIES INC	0249	07/09/1932	C	X	300WSCKO	--
636	395836075082001	HEIDELBERGER CONFECTIONARY	-387	06/13/1935	C	X	300WSCKO	--
637	395833075082501	COLLINS MFG CO	-204	1908	C	X	300WSCKO	--
638	395840075084301	MCNEELY, RICHARD P	-204	1906	C	X	300WSCKO	--
639	395840075084302	MCNEELY, RICHARD P	-204	1907	C	X	300WSCKO	--
640	395846075090201	CLASS & NACHOD BREWERY	-389	--	C	X	300WSCKO	--
641	395846075090202	CLASS & NACHOD BREWERY	-389	1911	C	X	300WSCKO	--
642	395848075083401	HUTTS DAIRIES INC	0249	--	C	X	300WSCKO	--
643	395851075080601	PETER HERNIG & SONS	-387	06/ /1931	C	X	300WSCKO	--
644	395854075081401	INDIVIDUAL MILK DEALERS	-387	04/ /1935	C	X	300WSCKO	--
645	395903075081601	PEERLESS BREWING CO	0249	04/11/1934	C	X	300WSCKO	--
646	395902075081901	DUNGAN & HOOD	-204	1906	C	X	300WSCKO	--
647	395904075084101	DELAVAU CO INC	-204	1904	C	X	300WSCKO	--
648	395908075085401	J SULLIVAN & SONS MFG CO	--	--	C	X	300WSCKO	--
649	395906075090101	OAKDALE BAKERY	-204	1903	C	X	300WSCKO	--
650	395909075092001	MASJID MUHAMMAD INC	-387	04/22/1950	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
700	13	8	125	--	--	40	--	Z	U	591
300	35	8	125	16.52	01/10/1979	55	--	U	U	592
550	178	8	125	29.00	01/28/1944	114	1.7	Z	U	593
340	--	20	115	--	--	--	--	Z	U	594
198	47	8	120	21.00	10/06/1950	62	3.4	Z	U	595
185	--	8	115	16.00	05/05/1936	30	1.1	Z	U	596
405	131	8	110	22.30	12/02/1954	70	--	Z	U	597
553	40	8	110	26.00	--	15	--	Z	U	598
300	50	8	110	37.00	1909	30	--	Z	U	599
180	--	8	107	0.00	12/14/1978	27	--	U	U	600
175	28	8	115	--	--	26	--	Z	U	601
150	28	8	115	--	--	30	--	Z	U	602
400	20	8	105	25.00	1908	30	--	Z	U	603
502	40	8	105	40.00	1908	67	--	Z	U	604
518	22	8	80	25.00	08/27/1934	4.0	0.0	Z	U	605
41	21	6	80	22.00	11/12/1934	15	1.1	Z	U	606
200	24	8	100	--	--	45	--	Z	U	607
200	24	8	100	--	--	17	--	Z	U	608
300	20	8	100	21.00	1921	30	--	Z	U	609
400	40	6	90	17.00	11/18/1953	21	0.1	Z	U	610
400	65	6	40	--	--	2.5	0.0	Z	U	611
435	27	10	40.8	19.51	12/07/1978	110	5.8	U	U	612
162	15	6	30	16.00	1906	60	--	Z	U	613
270	20	8	30	--	--	110	--	Z	U	614
140	70	8	30	--	--	32	--	Z	U	615
111	--	12	27.6	14.42	12/13/1978	65	--	Z	U	616
300	--	8	30	--	--	60	--	Z	U	617
308	--	6	30	--	--	--	--	Z	U	618
--	--	--	30	--	--	--	--	Z	U	619
300	22	8	30	61.00	1906	100	--	Z	U	620
1100	--	--	20	--	--	--	--	Z	U	621
175	--	6	20	--	--	--	--	Z	U	622
50	41	8	25	12.00	1907	5.0	--	Z	U	623
300	43	6	30	11.00	1914	60	--	Z	U	624
400	--	6	30	16.38	12/27/1954	--	--	Z	U	625
500	60	6	30	15.00	06/ /1954	--	--	Z	U	626
131	50	8	30	37.00	--	18	--	Z	U	627
96	27	6	35	--	1906	15	--	Z	U	628
525	--	8	25	40.00	04/05/1921	150	--	Z	U	629
524	--	8	25	40.00	12/03/1921	95	--	Z	U	630
350	30	8	70	--	--	60	--	Z	U	631
300	--	8	80	18.43	12/13/1978	60	--	U	U	632
76	11	8	30	--	--	20	--	Z	U	633
200	33	8	30	--	--	100	--	Z	U	634
330	37	8	25	11.00	07/09/1932	110	--	Z	U	635
366	--	8	30	12.70	12/13/1954	42	--	Z	U	636
500	33	8	35	8.00	1908	45	--	Z	U	637
500	--	8	40	10.00	1906	8.0	--	Z	U	638
226	14	8	40	15.00	1907	100	--	Z	U	639
300	24	8	60	--	--	80	--	Z	U	640
500	20	8	60	--	--	50	--	Z	U	641
500	--	6	45	58.00	10/24/1939	60	0.5	Z	U	642
330	--	8	30	--	--	--	--	Z	U	643
300	--	8	35	--	--	--	--	Z	U	644
270	42	8	50	11.20	04/11/1934	82	0.7	Z	U	645
501	21	8	50	8.00	1906	100	--	Z	U	646
480	35	8	70	45.00	1904	48	0.6	W	A	647
115	--	8	80	17.80	10/20/1950	24	--	Z	U	648
200	16	8	75	3.50	1903	7.0	--	Z	U	649
225	--	6	80	14.10	08/29/1979	100	25.0	U	U	650

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
651	395909075092301	BLUEBIRD THEATER	0249	06/26/1936	C	X	300WSCKO	--
652	395915075090502	AMERICAN ICE CO	-204	--	C	X	300WSCKO	--
653	395915075090501	AMERICAN ICE CO	-204	1904	C	X	300WSCKO	--
654	395913075085001	BRANDLE & SMITH	-204	1919	C	X	300WSCKO	--
655	395923075084902	BREYER ICE CREAM CO	-387	03/ /1912	C	X	300WSCKO	--
656	395923075084901	BREYER ICE CREAM CO	-387	05/ /1912	C	X	300WSCKO	--
657	395922075075501	HOWARD THEATER	0249	06/26/1937	C	X	300WSCKO	--
658	395928075081301	DEPENDABLE DELIVERY SVC	--	--	C	X	300WSCKO	--
659	395930075081301	HYMAN BRODSKY & SON CORP	0297	1932	C	X	300WSCKO	--
660	395932075081401	HYMAN BRODSKY & SON CORP	0297	1942	C	X	300WSCKO	--
661	395933075081101	E F HOUGHTON CO	0249	1916	C	X	300WSCKO	--
662	395936075085101	AVENUE THEATER	-387	07/ /1935	C	X	300WSCKO	--
663	395950075083501	BREUNINGER DAIRY	-389	1921	C	X	300WSCKO	--
664	395942075080802	AMERICAN ICE CO	0297	1915	C	X	300WSCKO	--
665	395942075080801	AMERICAN ICE CO	0297	1915	C	X	300WSCKO	--
666	395953075080401	DELAWARE VALLEY SCRAP MTL	0249	12/02/1947	C	X	300WSCKO	--
667	400018075060401	BACHMANN BROS INC	0249	01/24/1949	C	X	300WSCKO	--
668	400019075060201	BACHMANN BROS INC	0249	02/19/1952	C	X	300WSCKO	--
669	400002075062601	ENGIL MILK CO	-387	12/ /1934	C	X	300WSCKO	--
670	400009075063101	BOGER & CRAWFORD	-387	02/18/1920	C	X	300WSCKO	--
671	395959075063801	PHILTEX MFG CO	-387	05/ /1934	C	X	300WSCKO	--
672	400013075063701	LCA CORP	--	1937	C	X	300WSCKO	--
673	400018075065201	CUNEO PRESS INC	-214	08/29/1941	C	X	300WSCKO	--
674	400006075071201	DATATECH BUSINESS FORMS	0249	04/05/1951	C	X	300WSCKO	--
675	395955075072001	NATIONAL CUTLERY CO	-204	1910	C	X	300WSCKO	--
676	400016075074401	DUFFY BROS	-389	1912	C	X	300WSCKO	--
677	400018075074401	CROSS BROS	--	1927	C	X	300WSCKO	--
678	400023075075401	THOMAS POTTER SONS CO	-204	1902	C	X	300WSCKO	--
679	400023075075402	THOMAS POTTER SONS CO	-204	1902	C	X	300WSCKO	--
680	400023075074901	JOHN POTTER & SON	-204	1908	C	X	300WSCKO	--
681	400017075075701	OTTO W SCHAUM	-204	1916	C	X	300WSCKO	--
682	400017075075901	GLENWOOD INDUSTRIAL CENTER	-204	1919	C	X	300WSCKO	--
683	400005075081401	GLOBE RUBBER PRODUCTS CORP	0249	05/21/1941	C	X	300WSCKO	--
684	400007075081201	GLOBE RUBBER PRODUCTS CORP	-387	01/11/1947	C	X	300WSCKO	--
685	400009075081101	GLOBE RUBBER PRODUCTS CORP	-387	07/09/1951	C	X	300WSCKO	--
686	400013075081401	S L ALLEN & CO	0249	1900	C	X	300WSCKO	--
687	400008075084201	SURPASS LEATHER CO	--	--	C	X	300WSCKO	--
688	400008075084101	SURPASS LEATHER CO	--	--	C	X	300WSCKO	--
689	400012075085401	HARBISONS DAIRIES	-204	1923	C	X	300WSCKO	--
690	400026075090601	FISHERS RESTAURANT	0249	04/01/1949	C	X	300WSCKO	--
691	400038075053901	EAST LAKE MFG CO	-204	1912	C	X	300WSCKO	--
692	400028075070901	DAVID MICHAEL & CO	0297	05/ /1942	C	X	300WSCKO	--
693	400031075070801	MESSENGER BEARINGS	--	--	C	X	300WSCKO	--
694	400038075075601	RALPH V RULON INC	-204	1909	C	X	300WSCKO	--
695	400049075075101	FABRICON PROD CO OF PA	0249	04/17/1946	C	X	300WSCKO	--
696	400103075074801	BIRD-ARCHER CO	0249	--	C	X	300WSCKO	--
697	400104075074501	L KENNEDY & SONS	0249	09/11/1946	C	X	300WSCKO	--
698	400058075074501	GREENMOUNT CEMETERY CO	-204	1908	C	X	300WSCKO	--
699	400037075081001	BLUE ANCHOR BEVERAGES	-387	1912	C	X	300WSCKO	--
700	400043075081001	FRANKLINVILLE DYE WORKS	--	--	C	X	300WSCKO	--
701	400038075090501	KOLB BAKERY CO	-204	1918	C	X	300WSCKO	--
702	400133075085101	HOUSE OF KOREA RESTAURANT	0249	01/ /1953	C	X	300WSCKO	--
703	400133075073701	F A CANUSO & SONS	0249	09/ /1952	C	X	300WSCKO	--
704	400149075055701	SEARS ROEBUCK & CO	0249	1920	C	X	300WSCKO	--
705	400149075055401	SEARS ROEBUCK & CO	-204	1920	C	X	300WSCKO	--
706	400151075055601	SEARS ROEBUCK & CO	-204	1921	C	X	300WSCKO	--
707	400207075055901	CANTLEY & CO	-387	06/25/1941	C	X	300WSCKO	--
708	400212075060801	KEYSTONE CLAY PRODUCTS	-387	11/ /1940	C	X	300WSCKO	--
709	400233075063901	BOND BREAD	-387	04/ /1928	C	X	300WSCKO	--
710	400216075070501	HEINTZ MFG CO	0249	02/ /1950	C	X	300WSCKO	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
498	--	--	85	27.50	04/08/1937	40	0.9	Z	U	651
70	26	8	80	30.00	1904	70	--	Z	U	652
250	29	8	80	20.00	1904	30	--	Z	U	653
590	40	8	85	40.00	1919	100	--	Z	U	654
200	28	6	90	--	--	11	--	Z	U	655
300	23	6	90	--	--	55	--	Z	U	656
469	33	8	55	14.00	06/26/1937	57	0.7	Z	U	657
508	150	8	70	11.64	12/13/1978	200	2.9	U	U	658
127	20	8	75	20.00	1932	150	--	Z	U	659
367	100	8	75	20.00	1942	300	--	Z	U	660
168	--	8	75	12.07	12/13/1978	16	0.9	U	U	661
326	--	8	90	--	--	--	--	U	U	662
650	90	6	80	--	--	2.5	--	Z	U	663
100	36	6	75	12.00	1915	60	--	Z	U	664
150	39	10	75	22.00	1915	30	--	Z	U	665
500	36	8	75	25.47	12/13/1978	67	--	U	U	666
462	35	8	48.9	21.98	12/28/1978	65	0.6	U	U	667
500	28	8	50	37.30	02/19/1952	128	--	W	N	668
300	--	8	40	--	--	--	--	Z	U	669
502	31	8	60	20.00	02/18/1920	60	--	Z	U	670
550	--	10	50	--	--	82	--	Z	U	671
532	16	8	60	5.44	12/28/1978	20	--	U	U	672
616	--	8	80	--	--	123	--	Z	U	673
500	41	8	75	13.12	12/28/1978	40	--	U	U	674
159	44	8	65	16.00	1910	28	--	Z	U	675
175	33	8	110	--	--	15	--	Z	U	676
342	--	--	110	17.00	03/20/1943	43	0.5	U	U	677
250	22	8	90	40.00	1902	15	--	Z	U	678
505	27	8	90	28.00	1902	113	--	Z	U	679
560	30	8	90	60.00	1908	80	--	Z	U	680
567	42	8	110	33.00	1916	25	--	Z	U	681
395	--	8	110	9.97	09/27/1942	15	0.1	U	U	682
300	14	8	90	28.00	05/21/1941	5.5	0.1	Z	U	683
400	16	8	90	51.00	01/11/1947	95	--	Z	U	684
400	15	10	90	48.00	08/09/1951	240	--	U	U	685
374	--	6	90	28.06	01/10/1955	30	--	U	U	686
330	--	10	85	16.00	01/19/1949	11	0.1	Z	U	687
300	--	8	85	14.43	12/06/1954	--	--	Z	U	688
600	10	8	100	22.00	1923	40	--	Z	U	689
560	23	8	105	20.38	01/11/1979	40	--	U	U	690
129	23	8	25	16.00	1912	35	--	Z	U	691
342	--	6	95	13.00	--	108	1.4	Z	U	692
190	--	6	100	25.00	--	--	--	Z	U	693
75	22	6	110	20.00	1909	23	--	Z	U	694
524	31	8	105	12.02	01/12/1979	85	0.8	U	U	695
314	--	6	100	21.25	08/17/1944	20	0.2	Z	U	696
73	36	6	90	22.00	09/11/1946	4.0	0.2	U	U	697
150	28	6	110	20.00	--	9.0	--	Z	U	698
390	36	7	105	28.00	1912	13	--	Z	U	699
314	--	6	100	--	--	40	--	Z	U	700
222	34	8	115	38.00	1918	13	--	Z	U	701
300	35	8	115	28.00	01/30/1953	82	--	U	U	702
278	47	6	120	28.00	09/01/1952	30	--	Z	U	703
641	19	12	110	12.95	01/04/1979	80	--	U	U	704
645	19	12	110	12.43	01/04/1979	17	--	U	U	705
1347	18	12	110	10.76	01/04/1979	175	--	U	U	706
40	--	8	110	20.00	06/25/1941	25	--	Z	U	707
100	--	8	110	--	--	30	--	Z	U	708
300	--	8	110	25.83	01/04/1979	50	1.1	U	U	709
600	22	8	130	14.45	02/02/1950	57	0.7	U	U	710

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	METHOD FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
711	400236075074501	FERN ROCK THEATER	0249	04/22/1936	C	X	300WSCKO	--
712	400342075081401	CITY LINE HOTEL	-204	1915	C	X	300WSCKO	--
713	400235075061901	CREST THEATRE	-387	04/ /1921	C	X	300WSCKO	--
714	400337075051001	BURHOLME BOWL	-387	07/14/1949	C	X	300WSCKO	--
715	400341075052301	WILMOT-FLEMING ENGINEERING	-387	1923	C	X	300WSCKO	--
716	400436075050901	AMERICAN LEGION POST 366	--	--	C	X	300WSCKO	--
717	400434075050101	FEASTER BROS COAL CO	0249	10/05/1934	C	X	300WSCKO	--
718	400323075024601	SMYLIES RESTAURANT	-387	05/03/1950	C	X	300WSCKO	--
719	400327075024401	BRINDLES FROZEN CUSTARD	-387	12/26/1946	C	X	300WSCKO	--
720	400335075023901	ESSO SERVICE STATION	0249	05/29/1937	C	X	300WSCKO	--
721	400320075014601	ST MARGARET IND SCHOOL	-204	1923	C	X	300WSCKO	--
722	400459075041101	TEKAKWITHA HILLS SCHOOL	--	--	C,D	W	300WSCKO	--
723	400651075023201	THE BUDD CO	0249	07/21/1942	C	X	300WSCKO	--
724	400403074595801	TORRESDALE-FRANKFORD CC	-204	1925	C	X	300WSCKO	--
725	400404075000501	TORRESDALE-FRANKFORD CC	-204	1925	C	X	300WSCKO	--
726	400559074591801	CHRISTIAN SERVICE	--	--	C	X	300WSCKO	--
727	395408075081301	CONRAIL	0424	1935	C	S	211MRPAL	237
728	395541075084401	N & G TAYLOR	-396	1892	C	X	300WSCKO	--
729	395617075102001	I J HORSTMANN & SONS	--	--	C	--	--	--
730	395546075083001	SPRECKELS SUGAR HOUSE	-397	1890	C	S	211MRPAL	--
731	395200075122001	BLACK, E N	-398	1885	C	X	300WSCKO	--
732	395753075080501	--	-398	1893	C	--	300WSCKO	--
733	400215075141802	FIBREFLEX PACKING & MFG CO	0249	02/09/1955	C	X	300WSCKO	--
734	400212075094202	PHILA STEEL WIRE	0248	07/12/1963	C	X	300WSCKO	--
735	400000075100002	CRESCENZO INC	0249	--	C	X	300WSCKO	--
736	395517075085001	PUBLICKER INDUSTRIES INC	--	--	C	S	211MRPAL	--
737	395618075121401	ANDERSON INC	0561	11/25/1949	C	X	300WSCKO	--
738	400011075110501	SUN CHEMICAL CORP	0249	1954	C	X	300WSCKO	--
739	400011075110801	SUN CHEMICAL CORP	0249	1954	C	X	300WSCKO	--
740	395735075085101	CRESCENT INK & COLOR CO	-221	1956	--	S	211MRPAL	--
741	395722075082801	NORTHWOOD RUBBER CO	0503	1957	--	S	211MRPAL	--
742	400039075031202	QUAKER RUBBER CORP	0249	06/04/1936	C	S	112TRNN	--
743	400347074593601	TORRESDALE-FRANKFORD CC	0111	--	A	X	300WSCKO	--
744	395945075063501	CALEDONIAN DYE WORKS	0248	01/14/1976	A	X	300WSCKO	--
745	395622075115801	SEABOARD SUPPLY CO	0248	07/30/1974	A	X	300WSCKO	160
746	400110075021901	WESTMORELAND CONDUIT CO	0331	03/24/1972	A	X	300WSCKO	278
747	395925075041002	KEYSTONE CONCRETE	0330	06/20/1975	A	S	211MRPAL	83
748	395739075083701	CITY OF PHILADELPHIA	0413	03/ /1976	A	X	300WSCKO	200
749	400133075015902	ARMAK CHEMICAL CO	0413	06/06/1974	A	X	300WSCKO	--
750	395445075083101	S A F AMERICA INC	0404	02/06/1979	--	S	211MRPAL	195
751	395444075083101	S A F AMERICA INC	0404	01/30/1979	--	S	211MRPAU	116
752	395443075083201	S A F AMERICA INC	0404	02/21/1979	--	S	211MRPAU	84
753	395442075083201	S A F AMERICA INC	0404	02/01/1979	--	S	211MRPAU	84
754	395440075083201	S A F AMERICA INC	0404	01/26/1979	--	S	211MRPAL	185
755	395436075083301	S A F AMERICA INC	0404	02/02/1979	--	S	211MRPAU	95
756	395434075083301	S A F AMERICA INC	0404	02/09/1979	--	S	211MRPAL	203
757	400015075035901	ROHM & HAAS CO	0249	07/12/1972	V	T	112TRNN	27
758	400013075035501	ROHM & HAAS CO	0249	07/11/1972	V	T	112TRNN	25
759	400010075034901	ROHM & HAAS CO	0249	07/17/1972	V	T	112TRNN	29
760	400007075034501	ROHM & HAAS CO	0249	07/25/1972	V	T	112TRNN	25
761	400011075034101	ROHM & HAAS CO	0249	07/31/1972	V	T	112TRNN	28
762	400014075034901	ROHM & HAAS CO	0249	08/03/1972	V	T	112TRNN	23
763	400018075040401	ROHM & HAAS CO	--	08/26/1977	V	T	112TRNN	18
764	400020075035601	ROHM & HAAS CO	--	08/29/1977	V	T	112TRNN	12
765	400020075034801	ROHM & HAAS CO	--	08/25/1977	V	T	112TRNN	12
766	400015075034401	ROHM & HAAS CO	--	08/26/1977	V	T	112TRNN	16
767	400013075033601	ROHM & HAAS CO	--	08/24/1977	V	T	112TRNN	16
768	400017075033601	ROHM & HAAS CO	--	08/25/1977	V	T	112TRNN	18
769	400018075033901	ROHM & HAAS CO	--	08/26/1977	V	T	112TRNN	16
770	400022075034301	ROHM & HAAS CO	--	08/23/1977	V	T	112TRNN	16

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
217	15	8	175	16.00	04/22/1936	12	0.2	Z	U	711
128	10	8	240	--	--	--	--	Z	U	712
245	--	6	130	--	--	150	--	Z	U	713
294	20	6	145	15.00	07/14/1949	75	3.0	Z	U	714
171	40	8	125	16.11	01/04/1979	--	--	U	U	715
230	--	6	215	--	--	--	--	Z	U	716
70	15	6	200	15.90	12/29/1954	15	30.0	Z	U	717
198	--	6	110	36.00	05/03/1950	10	--	Z	U	718
75	41	6	100	20.00	12/26/1946	6.0	--	Z	U	719
132	64	4.50	105	19.00	05/29/1937	15	--	Z	U	720
27	21	8	105	14.00	1923	--	--	Z	U	721
90	--	36	180	15.74	12/29/1954	--	--	Z	U	722
254	17	10	250	21.00	07/21/1942	30	--	Z	U	723
68	46	8	80	30.00	1925	5.0	--	W	H	724
80	50	8	90	26.00	1925	15	--	Z	U	725
102	--	6	100	16.00	--	25	--	Z	U	726
--	--	--	12	--	--	--	--	Z	U	727
670	--	12	14	--	--	250	--	Z	U	728
--	--	--	30	--	--	--	--	W	N	729
98	--	--	8	--	--	--	--	Z	U	730
456	--	--	10	--	--	--	--	Z	U	731
308	--	--	13	--	--	--	--	Z	U	732
114	32	6	210	--	--	1.0	--	U	U	733
250	22	6	170	9.90	01/09/1979	6.0	--	U	U	734
498	--	6	120	28.23	12/14/1978	11	0.1	U	U	[illegible]
168	--	16	10	--	--	400	--	Z	U	7
404	48	6	10	40.00	11/25/1949	50	--	Z	U	737
520	--	--	100	28.00	07/07/1978	32	--	W	N	738
370	--	--	100	--	--	19	--	U	U	739
70	60	8	41	--	--	--	--	Z	U	740
70	--	--	22	--	--	--	--	Z	U	741
28	10	12	8	10.00	06/04/1936	150	30.0	Z	U	742
96	50	6	55	20.16	01/03/1979	18	0.4	U	U	743
230	36	6	27	13.00	01/14/1976	100	0.5	U	U	744
160	46	6	37.5	28.76	10/02/1979	11	0.8	U	U	745
278	60	6	14	20.00	03/24/1972	11	0.1	U	U	746
83	73	8	11.0	11.44	12/19/1978	430	9.0	U	U	747
200	--	--	28.9	15.90	12/07/1978	80	--	W	Z	748
350	36	6	19.5	17.00	06/06/1974	220	2.8	W	N	749
167	122	8	9.7	21.10	02/06/1979	503	36.0	T	U	750
77	62	8	9.6	18.60	01/30/1979	54	2.3	T	U	751
75	60	8	9.4	18.10	02/21/1979	310	12.5	T	U	752
63	52	4	8.5	18.25	02/01/1979	30	--	T	U	753
162	136	4	8.6	19.50	01/26/1979	25	--	T	U	754
61	41	4	8.1	17.00	02/02/1979	20	--	T	U	755
179	154	4	7.8	19.75	02/09/1979	30	--	T	U	756
18	4	1.25	11.6	5.65	08/03/1972	1.0	--	O	U	757
21	10	1.25	16.2	11.88	07/17/1972	0.50	--	O	U	758
23	12	1.25	17.5	12.77	08/03/1972	1.5	--	O	U	759
20	9	1.25	16.3	12.35	08/03/1972	0.50	--	O	U	760
28	17	1.25	22.8	19.21	08/04/1972	2.0	--	O	U	761
20	12	1.25	18.5	13.60	08/03/1972	0.50	--	O	U	762
18	--	1.25	9.13	3.68	09/05/1979	0.36	0.2	O	U	763
11	--	1.25	9.4	1.85	09/13/1978	0.01	--	O	U	764
10	--	1.25	7.7	4.10	09/11/1978	0.05	--	O	U	765
16	--	1.25	6.1	2.62	09/12/1978	0.07	--	O	U	766
14	--	1.25	8.8	4.70	08/29/1978	0.06	--	O	U	767
14	--	1.25	6.5	2.26	09/12/1978	0.06	--	O	U	768
16	--	1.25	6.8	2.30	09/11/1978	0.03	--	O	U	769
16	--	1.25	7.6	1.93	09/05/1979	0.34	1.2	O	U	770

TABLE 2.-- RECORDS OF WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	SITE-ID	OWNER OR IDENTIFIER	DRILLER'S LICENSE NUMBER	DATE COMPLETED	METHOD CONST-RUCTED	FINISH	GEOLOGIC UNIT	DEPTH DRILLED (FEET)
771	400524074593501	DAVID MICHAEL & CO	0413	1969	A	X	300WSCKO	--
772	400525074593901	DAVID MICHAEL & CO	0413	1969	A	X	300WSCKO	--
773	395937075063402	PHILA RUST PROOF CO	--	--	C	X	300WSCKO	--
774	400134075092001	FOX PRODUCTS CO	-221	1956	C	X	300WSCKO	--
775	395808075082201	C SCHMIDT & SONS INC	--	--	V	T	112TRNN	--
776	395718075082602	M WILDSTEIN & CO	--	--	--	--	--	--
777	400347074593602	TORRESDALE-FRANKFORD CC	--	--	D	W	300WSCKO	--
778	395537075121801	ATLANTIC RICHFIELD CO	--	07/ /1979	D	P	112TRNN	27
779	395538075122401	ATLANTIC RICHFIELD CO	--	1977	D	P	112TRNN	20
780	395529075084601	UNITED NESCO CONTAINER CO	0424	1953	C	S	211MRPAL	142
781	400203075140401	THE BORDMAN CO	-221	08/12/1955	C	X	300WSCKO	--
782	400203075140402	THE BORDMAN CO	-221	09/07/1955	C	X	300WSCKO	--
783	400019075101001	KEYSTONE PACKAGING	0330	11/08/1979	A	X	300WSCKO	--
784	395323075131901	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	36
785	395322075132001	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	36
786	395323075131801	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	40
787	395321075131901	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	25
788	395319075131501	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	40
789	395319075131701	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	--
790	395318075131501	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	40
791	395318075131701	CITY OF PHILA	-452	03/ /1980	A	S	112TRNN	40
792	395720075113701	UNIV OF PENNA	0330	1973	A	X	300WSCKO	--
793	395720075113801	UNIV OF PENNA	0330	1977	A	X	300WSCKO	--
794	400008075035001	ROHM AND HAAS CO	0413	10/ /1956	C	S	211MRPAL	78
795	400009075035101	ROHM AND HAAS CO	0413	10/ /1956	C	S	211MRPAL	52
796	395816075073301	CITY OF PHILA	--	05/ /1976	B	G	112TRNN	18
797	395459075140501	CITY OF PHILA	--	04/20/1976	B	G	112TRNN	26
798	395922075103301	CITY OF PHILA	--	10/ /1976	B	G	300WSCKO	24
799	395904075083401	CITY OF PHILA	--	05/ /1976	B	G	300WSCKO	23
800	400317075113101	CITY OF PHILA	--	09/ /1976	B	G	300WSCKO	44
801	400208075102601	ASHER, CHESTER	-204	1919	C	X	300WSCKO	--
802	400318075151301	SCHUYLKILL VAL NATURE CTR	0514	03/ /1968	A	X	377CCKS	--
803	400329075150401	SCHUYLKILL VAL NATURE CTR	0514	--	A	X	377CCKS	--
804	400309075152901	SCHUYLKILL VAL NATURE CTR	--	1936	C	X	377CCKS	--
805	400044075032601	KROMETAL MFG CORP	--	--	--	--	211MRPAL	--
806	400536075034601	GUARINO, CARMEN	0248	08/ /1979	A	X	300WSCKO	--
807	400537075034601	GUARINO, CARMEN	0248	08/ /1979	A	X	300WSCKO	--
808	395327075131601	CITY OF PHILA	0404	01/ /1981	A	P	112TRNN	35
809	395327075131602	CITY OF PHILA	0404	01/ /1981	A	P	211MRPAU	89
810	395320075130301	CITY OF PHILA	0404	01/ /1981	A	P	211MRPAU	107
811	395320075130302	CITY OF PHILA	0404	01/ /1981	A	P	112TRNN	40
812	395319075130901	CITY OF PHILA	0404	01/ /1981	A	P	211MRPAU	115
813	395319075130902	CITY OF PHILA	0404	01/ /1981	A	P	112TRNN	40
814	395313075124801	CITY OF PHILA	0404	01/ /1981	A	P	211MRPAM	134
815	395313075124802	CITY OF PHILA	0404	01/ /1981	A	P	112TRNN	50
816	400225075133001	FAIRMOUNT FARM	-221	09/22/1955	C	X	300WSCKO	--
817	400244075032701	BRADLEYS COUNTRY TAVERN	-221	07/08/1955	C	X	300WSCKO	--
818	400322075135801	ROGGIO, ALBERT	-221	01/07/1954	C	X	300WSCKO	90
819	400242075034001	VITALES RESTAURANT	-387	07/03/1951	C	X	300WSCKO	--
820	395633075094901	DEL VAL FISH CO INC	0413	06/ /1979	A	S	211MRPAL	55
821	400308075145801	BARKER, REDWOOD	0514	03/ /1979	A	X	300WSCKO	--
822	395303075124401	CITY OF PHILA	0404	09/08/1981	H	--	--	171
823	395239075125301	CITY OF PHILA	0404	09/09/1981	H	--	--	60
824	395242075125101	CITY OF PHILA	0404	09/10/1981	H	--	--	166
825	395327075132401	CITY OF PHILA	-452	10/ /1981	--	P	112TRNN	--
826	395328075132301	CITY OF PHILA	-452	10/ /1981	--	P	112TRNN	--
827	395326075132401	CITY OF PHILA	-452	10/ /1981	--	P	112TRNN	--
828	395327075132301	CITY OF PHILA	-452	10/ /1981	--	P	112TRNN	--
---	395505075101701	SHUNK ST STATION SUMP	--	--	--	-	112TRNN	--
---	395550075100701	TASKER-MORRIS STS SUMP	--	--	--	-	112TRNN	--
---	395424075101001	VETERANS STADIUM SUMP	--	--	--	-	112TRNN	--

DEPTH OF WELL (FEET)	DEPTH CASED (FEET)	CASING DIAM-ETER (INCHES)	ALTITUDE OF LAND SURFACE (FEET NGVD)	WATER LEVEL (FEET)	DATE WATER LEVEL MEASURED	DISCHARGE (GALLONS PER MINUTE)	SPECIFIC CAPACITY (GPM/FT)	USE OF SITE	USE OF WATER	LOCAL NUMBER
293	29	8	100	20.00	04/16/1969	83	1.1	W	N	771
353	30	8	90	8.87	04/16/1969	80	--	W	R	772
--	--	8	24.0	12.22	12/18/1978	--	--	Z	U	773
195	--	8	125	2.54	12/04/1979	--	--	U	U	774
--	--	--	23.4	--	--	--	--	U	U	775
--	--	--	8.95	6.70	11/09/1978	--	--	U	U	776
28	28	36	53	20.16	01/03/1979	--	--	U	U	777
25	16	16	17.1	1.39	11/14/1979	--	--	O	U	778
18	9	12	20.0	12.02	11/14/1979	--	--	O	U	779
134	112	8	11	34.00	1953	415	26.0	W	N	780
300	34	6	110	43.00	08/12/1955	24	0.3	Z	U	781
208	35	6	110	47.00	09/07/1955	31	0.4	Z	U	782
324	40	6	145	26.72	02/26/1980	25	--	U	U	783
27	10	12	10	--	--	--	--	W	D	784
29	10	12	10	--	--	--	--	W	D	785
32	10	12	10	--	--	--	--	W	D	786
25	19	12	10	--	--	--	--	U	U	787
40	10	12	10	--	--	--	--	W	D	788
--	--	12	10	--	--	--	--	W	D	789
40	10	12	10	--	--	--	--	W	D	790
40	14	12	10	--	--	--	--	W	D	791
300	--	6	70	--	--	5.0	--	W	Z	792
300	40	6	70	--	--	5.0	--	W	Z	793
54	25	6	8	--	--	3.3	--	U	U	794
52	39	--	8	--	--	--	--	U	U	795
18	13	1.50	14.4	8.67	10/09/1980	0.21	0.3	O	U	796
25	20	1.50	34.1	14.10	10/15/1980	0.08	0.0	O	U	797
24	19	1.50	107.6	16.72	10/09/1980	0.16	0.1	O	U	798
22	17	1.50	62.1	8.37	10/09/1980	0.22	0.1	O	U	799
43	38	1.50	290.6	15.00	10/22/1980	0.28	0.3	O	U	800
125	6	8	222	15.79	11/05/1980	17	--	U	U	801
400	--	6	345	--	--	7.0	--	W	H	802
180	--	6	333	--	--	7.0	--	W	H	803
180	--	6	220	--	--	7.0	--	W	H	804
60	--	8	20	12.00	--	60	--	W	N	805
263	33	6	135	31.13	11/17/1980	--	--	U	U	806
200	20	6	145	10.00	08/ /1979	7.5	0.0	W	E	807
23	18	4	4.7	14.08	02/04/1981	15	--	O	U	808
80	75	4	4.6	13.98	02/04/1981	30	--	O	U	809
100	95	4	10.7	19.46	02/04/1981	50	--	O	U	810
30	25	4	10.9	18.37	02/04/1981	10	--	O	U	811
110	105	4	11.9	20.63	02/04/1981	30	--	O	U	812
30	25	4	11.8	19.45	02/04/1981	7.0	--	O	U	813
130	125	4	7.5	15.69	02/04/1981	50	--	O	U	814
40	35	4	7.8	14.32	02/04/1981	15	--	O	U	815
308	50	6	300	25.00	09/22/1955	16	0.1	--	--	816
300	43	6	105	14.00	07/08/1955	58	0.6	--	--	817
90	33	6	350	15.00	01/07/1954	14	0.5	--	--	818
256	60	6	95	10.00	07/03/1951	55	1.1	U	U	819
55	35	6	35	18.00	06/ /1979	25	2.5	W	Q	820
275	40	6	310	42.00	03/ /1979	20	0.1	W	H	821
--	--	--	5	--	--	--	--	T	--	822
--	--	--	5	--	--	--	--	T	--	823
--	--	--	5	--	--	--	--	T	--	824
40	20	12	10	--	--	250	--	Z	U	825
40	20	12	10	--	--	250	--	Z	U	826
40	20	12	10	--	--	250	--	Z	U	827
40	20	12	10	--	--	250	--	Z	U	828
--	--	--	19	--	--	--	--	W	D	---
--	--	--	30	--	--	--	--	W	D	---
--	--	--	15	--	--	--	--	W	D	---

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
PH-1	43-04-08	211MRPAL	704	--	6.9	--	20	0	6.6	.9
	43-07-19	211MRPAL	704	--	7.3	--	37	0	7.4	4.6
	44-01-14	211MRPAL	704	--	6.6	--	46	0	12	4.0
	44-02-15	211MRPAL	704	--	6.5	--	32	0	7.5	3.2
	44-06-19	211MRPAL	704	--	7.0	--	22	0	6.1	1.6
	44-10-03	211MRPAL	704	--	6.4	--	49	0	13	4.1
	45-10-11	211MRPAL	704	--	6.5	--	88	0	20	9.1
	45-11-15	211MRPAL	1028	265	6.6	--	74	0	17	7.7
	45-12-13	211MRPAL	1028	258	6.3	13.0	--	--	--	--
	45-12-13	211MRPAL	704	--	6.3	13.0	70	0	17	6.6
	46-01-03	211MRPAL	1028	264	6.3	13.0	76	0	--	--
	46-01-10	211MRPAL	704	--	6.2	--	75	0	18	7.3
	46-01-17	211MRPAL	1028	270	6.3	--	72	0	--	--
	46-01-31	211MRPAL	1028	267	6.4	14.0	75	0	--	--
	46-02-14	211MRPAL	1028	270	6.4	14.0	78	0	--	--
	46-02-15	211MRPAL	704	--	6.3	--	76	0	16	8.6
	46-02-28	211MRPAL	1028	271	6.4	13.0	--	--	--	--
	46-03-14	211MRPAL	1028	275	6.4	14.0	81	0	--	--
	46-03-15	211MRPAL	704	--	6.5	--	80	0	19	7.8
	46-03-28	211MRPAL	1028	280	6.3	14.0	84	0	--	--
	46-04-11	211MRPAL	1028	286	6.2	14.0	80	0	--	--
	46-04-12	211MRPAL	704	--	6.1	--	84	0	19	8.8
	46-04-25	211MRPAL	1028	283	6.3	13.0	81	0	--	--
	46-05-09	211MRPAL	1028	284	6.4	14.0	81	0	--	--
	46-05-17	211MRPAL	704	--	5.9	--	74	0	18	7.0
	46-06-20	211MRPAL	1028	285	6.5	13.0	81	0	--	--
	46-06-28	211MRPAL	704	--	6.2	--	95	0	20	11
	46-07-11	211MRPAL	1028	285	6.7	13.0	87	0	--	--
	46-07-26	211MRPAL	1028	290	6.5	14.0	78	0	--	--
	46-08-15	211MRPAL	1028	293	6.8	13.0	89	0	21	8.8
	46-08-29	211MRPAL	1028	290	6.4	14.0	100	0	--	--
	46-09-03	211MRPAL	704	--	6.3	--	88	0	20	9.2
	46-09-12	211MRPAL	1028	294	6.6	14.0	100	0	--	--
	46-10-02	211MRPAL	704	--	6.1	--	86	0	20	8.7
	46-10-10	211MRPAL	1028	290	6.3	14.0	82	0	19	8.3
	46-11-04	211MRPAL	704	--	6.2	--	88	0	20	9.3
	46-12-05	211MRPAL	1028	295	6.3	14.0	88	0	--	--
	46-12-30	211MRPAL	704	--	6.1	--	99	0	20	12
	47-01-30	211MRPAL	704	--	5.9	--	75	0	17	7.9
	47-02-27	211MRPAL	1028	295	6.3	--	99	0	--	--
	47-02-28	211MRPAL	704	--	6.1	--	100	1	25	9.5
	47-03-31	211MRPAL	704	--	5.9	--	110	15	27	9.7
	47-05-02	211MRPAL	704	--	5.9	--	100	8	26	9.6
	47-06-05	211MRPAL	704	--	6.0	--	100	6	26	9.6
	47-07-07	211MRPAL	704	--	5.9	--	100	12	25	10
	47-07-31	211MRPAL	704	--	5.9	--	100	--	26	8.9
	47-09-05	211MRPAL	704	--	5.9	--	77	--	16	9.2
	47-10-02	211MRPAL	704	--	5.9	--	100	10	27	8.9
	47-10-30	211MRPAL	704	--	5.9	--	71	0	12	10
	48-01-09	211MRPAL	704	--	6.3	--	92	0	22	9.0
	48-02-05	211MRPAL	704	--	6.1	--	96	0	23	9.3
	48-03-05	211MRPAL	704	--	6.4	--	97	0	24	9.0
	48-04-09	211MRPAL	704	--	5.9	--	88	0	17	11
	48-05-07	211MRPAL	704	--	5.9	--	110	13	25	11
	48-06-14	211MRPAL	704	--	5.9	--	92	0	26	6.6

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	85	14	17	--	23	129	.00	200	--	PH-1
--	--	90	10	19	--	23	129	.02	250	--	
--	--	98	--	15	--	19	129	.00	200	--	
--	--	104	6.4	17	--	29	124	.10	100	--	
--	--	92	11	22	--	12	139	.10	380	--	
--	--	85	7.0	19	--	3.0	134	.10	100	--	
--	--	112	8.6	31	.0	12	185	.10	1000	--	
24	4.1	118	10	15	.3	14	148	.45	1200	30	
--	--	117	--	17	--	--	--	.54	--	--	
--	--	111	11	21	--	16	150	.10	1600	--	
--	--	118	--	16	--	--	--	.54	--	--	
--	--	115	11	20	--	18	158	.05	2700	--	
--	--	120	--	18	--	--	--	.68	--	--	
--	--	120	--	18	--	--	--	.60	--	--	
--	--	122	15	14	--	--	--	.60	1300	--	
--	--	115	7.8	--	--	23	--	.01	1500	--	
--	--	118	--	18	--	--	--	.70	--	--	
--	--	120	13	19	--	--	--	.70	1500	--	
--	--	122	8.9	19	--	10	159	.02	1700	--	
--	--	126	12	19	--	--	--	.80	1700	--	
--	--	124	14	19	--	--	--	.90	1500	--	
--	--	116	12	31	--	10	161	.10	1900	--	
--	--	125	13	17	--	--	--	.80	1500	--	
--	--	124	15	18	--	--	--	.80	1300	--	
--	--	121	11	24	--	18	--	--	2100	--	
--	--	122	11	18	--	--	--	.80	1320	--	
--	--	120	18	24	--	14	172	.00	1700	--	
--	--	123	14	18	--	--	--	.70	200	--	
--	--	122	20	18	--	--	--	.90	200	--	
24	2.9	122	12	16	.3	15	162	.90	2030	--	
--	--	130	22	18	--	--	--	1.20	--	--	
--	--	121	11	24	--	15	170	.00	1300	--	
--	--	130	16	17	--	--	--	.60	--	--	
--	--	120	9.4	24	--	17	172	--	2000	--	
--	--	120	14	18	--	--	--	1.60	--	--	
--	--	121	14	23	--	14	165	.00	1600	--	
--	--	120	18	18	--	--	--	1.30	--	--	
--	--	122	12	26	--	15	172	.01	1800	--	
--	--	120	18	24	--	14	192	.00	2000	--	
--	--	123	16	20	--	--	--	1.40	--	--	
--	--	122	20	24	--	19	177	.20	2100	--	
--	--	112	16	28	--	17	200	.00	2700	--	
--	--	117	13	28	--	17	194	.00	2800	--	
--	--	120	20	28	--	17	188	.01	1700	--	
--	--	112	19	27	--	15	173	.00	2000	--	
--	--	--	18	27	--	19	216	.00	1900	--	
--	--	--	20	26	--	36	196	.00	2200	--	
--	--	115	18	28	--	15	200	.01	3200	--	
--	--	111	21	22	--	16	186	.02	2400	--	
--	--	120	22	24	--	19	193	.02	2100	--	
--	--	134	23	22	--	15	202	.01	2600	--	
--	--	123	25	30	--	20	206	.01	3400	--	
--	--	112	25	26	--	17	208	.02	3500	--	
--	--	116	26	28	--	15	220	.03	3400	--	
--	--	118	27	28	--	15	222	.03	2900	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
1	48-08-06	211MRPAL	704	--	6.1	--	94	0	27	6.4
	48-09-03	211MRPAL	704	--	5.9	--	110	9	27	11
	48-10-08	211MRPAL	704	--	6.2	--	120	27	28	12
	48-11-05	211MRPAL	704	--	6.1	--	120	27	28	12
	48-12-13	211MRPAL	704	--	6.0	--	120	18	27	12
	49-01-06	211MRPAL	704	--	6.2	--	--	--	--	--
	49-01-19	211MRPAL	704	--	6.2	--	120	3	28	11
	49-01-27	211MRPAL	704	--	6.2	--	--	--	--	--
	49-02-18	211MRPAL	704	--	6.2	--	120	23	29	12
	49-03-17	211MRPAL	704	--	6.1	--	110	9	25	11
	49-04-21	211MRPAL	704	--	6.0	--	120	27	29	12
	49-04-25	211MRPAL	1028	392	6.0	14.0	130	43	32	13
	49-06-30	211MRPAL	704	--	6.1	--	120	25	27	13
	49-07-28	211MRPAL	704	--	6.2	--	130	37	32	12
	49-08-25	211MRPAL	704	--	6.1	--	140	54	36	12
	49-09-29	211MRPAL	704	--	--	--	140	--	36	12
	49-10-27	211MRPAL	704	--	6.2	--	150	56	39	13
	49-12-29	211MRPAL	704	--	6.1	--	100	8	20	13
	50-01-19	211MRPAL	704	--	6.0	--	140	20	35	13
	50-01-26	211MRPAL	704	--	--	--	130	--	20	19
	50-01-30	211MRPAL	--	--	--	--	--	--	--	--
	50-02-23	211MRPAL	704	--	6.0	--	160	53	34	19
	50-03-23	211MRPAL	704	--	6.2	--	140	46	36	12
	50-04-27	211MRPAL	704	--	6.0	--	140	20	35	13
	50-05-18	211MRPAL	704	--	6.1	--	--	--	--	--
	50-07-25	211MRPAL	704	--	6.0	--	150	52	34	15
	50-09-26	211MRPAL	704	--	6.0	--	170	56	30	24
	50-09-28	211MRPAL	704	--	6.1	--	170	51	36	20
	50-10-27	211MRPAL	704	--	6.0	--	180	61	37	22
	50-11-15	211MRPAL	704	--	5.9	--	180	56	29	25
	50-12-28	211MRPAL	704	--	6.0	--	190	55	34	25
	51-01-30	211MRPAL	704	--	5.9	--	190	51	37	23
	51-02-28	211MRPAL	704	--	5.9	--	180	45	40	20
	51-03-30	211MRPAL	704	--	5.9	--	140	9	26	18
	51-09-28	211MRPAL	704	--	6.1	--	180	--	40	20
	51-10-15	211MRPAL	704	--	6.1	--	200	84	44	21
	51-10-30	211MRPAL	704	--	6.1	--	200	84	44	21
	51-11-26	211MRPAL	704	--	6.0	--	190	72	42	20
	51-12-20	211MRPAL	704	--	6.1	--	190	72	43	20
	52-01-30	211MRPAL	704	--	6.0	--	200	100	45	21
	52-02-28	211MRPAL	704	--	5.9	--	240	150	53	25
	52-03-27	211MRPAL	704	--	6.0	--	220	94	40	28
	52-04-28	211MRPAL	704	--	6.0	--	--	--	41	--
	52-05-28	211MRPAL	704	--	5.9	--	230	110	43	30
	52-06-26	211MRPAL	704	--	6.0	--	210	87	50	20
	52-08-21	211MRPAL	704	--	6.0	--	--	--	--	--
	52-09-26	211MRPAL	704	--	6.0	--	280	--	76	21
	52-10-23	211MRPAL	704	--	6.0	--	--	--	--	--
	53-02-15	211MRPAL	704	--	5.9	--	--	--	--	--
	53-03-17	211MRPAL	704	--	5.9	--	--	--	52	--
	53-04-29	211MRPAL	704	--	5.9	--	244	19	--	--
	53-05-28	211MRPAL	704	--	6.0	--	--	--	--	--
	53-12-23	211MRPAL	1028	689	6.0	14.0	236	160	--	--
	54-02-19	211MRPAL	1028	653	6.5	14.0	230	98	54	23
	54-04-12	211MRPAL	704	--	5.9	--	240	140	47	30

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	114	30	28	--	15	240	.02	3200	--	1
--	--	126	30	32	--	17	226	.03	2000	--	
--	--	113	34	32	--	16	225	2.30	3700	--	
--	--	112	33	30	--	17	225	.02	3500	--	
--	--	120	36	30	--	16	228	.02	3800	--	
--	--	--	37	--	--	--	--	--	3500	--	
--	--	137	36	36	--	17	--	.03	3700	--	
--	--	--	35	--	--	--	--	--	3900	--	
--	--	120	40	35	--	16	225	.03	560	--	
--	--	120	35	34	--	15	220	.03	3000	--	
--	--	115	34	37	--	16	250	2.30	3900	--	
25	5.0	110	42	31	.2	16	238	2.70	6200	--	
--	--	117	--	33	--	20	226	2.30	3700	--	
--	--	112	38	36	--	20	256	.02	4000	--	
--	--	104	36	35	--	16	225	.03	4300	--	
--	--	--	31	35	--	16	225	.03	5100	--	
--	--	116	48	35	--	15	228	.03	3000	--	
--	--	116	44	43	--	10	230	.03	3300	--	
--	--	147	57	36	--	12	228	.00	6000	--	
--	--	--	--	--	--	10	248	--	3400	--	
--	--	--	--	--	--	--	--	--	10000	--	
--	--	134	50	41	--	10	188	.02	3400	--	
--	--	114	31	36	--	16	226	.03	4800	--	
--	--	148	57	36	--	12	228	.00	6000	--	
--	--	--	56	--	--	--	--	--	6200	--	
--	--	115	62	42	--	10	--	2.30	5900	--	
--	--	144	63	45	--	13	315	.00	7200	--	
--	--	148	61	45	--	13	239	--	8400	--	
--	--	149	66	45	--	13	332	.00	9800	--	
--	--	145	59	42	--	10	407	.00	10000	--	
--	--	159	58	44	--	16	294	.03	9200	--	
--	--	166	56	38	--	9.0	385	.03	0	--	
--	--	167	51	40	--	7.0	265	.01	11100	--	
--	--	159	59	41	--	13	255	.20	9000	--	
--	--	--	65	39	--	8.0	226	--	6700	--	
--	--	137	72	41	--	10	--	.05	5600	--	
--	--	137	72	41	--	10	230	.05	6300	--	
--	--	140	71	38	--	8.0	270	--	6600	--	
--	--	144	77	39	--	10	279	--	6400	--	
--	--	118	79	39	--	10	269	--	6100	--	
--	--	110	76	40	--	15	273	--	6400	--	
--	--	148	69	48	--	13	285	--	7700	--	
27	--	153	--	50	--	14	284	--	7600	--	
--	--	148	79	54	--	14	--	--	5100	--	
--	--	146	--	60	--	12	--	--	4300	--	
--	--	--	83	--	--	--	--	--	4700	--	
--	--	--	82	40	--	--	--	--	4900	--	
--	--	--	81	38	--	--	--	--	4300	380	
--	--	--	--	--	--	--	--	--	--	--	
--	--	99	150	60	--	12	--	--	3500	490	
--	--	104	149	58	--	15	--	--	2700	--	
--	--	--	--	61	--	--	--	--	--	--	
--	--	93	142	46	--	--	--	1.40	5000	--	
38	6.0	160	124	57	.2	16	406	.90	5900	--	
--	--	124	129	61	--	13	--	--	1800	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
1	54-04-12	211MRPAL	1028	681	6.3	14.0	240	160	--	--
	54-10-08	211MRPAL	1028	723	6.2	14.0	246	170	--	--
	56-01-17	211MRPAL	1028	801	6.8	--	290	3	62	33
	57-07-23	211MRPAL	1028	827	6.1	14.0	300	170	68	31
2	43-04-08	211MRPAL	704	--	7.0	--	29	0	7.7	2.3
	43-07-19	211MRPAL	704	--	7.4	--	61	0	17	4.4
	44-01-14	211MRPAL	704	--	6.7	--	44	0	12	3.4
	44-02-15	211MRPAL	704	--	6.7	--	28	0	8.5	1.6
	44-06-19	211MRPAL	704	--	7.3	--	45	0	12	3.7
	44-10-03	211MRPAL	704	--	6.7	--	52	0	13	4.8
	45-10-11	211MRPAL	704	--	6.5	--	62	0	14	6.6
	45-11-15	211MRPAL	1028	274	6.7	14.0	62	0	15	5.9
	45-12-13	211MRPAL	1028	271	6.5	14.0	--	--	--	--
	46-01-10	211MRPAL	704	--	6.4	--	65	0	16	6.1
	46-01-17	211MRPAL	1028	278	6.5	--	66	0	--	--
	46-01-31	211MRPAL	1028	276	6.7	14.0	--	--	--	--
	46-02-15	211MRPAL	704	--	6.5	--	62	0	13	7.2
	46-03-14	211MRPAL	1028	280	6.7	14.0	72	0	--	--
	46-03-15	211MRPAL	704	--	6.6	--	68	0	16	6.7
	46-03-28	211MRPAL	1028	281	6.6	14.0	69	0	--	--
	46-04-11	211MRPAL	1028	281	6.5	14.0	66	0	--	--
	46-04-12	211MRPAL	704	--	6.4	--	66	0	16	6.4
	46-04-25	211MRPAL	1028	283	6.6	14.0	68	0	--	--
	46-05-09	211MRPAL	1028	289	6.7	14.0	64	0	--	--
	46-05-17	211MRPAL	704	--	6.6	--	63	0	15	6.1
	46-06-20	211MRPAL	1028	288	6.8	14.0	69	0	--	--
	46-06-28	211MRPAL	704	--	6.5	--	74	0	13	10
	46-07-11	211MRPAL	1028	285	6.8	14.0	74	0	--	--
	46-07-26	211MRPAL	1028	288	6.8	14.0	68	0	--	--
	46-08-15	211MRPAL	1028	285	7.0	14.0	70	0	17	6.7
	46-09-03	211MRPAL	704	--	6.4	--	68	0	16	6.9
	46-09-12	211MRPAL	1028	285	6.8	14.0	76	0	--	--
	46-10-02	211MRPAL	704	--	6.5	--	69	0	16	7.1
	46-11-04	211MRPAL	704	--	6.5	--	70	0	16	7.4
	46-12-05	211MRPAL	1028	281	6.6	14.0	74	0	--	--
	46-12-30	211MRPAL	704	--	6.0	--	99	6	20	12
	47-01-16	211MRPAL	1028	280	6.6	14.0	--	--	--	--
	47-01-30	211MRPAL	704	--	6.3	--	70	0	18	6.2
	47-02-27	211MRPAL	1028	275	6.6	14.0	76	0	--	--
	47-02-28	211MRPAL	704	--	6.5	--	74	0	18	7.0
	47-03-13	211MRPAL	1028	277	6.5	14.0	--	--	--	--
	47-03-27	211MRPAL	1028	282	6.6	14.0	--	--	--	--
	47-03-31	211MRPAL	704	--	6.3	--	74	0	19	6.4
	47-05-02	211MRPAL	704	--	6.3	--	82	0	18	8.9
	47-06-05	211MRPAL	704	--	6.3	--	79	0	22	5.8
	47-07-07	211MRPAL	704	--	6.3	--	79	0	20	7.0
	47-07-31	211MRPAL	704	--	6.3	--	78	56	20	6.8
	47-09-05	211MRPAL	704	--	6.3	--	92	41	26	6.6
	47-10-02	211MRPAL	704	--	6.3	--	78	0	19	7.5
	48-01-09	211MRPAL	704	--	6.3	--	56	0	14	5.0
	48-02-05	211MRPAL	704	--	6.5	--	66	0	16	6.4
	48-03-05	211MRPAL	704	--	6.7	--	71	0	17	7.0
	48-04-09	211MRPAL	704	--	6.4	--	100	--	29	7.2
	48-05-07	211MRPAL	704	--	6.4	--	75	0	18	7.4
	48-06-14	211MRPAL	704	--	6.3	--	53	0	18	2.0

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	100	159	62	--	--	--	--	--	--	1
--	--	96	116	69	--	--	--	1.20	5400	--	
--	--	351	174	65	.4	18	511	.70	2300	--	
50	5.8	158	181	59	.4	16	559	.11	3800	--	
--	--	92	8.8	20	--	18	155	.00	200	--	2
--	--	104	13	22	--	18	145	.10	200	--	
--	--	122	9.9	22	--	16	142	.00	300	--	
--	--	104	11	26	--	38	141	.10	490	--	
--	--	110	12	25	--	18	162	.03	380	--	
--	--	104	9.9	26	--	3.8	154	.04	1500	--	
--	--	122	6.6	29	.0	12	171	.05	600	--	
32	4.1	122	11	18	.5	11	156	.02	470	--	
--	--	121	--	18	--	--	--	.20	--	--	
--	--	122	11	22	--	14	161	.02	700	--	
--	--	124	--	18	--	--	--	.20	--	--	
--	--	126	--	19	--	--	--	.02	--	--	
--	--	118	6.2	22	--	20	111	.00	700	--	
--	--	131	14	20	--	--	--	.02	200	--	
--	--	126	8.1	22	--	9.6	167	.00	800	--	
--	--	127	12	21	--	--	--	.20	<100	--	
--	--	127	12	18	--	--	--	.20	<100	--	
--	--	123	12	22	--	6.5	160	.01	900	--	
--	--	127	12	19	--	--	--	.30	<100	--	
--	--	130	14	18	--	--	--	.20	430	--	
--	--	137	10	22	--	20	123	.00	900	--	
--	--	130	12	20	--	--	--	.20	1160	--	
--	--	125	8.2	24	--	15	165	.00	800	--	
--	--	126	15	18	--	--	--	.20	100	--	
--	--	126	13	19	--	--	--	.30	<100	--	
33	2.4	127	9.9	20	.5	11	159	.20	680	--	
--	--	132	8.9	26	--	12	176	.00	1100	--	
--	--	130	10	18	--	--	--	.20	--	--	
--	--	128	9.4	26	--	11	168	.00	700	--	
--	--	131	11	22	--	8.8	165	.00	1000	--	
--	--	126	5.8	18	--	--	--	.20	--	--	
--	--	114	15	24	--	15	184	.01	3500	--	
--	--	126	--	--	--	--	--	--	--	--	
--	--	122	11	20	--	8.2	192	.01	900	--	
--	--	132	9.1	17	--	--	--	.05	--	--	
--	--	129	8.1	22	--	13	159	.00	800	--	
--	--	132	--	--	--	--	--	--	--	--	
--	--	132	--	--	--	--	--	--	--	--	
--	--	137	9.9	24	--	11	160	.00	800	--	
--	--	135	8.2	24	--	12	168	.00	1000	--	
--	--	133	16	26	--	13	170	.00	700	--	
--	--	127	10	23	--	12	168	.00	1000	--	
--	--	27	10	25	--	14	192	.00	1200	--	
--	--	62	8.0	22	--	20	168	.00	1000	--	
--	--	124	8.0	20	--	12	176	.00	1100	--	
--	--	132	10	20	--	16	163	.00	1300	--	
--	--	134	10	22	--	12	173	.30	1500	--	
--	--	147	11	22	--	12	176	.04	1500	--	
--	--	130	9.9	20	--	12	175	.05	1500	--	
--	--	130	11	20	--	11	181	.05	2400	--	
--	--	130	10	20	--	10	179	.05	1800	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
2	48-07-09	211MRPAL	704	--	6.3	--	59	0	19	2.7
	48-08-06	211MRPAL	704	--	6.1	--	62	0	18	4.1
	48-09-03	211MRPAL	704	--	6.3	--	74	0	18	7.1
	48-10-08	211MRPAL	704	--	6.4	--	78	0	19	7.4
	48-11-05	211MRPAL	704	--	6.4	--	76	0	18	7.6
	48-12-13	211MRPAL	704	--	6.2	--	75	0	18	7.4
	49-01-06	211MRPAL	704	--	6.6	--	--	--	--	--
	49-01-19	211MRPAL	704	--	6.4	--	70	0	18	6.0
	49-01-21	211MRPAL	704	--	6.5	--	--	--	--	--
	49-01-27	211MRPAL	704	--	6.5	--	--	--	--	--
	49-02-18	211MRPAL	704	--	6.6	--	78	0	18	8.0
	49-03-17	211MRPAL	704	--	6.3	--	78	0	18	8.0
	49-04-21	211MRPAL	704	--	6.3	--	85	0	21	8.0
	49-04-25	211MRPAL	1028	305	6.9	14.0	83	0	20	8.0
	49-05-26	211MRPAL	704	--	6.5	--	80	0	19	8.0
	49-12-29	211MRPAL	704	--	6.3	--	87	0	15	12
	50-01-19	211MRPAL	704	--	6.4	--	91	0	20	10
	50-01-26	211MRPAL	704	--	--	--	100	--	14	16
	50-02-23	211MRPAL	704	--	6.3	--	90	0	19	10
	50-04-27	211MRPAL	704	--	6.4	--	91	0	20	10
	50-07-25	211MRPAL	704	--	6.1	--	110	0	22	10
	50-09-26	211MRPAL	704	--	6.5	--	120	0	26	14
	50-09-28	211MRPAL	704	--	6.5	--	140	0	24	19
	50-10-27	211MRPAL	704	--	6.4	--	120	0	26	13
	50-11-15	211MRPAL	704	--	6.5	--	130	8	25	17
	50-12-28	211MRPAL	704	--	6.4	--	130	9	24	18
	51-01-30	211MRPAL	704	--	6.4	--	130	0	24	18
	51-02-28	211MRPAL	704	--	6.4	--	120	0	25	15
	51-03-30	211MRPAL	704	--	6.6	--	110	0	24	12
	51-09-28	211MRPAL	704	--	6.1	--	120	--	26	14
	51-10-15	211MRPAL	704	--	6.2	--	140	25	31	15
	51-10-30	211MRPAL	704	--	6.2	--	140	25	31	15
	51-11-26	211MRPAL	704	--	6.1	--	140	19	32	14
	51-12-20	211MRPAL	704	--	6.0	--	140	22	32	15
	52-01-30	211MRPAL	704	--	6.1	--	140	37	31	14
	52-02-28	211MRPAL	704	--	6.0	--	130	31	27	15
	52-03-27	211MRPAL	704	--	6.0	--	130	0	29	15
	52-04-28	211MRPAL	704	--	6.1	--	130	0	30	14
	52-05-28	211MRPAL	704	--	6.3	--	144	9	29	12
	52-06-26	211MRPAL	704	--	6.4	--	180	48	50	13
	52-08-21	211MRPAL	704	--	6.1	--	140	--	--	--
	52-09-26	211MRPAL	704	--	6.0	--	140	--	56	--
	52-10-23	211MRPAL	704	--	6.0	--	--	--	--	--
	53-02-15	211MRPAL	704	--	6.2	--	--	--	--	--
	53-03-17	211MRPAL	704	--	6.2	--	162	29	44	--
	53-04-29	211MRPAL	704	--	6.1	--	160	0	--	--
	53-05-28	211MRPAL	704	--	6.0	--	--	--	--	--
	54-04-12	211MRPAL	704	--	6.0	--	220	80	41	28
	71-12-08	211MRPAL	1028	696	6.7	16.3	240	33	55	26
	73-06-06	211MRPAL	1028	773	6.6	15.5	270	86	67	26
3	43-04-13	211MRPAL	704	--	6.8	--	19	0	5.7	1.1
	43-07-19	211MRPAL	704	--	7.2	--	23	0	3.7	3.4
	44-02-15	211MRPAL	704	--	6.5	--	19	0	6.0	1.0
	44-06-19	211MRPAL	704	--	7.0	--	35	0	8.3	3.4
	44-10-03	211MRPAL	704	--	6.4	--	41	0	11	3.3

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	132	11	22	--	11	180	.00	2000	--	2
--	--	136	12	20	--	11	190	.04	2000	--	
--	--	146	10	16	--	11	186	.04	1700	--	
--	--	135	11	22	--	11	181	.04	2500	--	
--	--	134	11	20	--	15	179	.02	2400	--	
--	--	137	13	20	--	12	183	.03	2700	--	
--	--	--	15	--	--	--	--	--	2200	--	
--	--	146	11	22	--	13	92	.03	2900	--	
--	--	--	18	--	--	--	--	--	2000	--	
--	--	--	13	--	--	--	--	--	1600	--	
--	--	144	13	24	--	12	223	.03	1700	--	
--	--	145	13	23	--	11	181	.05	2300	--	
--	--	135	15	24	--	12	153	3.40	3600	--	
28	3.6	133	13	18	.3	12	174	.80	4000	--	
--	--	144	14	30	--	14	330	.02	3500	--	
--	--	110	28	44	--	9.0	325	.04	2400	--	
--	--	158	28	30	--	14	216	--	3900	--	
--	--	--	--	--	--	9.0	285	--	3000	--	
--	--	137	36	31	--	11	228	.03	3000	--	
--	--	159	28	30	--	14	216	--	3900	--	
--	--	152	21	27	--	9.0	--	3.60	5000	--	
--	--	157	24	25	--	11	275	.00	5300	--	
--	--	182	20	28	--	15	202	.00	7700	--	
--	--	183	20	26	--	10	225	.00	5600	--	
--	--	152	17	31	--	9.0	205	.00	7000	--	
--	--	152	18	29	--	13	322	.04	6100	--	
--	--	172	12	30	--	7.0	210	.20	6300	--	
--	--	172	17	29	--	6.0	245	.02	6800	--	
--	--	165	24	28	--	9.4	240	.40	4800	--	
--	--	--	39	33	--	7.0	230	--	4900	--	
--	--	139	29	30	--	9.0	232	1.80	5000	--	
--	--	139	29	30	--	9.0	232	.20	5000	--	
--	--	144	25	35	--	9.0	275	--	5300	--	
--	--	146	26	36	--	9.0	275	--	4900	--	
--	--	120	26	36	--	10	245	--	5200	--	
--	--	120	29	35	--	10	240	--	5400	--	
--	--	168	31	32	--	10	212	--	5200	--	
--	--	171	--	33	--	10	210	--	5600	--	
--	--	165	26	30	--	10	--	--	5400	--	
--	--	159	--	39	--	10	--	--	5600	--	
--	--	--	46	--	--	--	--	--	5300	--	
--	--	--	45	35	--	--	--	--	5300	--	
--	--	--	44	28	--	--	--	--	4000	230	
--	--	--	--	--	--	--	--	--	--	--	
--	--	162	61	34	--	10	--	--	5500	530	
--	--	196	66	30	--	10	--	--	5320	--	
--	--	--	--	51	--	--	--	--	--	--	
--	--	166	75	51	--	10	--	--	2900	--	
39	12	258	95	41	.8	9.6	402	.43	56000	2900	
40	5.4	224	88	42	.3	10	485	.00	--	4600	
--	--	79	9.7	20	--	10	121	.00	70	--	3
--	--	73	7.4	23	--	19	124	.30	--	--	
--	--	79	4.9	24	--	25	125	.70	0	--	
--	--	79	8.0	28	--	13	142	.40	100	--	
--	--	79	11	26	--	2.2	140	.10	70	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE
IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
3	45-10-11	211MRPAL	704	--	6.1	--	60	0	13	6.5
	45-11-15	211MRPAL	1028	252	6.3	14.0	59	0	14	5.9
	45-12-13	211MRPAL	1028	262	6.2	13.0	--	--	--	--
	45-12-13	211MRPAL	704	--	6.1	--	62	0	15	5.9
	46-01-03	211MRPAL	1028	264	6.2	14.0	--	--	--	--
	46-01-10	211MRPAL	704	--	6.1	--	63	0	15	6.2
	46-02-14	211MRPAL	1028	272	6.3	14.0	64	0	--	--
	46-02-15	211MRPAL	704	--	6.1	--	63	0	14	7.0
	46-03-14	211MRPAL	1028	269	6.4	14.0	72	2	--	--
	46-03-15	211MRPAL	704	--	6.3	--	63	0	15	6.2
	46-04-12	211MRPAL	704	--	6.1	--	68	0	16	6.8
	46-04-25	211MRPAL	1028	276	6.3	14.0	63	0	--	--
	46-05-09	211MRPAL	1028	279	6.4	13.0	68	1	--	--
	46-05-17	211MRPAL	704	--	6.0	--	69	0	16	7.0
	46-06-20	211MRPAL	1028	285	6.5	14.0	75	9	--	--
	46-06-28	211MRPAL	704	--	6.1	--	83	11	18	9.2
	46-07-11	211MRPAL	1028	--	6.6	14.0	80	11	--	--
	46-09-12	211MRPAL	1028	309	6.4	14.0	90	19	--	--
	46-09-26	211MRPAL	1028	309	6.2	14.0	99	28	--	--
	46-10-02	211MRPAL	704	--	5.9	--	88	0	21	8.7
	46-10-10	211MRPAL	1028	314	6.3	14.0	92	15	--	--
	46-11-04	211MRPAL	704	--	5.9	--	97	6	23	9.7
	46-12-05	211MRPAL	1028	334	6.3	14.0	102	15	--	--
	46-12-30	211MRPAL	704	--	5.9	--	120	27	23	14
	47-01-16	211MRPAL	1028	338	6.3	14.0	--	--	--	--
	47-01-30	211MRPAL	704	--	6.1	--	99	0	24	9.5
	47-02-27	211MRPAL	1028	--	6.2	13.0	103	11	--	--
	47-02-28	211MRPAL	704	--	6.1	--	120	0	28	11
	47-03-13	211MRPAL	1028	336	6.2	14.0	--	--	--	--
	47-03-31	211MRPAL	704	--	6.1	--	120	26	28	11
	47-05-02	211MRPAL	704	--	5.9	--	110	18	27	9.8
	47-06-05	211MRPAL	704	--	5.9	--	110	9	27	9.1
	47-07-07	211MRPAL	704	--	6.1	--	110	12	29	10
	47-07-31	211MRPAL	704	--	6.1	--	120	71	29	11
	47-09-05	211MRPAL	704	--	6.1	--	160	91	46	10
	47-10-02	211MRPAL	704	--	6.1	--	120	16	31	11
	47-10-30	211MRPAL	704	--	6.1	--	110	9	26	11
	48-01-09	211MRPAL	704	--	5.9	--	110	0	24	11
	48-02-05	211MRPAL	704	--	--	--	120	4	26	12
	48-03-05	211MRPAL	704	--	5.9	--	100	0	22	12
	48-04-09	211MRPAL	704	--	5.9	--	150	44	45	9.0
	48-05-07	211MRPAL	704	--	5.9	--	99	0	24	9.6
	48-06-14	211MRPAL	704	--	6.1	--	91	0	27	5.8
	48-07-09	211MRPAL	704	--	6.1	--	91	0	27	5.7
	48-08-06	211MRPAL	704	--	6.1	--	95	0	28	6.0
	48-09-03	211MRPAL	704	--	6.1	--	130	0	29	13
	48-10-08	211MRPAL	704	--	--	--	120	1	27	13
	48-11-05	211MRPAL	704	--	6.3	--	130	14	30	14
	48-12-13	211MRPAL	704	--	6.4	--	130	19	30	14
	49-01-06	211MRPAL	704	--	6.4	--	--	--	--	--
	49-01-19	211MRPAL	704	--	6.2	--	130	19	30	13
	49-01-21	211MRPAL	704	--	6.3	--	--	--	--	--
	49-01-27	211MRPAL	704	--	6.3	--	--	--	--	--
	49-02-18	211MRPAL	704	--	6.5	--	130	1	29	13
	49-03-17	211MRPAL	704	--	6.2	--	100	0	24	10

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	83	9.1	63	.0	7.0	156	.10	70	--	3
25	3.6	76	12	21	.3	15	148	2.70	20	0	
--	--	82	--	23	--	--	--	3.20	--	--	
--	--	82	11	26	--	11	155	.02	100	--	
--	--	80	--	23	--	--	--	3.20	--	--	
--	--	88	12	27	--	19	158	.10	100	--	
--	--	86	15	25	--	--	--	2.90	100	--	
--	--	87	6.4	27	--	32	160	.03	100	--	
--	--	85	15	26	--	--	--	2.70	100	--	
--	--	83	9.5	27	--	14	164	.02	100	--	
--	--	88	17	29	--	14	173	.20	60	--	
--	--	83	14	24	--	--	--	3.40	100	--	
--	--	82	16	23	--	--	--	2.70	100	--	
--	--	85	13	31	--	8.0	155	--	100	--	
--	--	80	15	26	--	--	--	4.10	160	--	
--	--	87	15	31	--	8.0	175	.00	100	--	
--	--	84	19	25	--	--	--	3.60	<100	--	
--	--	86	21	25	--	--	--	2.10	--	--	
--	--	86	21	26	--	--	--	1.90	--	--	
--	--	88	17	34	--	15	200	--	100	--	
--	--	94	29	26	--	--	--	4.10	--	--	
--	--	111	21	34	--	19	219	.02	100	--	
--	--	106	25	26	--	--	--	4.50	--	--	
--	--	107	17	30	--	18	216	.02	100	--	
--	--	107	--	--	--	--	--	--	--	--	
--	--	126	21	30	--	14	260	.01	100	--	
--	--	112	20	26	--	--	--	3.40	--	--	
--	--	147	17	32	--	15	198	.10	100	--	
--	--	110	--	--	--	--	--	--	--	--	
--	--	109	19	36	--	15	296	.00	100	--	
--	--	109	13	32	--	16	208	.01	30	--	
--	--	117	23	32	--	16	212	.02	100	--	
--	--	124	21	33	--	15	196	.02	100	--	
--	--	54	22	32	--	11	223	.01	200	--	
--	--	78	22	32	--	32	212	.00	100	--	
--	--	129	20	30	--	17	216	.02	140	--	
--	--	124	21	28	--	14	244	.01	0	--	
--	--	158	20	28	--	15	207	.03	140	--	
--	--	134	21	28	--	13	216	1.50	140	--	
--	--	137	19	28	--	16	197	.05	560	--	
--	--	128	19	22	--	16	188	.04	980	--	
--	--	124	20	26	--	15	220	.04	1500	--	
--	--	138	24	32	--	16	230	.04	280	--	
--	--	134	23	--	--	16	240	.04	140	--	
--	--	134	25	32	--	15	248	.04	70	--	
--	--	161	24	34	--	14	257	.04	140	--	
--	--	146	25	28	--	14	229	4.50	210	--	
--	--	144	25	28	--	16	229	.34	280	--	
--	--	138	26	30	--	14	224	.05	280	--	
--	--	--	27	--	--	--	--	--	280	--	
--	--	134	27	30	--	16	120	.05	70	--	
--	--	--	27	--	--	--	--	--	500	--	
--	--	--	27	--	--	--	--	--	590	--	
--	--	152	27	32	--	14	266	.05	210	--	
--	--	128	26	34	--	15	220	.04	200	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
3	49-04-21	211MRPAL	704	--	6.4	--	140	13	25	18
	49-04-25	211MRPAL	1028	402	6.2	14.0	140	18	32	14
	49-05-26	211MRPAL	704	--	6.3	--	140	32	36	12
	49-06-30	211MRPAL	704	--	6.3	--	130	18	28	14
	49-07-28	211MRPAL	704	--	6.3	--	140	31	35	13
	49-08-25	211MRPAL	704	--	6.4	--	130	17	33	11
	49-09-29	211MRPAL	704	--	--	--	130	--	33	12
	49-10-27	211MRPAL	704	--	6.4	--	120	0	30	10
	49-12-29	211MRPAL	704	--	6.2	--	62	0	6.6	11
	50-02-23	211MRPAL	704	--	6.4	--	160	47	34	18
	50-03-23	211MRPAL	704	--	6.3	--	130	24	33	12
	50-05-18	211MRPAL	704	--	6.3	--	--	--	--	--
	50-07-25	211MRPAL	704	--	6.2	--	164	44	28	16
	50-09-26	211MRPAL	704	--	6.3	--	180	71	37	22
	50-09-28	211MRPAL	704	--	6.3	--	190	100	35	24
	50-10-27	211MRPAL	704	--	6.3	--	190	110	37	24
	50-11-15	211MRPAL	704	--	6.3	--	170	72	36	19
	50-12-28	211MRPAL	704	--	6.2	--	140	27	31	14
	51-01-30	211MRPAL	704	--	6.0	--	150	48	29	18
	51-02-28	211MRPAL	704	--	6.0	--	150	39	30	19
	51-03-30	211MRPAL	704	--	6.0	--	160	33	29	22
	51-09-28	211MRPAL	704	--	6.3	--	160	--	38	16
	51-10-15	211MRPAL	704	--	6.3	--	170	51	37	19
	51-10-30	211MRPAL	704	--	6.3	--	170	51	37	19
	51-11-26	211MRPAL	704	--	6.3	--	170	58	36	19
	51-12-20	211MRPAL	704	--	6.2	--	170	70	35	20
	52-01-30	211MRPAL	704	--	6.2	--	170	89	37	19
	52-02-28	211MRPAL	704	--	6.2	--	170	63	35	20
	52-03-27	211MRPAL	704	--	6.2	--	190	92	39	22
	52-04-28	211MRPAL	704	--	6.3	--	190	90	38	23
	52-05-28	211MRPAL	704	--	6.3	--	252	150	37	20
	52-06-26	211MRPAL	704	--	6.2	--	230	130	40	24
	52-08-21	211MRPAL	704	--	6.3	--	200	--	--	--
	52-09-26	211MRPAL	704	--	6.3	--	200	--	33	41
	52-10-23	211MRPAL	704	--	6.3	--	--	--	--	--
	53-02-15	211MRPAL	704	--	6.2	--	--	--	--	--
	53-03-17	211MRPAL	704	--	6.2	--	192	37	20	--
	53-04-29	211MRPAL	704	--	6.2	--	189	2	--	--
	53-05-28	211MRPAL	704	--	6.2	--	--	--	--	--
	54-04-12	211MRPAL	704	--	6.2	--	216	66	44	25
	56-01-17	211MRPAL	1028	491	8.3	--	160	32	41	15
	57-07-23	211MRPAL	1028	480	6.3	15.0	170	37	40	16
	67-08-04	211MRPAL	1028	415	6.6	--	140	16	30	16
4	43-04-13	211MRPAL	704	--	6.9	--	20	0	5.0	1.9
	43-07-19	211MRPAL	704	--	7.3	--	20	0	4.4	2.2
	44-02-15	211MRPAL	704	--	6.6	--	21	0	6.4	1.1
	44-06-19	211MRPAL	704	--	7.1	--	45	0	11	4.3
	44-10-03	211MRPAL	704	--	6.4	--	30	0	8.3	2.3
	45-10-11	211MRPAL	704	--	5.9	--	44	0	8.3	5.6
	45-11-15	211MRPAL	1028	219	6.2	14.0	46	0	11	4.4
	45-12-13	211MRPAL	1028	224	6.1	14.0	--	--	--	--
	45-12-13	211MRPAL	704	--	6.0	--	51	0	12	5.2
	46-01-10	211MRPAL	704	--	5.9	--	47	0	12	4.2
	46-01-17	211MRPAL	1028	227	6.1	--	54	0	--	--
	46-02-14	211MRPAL	1028	232	6.2	14.0	56	0	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	150	32	34	--	14	302	4.10	210	--	3
27	5.9	146	30	27	.2	15	254	2.50	1000	--	
--	--	131	25	44	--	15	360	.03	200	--	
--	--	134	27	21	--	10	230	4.10	200	--	
--	--	134	27	31	--	10	268	.02	200	--	
--	--	134	28	30	--	12	265	.05	200	--	
--	--	--	32	30	--	14	289	.05	2600	--	
--	--	148	30	30	--	16	288	.04	210	--	
--	--	150	27	34	--	10	295	.04	350	--	
--	--	136	38	34	--	10	250	.02	200	--	
--	--	132	32	30	--	14	289	.05	260	--	
--	--	--	39	--	--	--	--	--	170	--	
--	--	146	43	35	--	8.0	--	2.00	200	--	
--	--	137	44	31	--	12	306	.00	470	--	
--	--	103	51	46	--	12	141	--	590	--	
--	--	99	47	41	--	15	151	.00	330	--	
--	--	117	56	35	--	10	249	.00	210	--	
--	--	132	55	34	--	17	248	.04	430	--	
--	--	122	54	34	--	9.0	255	.20	200	--	
--	--	138	50	38	--	7.5	221	.04	425	--	
--	--	159	56	35	--	11	225	.05	680	--	
--	--	--	49	39	--	7.0	210	--	560	--	
--	--	146	44	37	--	9.0	215	.20	490	--	
--	--	146	44	37	--	9.0	215	.20	490	--	
--	--	134	41	31	--	9.0	200	--	630	--	
--	--	122	44	30	--	10	210	--	1100	--	
--	--	100	46	30	--	9.0	200	--	1100	--	
--	--	130	46	30	--	12	198	--	900	--	
--	--	117	44	38	--	11	240	--	900	--	
--	--	121	--	40	--	11	241	--	900	--	
--	--	122	43	39	--	11	--	--	1000	--	
--	--	120	--	36	--	12	--	--	1000	--	
--	--	--	56	--	--	--	--	--	630	--	
--	--	--	56	30	--	--	--	--	630	--	
--	--	--	58	34	--	--	--	--	300	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	189	54	35	--	12	--	--	560	650	
--	--	228	56	34	--	12	--	--	640	--	
--	--	--	--	36	--	--	--	--	--	--	
--	--	183	44	34	--	11	--	--	910	--	
--	--	155	59	27	.4	15	292	4.30	5800	0	
26	4.7	157	55	25	.6	14	294	2.90	11000	610	
30	3.6	152	48	27	.2	14	248	.05	4700	200	
--	--	85	9.7	24	--	15	133	.00	200	--	4
--	--	85	7.1	23	--	15	125	.30	--	--	
--	--	79	6.2	24	--	27	128	.75	980	--	
--	--	79	12	25	--	14	138	.35	310	--	
--	--	67	10	22	--	2.6	144	.14	300	--	
--	--	76	12	51	.0	10	149	.03	400	--	
25	3.8	72	20	13	.2	17	135	1.10	480	--	
--	--	77	--	15	--	--	--	1.40	--	--	
--	--	82	19	17	--	10	151	.10	600	--	
--	--	83	19	19	--	30	145	.00	500	--	
--	--	76	--	16	--	--	--	1.24	--	--	
--	--	80	27	16	--	--	--	1.11	<100	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
4	46-02-15	211MRPAL	704	--	5.9	--	51	1	12	5.0
	46-03-28	211MRPAL	1028	232	6.1	14.0	50	0	--	--
	46-04-11	211MRPAL	1028	238	6.1	14.0	52	0	--	--
	46-04-12	211MRPAL	704	--	5.9	--	54	0	13	5.2
	46-05-09	211MRPAL	1028	237	6.2	14.0	57	0	--	--
	46-05-17	211MRPAL	704	--	5.9	--	48	0	12	4.4
	46-06-20	211MRPAL	1028	239	6.3	--	56	0	--	--
	46-06-28	211MRPAL	704	--	6.0	--	57	0	13	6.0
	46-07-11	211MRPAL	1028	241	6.5	14.0	58	0	--	--
	46-08-15	211MRPAL	1028	253	6.7	14.0	61	0	15	5.6
	46-09-03	211MRPAL	704	--	5.8	--	59	0	14	5.9
	46-09-26	211MRPAL	1028	252	6.2	14.0	72	1	--	--
	46-10-02	211MRPAL	704	--	5.8	--	61	0	15	5.8
	46-11-04	211MRPAL	704	--	5.9	--	68	0	15	7.3
	46-12-05	211MRPAL	1028	268	6.3	14.0	78	2	--	--
	46-12-30	211MRPAL	704	--	5.9	--	89	9	16	12
	47-01-30	211MRPAL	704	--	5.9	--	72	0	18	6.6
	47-02-27	211MRPAL	1028	275	6.2	16.0	76	0	--	--
	47-02-28	211MRPAL	704	--	5.9	--	81	0	20	7.6
	47-03-31	211MRPAL	704	--	5.9	--	78	0	19	7.5
	47-07-07	211MRPAL	704	--	5.9	--	84	2	22	7.0
	47-07-31	211MRPAL	704	--	5.9	--	87	0	23	7.1
	47-09-05	211MRPAL	704	--	5.9	--	70	0	16	7.4
	47-10-02	211MRPAL	704	--	5.9	--	90	0	24	7.3
	47-10-30	211MRPAL	704	--	5.9	--	83	0	20	8.0
	48-01-09	211MRPAL	704	--	--	--	85	0	21	8.0
	48-02-05	211MRPAL	704	--	6.2	--	90	0	22	8.5
	48-03-05	211MRPAL	704	--	5.9	--	88	0	22	8.0
	48-04-09	211MRPAL	704	--	5.9	--	77	0	16	9.0
	48-05-07	211MRPAL	704	--	5.9	--	100	0	24	10
	48-06-14	211MRPAL	704	--	5.9	--	28	0	2.4	5.4
	48-08-06	211MRPAL	704	--	6.0	--	84	0	25	5.2
	48-09-03	211MRPAL	704	--	6.0	--	110	0	26	10
	48-10-08	211MRPAL	704	--	--	--	110	9	26	11
	48-11-05	211MRPAL	704	--	6.4	--	110	11	27	11
	48-12-13	211MRPAL	704	--	6.4	--	110	4	27	11
	49-01-06	211MRPAL	704	--	6.4	--	--	--	--	--
	49-01-19	211MRPAL	704	--	6.4	--	120	28	30	9.8
	49-01-21	211MRPAL	704	--	6.4	--	--	--	--	--
	49-02-18	211MRPAL	704	--	6.3	--	120	16	27	12
	49-03-17	211MRPAL	704	--	6.4	--	100	0	25	10
	49-04-26	211MRPAL	1028	351	6.5	--	120	21	28	11
	49-05-26	211MRPAL	704	--	6.2	--	120	0	27	13
	49-06-30	211MRPAL	704	--	6.2	--	110	9	26	12
	49-07-28	211MRPAL	704	--	6.2	--	140	36	32	15
	49-08-25	211MRPAL	704	--	6.4	--	150	39	39	12
	49-09-29	211MRPAL	704	--	--	--	140	--	39	11
	49-10-27	211MRPAL	704	--	6.3	--	130	16	37	8.0
	49-12-29	211MRPAL	704	--	6.3	--	110	1	16	17
	50-01-19	211MRPAL	704	--	6.3	--	140	34	38	12
	50-01-26	211MRPAL	704	--	--	--	110	--	16	17
	50-02-23	211MRPAL	704	--	6.4	--	150	43	28	20
	50-03-23	211MRPAL	704	--	6.4	--	140	27	39	11
	50-04-27	211MRPAL	704	--	6.3	--	140	34	38	12
	50-05-18	211MRPAL	704	--	6.3	--	--	--	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	60	15	19	--	28	94	.02	600	--	4
--	--	73	27	17	--	--	--	1.60	<100	--	
--	--	77	27	14	--	--	--	1.36	<100	--	
--	--	87	22	17	--	11	147	.12	600	--	
--	--	73	29	11	--	--	--	1.24	420	--	
--	--	82	24	19	--	12	172	.00	500	--	
--	--	75	25	16	--	--	--	1.20	120	--	
--	--	79	24	22	--	6.4	108	.00	500	--	
--	--	76	30	14	--	--	--	1.11	<100	--	
25	2.5	84	23	15	.2	15	152	1.13	640	--	
--	--	100	20	22	--	17	146	.00	400	--	
--	--	86	29	16	--	--	--	1.50	--	--	
--	--	90	24	28	--	18	164	.00	600	--	
--	--	95	27	21	--	15	188	.00	600	--	
--	--	93	24	14	--	--	--	1.22	--	--	
--	--	98	16	20	--	30	176	.00	600	--	
--	--	105	22	18	--	16	184	.00	600	--	
--	--	102	24	17	--	--	--	1.31	--	--	
--	--	105	22	20	--	16	171	.04	600	--	
--	--	115	24	24	--	17	176	.01	560	--	
--	--	100	22	25	--	15	172	.01	630	--	
--	--	106	22	25	--	16	186	.01	840	--	
--	--	115	22	24	--	32	188	.00	700	--	
--	--	117	20	22	--	15	192	.01	1330	--	
--	--	118	20	22	--	15	190	.01	910	--	
--	--	134	18	22	--	15	189	.04	1200	--	
--	--	122	18	22	--	15	192	.01	1300	--	
--	--	138	19	26	--	15	199	.02	1500	--	
--	--	128	20	24	--	16	200	.02	1100	--	
--	--	126	20	24	--	15	224	.02	1500	--	
--	--	118	21	26	--	16	210	.02	1000	--	
--	--	124	20	20	--	15	222	.03	1300	--	
--	--	140	19	26	--	15	226	.03	980	--	
--	--	123	21	26	--	15	212	2.30	1500	--	
--	--	124	20	24	--	16	217	.02	1600	--	
--	--	132	23	30	--	15	214	.02	2000	--	
--	--	--	21	--	--	--	--	--	1800	--	
--	--	106	23	28	--	16	111	.03	490	--	
--	--	--	23	--	--	--	--	--	2000	--	
--	--	123	26	28	--	16	240	.03	770	--	
--	--	126	25	30	--	16	223	.02	1200	--	
24	3.8	115	26	22	.2	16	217	3.84	1100	--	
--	--	149	26	34	--	15	262	.05	2000	--	
--	--	129	25	29	--	10	210	2.30	1600	--	
--	--	129	28	29	--	10	255	.02	2700	--	
--	--	132	23	31	--	14	238	.04	2400	--	
--	--	--	23	31	--	10	260	.04	2200	--	
--	--	133	33	31	--	11	265	.04	2000	--	
--	--	133	28	34	--	12	270	.03	2600	--	
--	--	134	45	32	--	10	240	--	2100	--	
--	--	--	--	--	--	12	270	--	2600	--	
--	--	131	34	28	--	9.0	240	.01	2900	--	
--	--	141	23	32	--	10	268	.04	2200	--	
--	--	134	45	32	--	10	240	.00	2100	--	
--	--	--	42	--	--	--	--	--	2300	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
4	50-10-27	211MRPAL	704	--	6.4	--	170	130	33	22
	50-11-15	211MRPAL	--	--	6.3	--	190	130	42	20
	50-12-28	211MRPAL	704	--	6.0	--	160	23	34	19
	51-01-30	211MRPAL	--	--	6.0	--	170	95	38	19
	51-02-28	211MRPAL	--	--	6.6	--	170	110	32	21
	51-03-30	211MRPAL	704	--	6.1	--	170	82	35	20
	51-09-28	211MRPAL	--	--	6.2	--	150	--	38	14
	51-10-30	211MRPAL	--	--	6.2	--	160	54	31	20
	51-11-26	211MRPAL	--	--	6.4	--	160	82	31	21
	51-12-20	211MRPAL	704	--	6.2	--	160	60	32	19
	52-01-30	211MRPAL	--	--	6.3	--	160	79	31	20
	52-02-28	211MRPAL	704	--	6.3	--	170	62	38	19
	52-03-27	211MRPAL	--	--	6.2	--	200	150	42	24
	52-04-28	211MRPAL	--	--	6.2	--	200	110	42	22
	52-05-28	211MRPAL	--	--	6.0	--	190	110	41	22
	52-06-26	211MRPAL	--	--	6.1	--	180	97	38	20
	52-08-21	211MRPAL	--	--	6.0	--	--	--	--	--
	52-09-26	211MRPAL	--	--	6.1	--	210	--	41	27
	52-10-23	211MRPAL	--	--	6.1	--	--	--	--	--
	53-02-15	211MRPAL	--	--	6.3	--	--	--	--	--
	53-03-17	211MRPAL	--	--	6.3	--	--	--	64	--
	53-04-29	211MRPAL	--	--	6.1	--	--	--	--	--
	53-05-28	211MRPAL	--	--	6.0	--	--	--	--	--
	54-04-12	211MRPAL	704	--	6.3	--	210	55	45	24
	54-04-29	211MRPAL	--	--	--	--	--	--	--	--
	57-07-23	211MRPAL	1028	460	6.2	15.0	170	23	40	16
	67-08-04	211MRPAL	1028	508	6.6	--	210	70	42	26
	71-05-17	211MRPAL	1028	524	6.4	15.1	210	59	45	24
5	42-09-30	211MRPAL	704	--	--	--	27	0	5.0	3.5
	43-01-02	211MRPAL	704	--	7.1	--	43	--	9.8	4.5
	43-04-13	211MRPAL	704	--	6.8	--	59	0	15	5.2
	43-07-21	211MRPAL	704	--	6.9	--	69	0	18	5.9
	43-11-16	211MRPAL	--	--	6.7	--	90	0	19	10
	54-10-08	211MRPAL	1028	469	8.2	14.0	180	58	45	16
6	43-08-09	211MRPAL	--	--	--	--	150	130	33	17
	43-11-09	211MRPAL	--	--	5.9	--	140	110	29	16
	44-02-15	211MRPAL	704	--	5.5	--	110	86	26	11
	44-06-19	211MRPAL	--	--	6.0	--	88	23	23	7.3
	44-08-18	211MRPAL	--	--	5.6	--	110	71	25	11
	46-05-19	211MRPAL	704	--	6.4	--	140	71	28	18
	46-05-23	211MRPAL	1028	411	6.1	13.0	--	--	--	--
	46-06-11	211MRPAL	--	--	5.8	--	160	90	31	20
	46-06-11	211MRPAL	--	--	6.8	--	180	110	38	20
	46-06-28	211MRPAL	--	--	6.5	--	160	100	31	20
	46-08-15	211MRPAL	1028	391	6.4	13.0	150	100	32	18
	46-09-03	211MRPAL	704	--	6.5	--	150	91	30	18
	46-10-02	211MRPAL	704	--	6.2	--	150	93	31	18
	46-11-04	211MRPAL	704	--	6.7	--	170	99	36	20
	46-12-30	211MRPAL	704	--	7.7	--	170	91	40	18
	47-01-30	211MRPAL	704	--	7.9	--	170	80	41	17
	47-02-28	211MRPAL	704	--	7.3	--	190	99	46	17
	47-03-31	211MRPAL	704	--	7.1	--	180	100	44	17
	47-03-31	211MRPAL	704	--	--	--	170	--	40	17
	47-05-02	211MRPAL	704	--	7.8	--	180	99	47	16
	47-06-05	211MRPAL	704	--	7.5	--	170	85	46	14

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	55	30	41	--	16	210	.00	310	--	4
--	--	74	65	38	--	12	385	.02	170	--	
--	--	172	61	32	--	17	176	.05	1200	--	
--	--	95	63	39	--	8.0	360	.49	200	--	
--	--	75	68	42	--	8.5	235	.28	420	--	
--	--	107	59	40	--	13	236	.30	470	--	
--	--	--	50	41	--	6.0	201	--	140	--	
--	--	129	49	42	--	10	210	.23	260	--	
--	--	100	49	38	--	10	212	--	840	--	
--	--	120	51	38	--	10	200	--	910	--	
--	--	98	52	38	--	8.0	210	--	1300	--	
--	--	135	52	40	--	10	200	--	840	--	
--	--	61	48	36	--	12	190	--	980	--	
--	--	99	--	35	--	12	180	--	980	--	
--	--	97	50	38	--	12	--	--	2000	--	
--	--	98	--	35	--	11	--	--	3100	--	
--	--	--	79	--	--	--	--	--	390	--	
--	--	--	76	40	--	--	--	--	420	--	
--	--	--	73	31	--	--	--	--	390	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	210	73	34	--	11	--	--	1500	330	
--	--	215	72	35	--	11	--	--	0	--	
--	--	--	--	46	--	--	--	--	--	--	
--	--	190	50	37	--	12	--	--	2300	--	
--	--	--	--	--	--	--	--	--	98	--	
22	4.9	174	45	17	.6	13	280	2.50	12000	230	
26	4.2	173	96	20	.2	14	335	.05	10000	320	
22	4.4	186	82	21	.4	13	325	.05	290	360	
--	--	122	2.8	31	--	16	160	.00	--	--	5
--	--	--	13	33	--	10	187	.00	2900	--	
--	--	134	11	29	--	18	182	.00	2800	--	
--	--	159	11	26	--	14	234	.10	4000	--	
--	--	183	6.0	19	--	15	189	.05	7000	--	
--	--	146	2.0	17	.8	7.6	293	14.5	5900	--	
--	--	35	109	22	--	19	285	.90	1100	--	6
--	--	37	89	22	--	20	279	7.00	100	--	
--	--	31	71	26	--	27	217	1.50	0	--	
--	--	79	68	19	--	25	247	2.10	600	--	
--	--	43	77	22	--	38	262	1.70	200	--	
--	--	89	42	24	--	2.0	183	.00	70	--	
--	--	86	--	21	--	--	--	--	--	--	
--	--	85	95	22	--	15	273	.00	20	--	
--	--	85	107	24	--	20	294	.00	7	--	
--	--	71	95	24	--	--	--	.00	70	--	
16	3.1	66	96	18	.1	17	255	1.85	50	--	
--	--	71	74	26	--	19	295	.00	30	--	
--	--	71	97	26	--	22	172	.00	10	--	
--	--	89	92	20	--	16	284	.00	7	--	
--	--	101	97	20	--	18	280	.01	7	--	
--	--	113	81	22	--	18	286	.01	10	--	
--	--	105	81	22	--	20	273	.04	7	--	
--	--	95	76	24	--	17	296	.00	0	--	
--	--	--	82	24	--	19	352	.01	30	--	
--	--	100	66	22	--	17	285	.01	7	--	
--	--	107	81	24	--	22	226	.01	0	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
6	47-07-07	211MRPAL	704	--	7.3	--	170	86	43	16
	47-07-31	211MRPAL	704	--	7.2	--	170	82	40	16
	47-09-05	211MRPAL	704	--	7.6	--	120	33	23	16
	47-10-02	211MRPAL	704	--	7.3	--	170	130	42	16
	47-10-30	211MRPAL	704	--	7.5	--	160	72	35	17
	48-01-09	211MRPAL	704	--	7.2	--	160	65	34	17
	48-02-05	211MRPAL	704	--	7.3	--	160	72	37	17
	48-03-05	211MRPAL	704	--	7.1	--	160	66	38	16
	48-04-09	211MRPAL	704	--	6.7	--	180	100	42	19
	48-05-07	211MRPAL	704	--	6.9	--	170	89	37	19
	48-06-14	211MRPAL	704	--	6.7	--	150	72	37	15
	48-07-09	211MRPAL	704	--	7.0	--	140	52	39	9.3
	48-08-06	211MRPAL	704	--	6.9	--	140	51	34	13
	48-09-03	211MRPAL	704	--	6.8	--	170	88	38	19
	48-10-08	211MRPAL	704	--	--	--	160	83	33	19
	48-11-05	211MRPAL	704	--	7.0	--	160	75	34	19
	48-12-13	211MRPAL	704	--	7.2	--	180	88	39	19
	49-01-06	211MRPAL	704	--	7.0	--	--	--	--	--
	49-01-19	211MRPAL	704	--	7.1	--	180	92	40	19
	49-01-21	211MRPAL	--	--	7.0	--	--	--	--	--
	49-01-27	211MRPAL	--	--	6.9	--	--	--	--	--
	49-02-18	211MRPAL	704	--	7.1	--	170	86	39	18
	49-03-17	211MRPAL	704	--	7.1	--	180	91	37	20
	49-04-21	211MRPAL	704	--	7.1	--	110	19	23	12
	49-04-25	211MRPAL	1028	393	6.5	--	150	84	31	18
	49-05-26	211MRPAL	704	--	7.1	--	210	130	37	28
	49-06-30	211MRPAL	704	--	7.0	--	170	79	34	20
	49-07-28	211MRPAL	704	--	7.0	--	270	180	38	42
	49-08-25	211MRPAL	--	--	7.1	--	170	84	38	18
	49-09-29	211MRPAL	704	--	--	--	170	--	38	18
	49-10-27	211MRPAL	--	--	7.0	--	100	15	16	15
	49-12-29	211MRPAL	--	--	7.0	--	110	23	18	16
	50-01-19	211MRPAL	--	--	7.0	--	170	60	38	17
	50-01-26	211MRPAL	--	--	--	--	110	--	18	16
	50-02-23	211MRPAL	--	--	6.9	--	140	56	23	20
	50-03-23	211MRPAL	--	--	7.0	--	170	85	38	18
	50-04-27	211MRPAL	--	--	7.0	--	170	60	38	17
	50-07-25	211MRPAL	--	--	7.0	--	120	2	10	22
	50-09-26	211MRPAL	--	--	7.0	--	190	97	40	21
	50-09-28	211MRPAL	--	--	7.6	--	200	86	40	24
	50-10-27	211MRPAL	--	--	7.0	--	220	95	46	25
	50-11-15	211MRPAL	--	--	6.9	--	210	110	37	28
	50-12-28	211MRPAL	--	--	6.8	--	170	80	35	21
	51-01-30	211MRPAL	--	--	7.0	--	230	120	34	34
	51-02-28	211MRPAL	--	--	7.0	--	190	78	33	27
	51-03-30	211MRPAL	--	--	7.1	--	200	89	33	29
	51-09-28	211MRPAL	--	--	7.0	--	200	--	40	24
	51-10-15	211MRPAL	--	--	7.0	--	210	91	41	25
	51-10-30	211MRPAL	--	--	7.0	--	210	72	41	25
	51-11-26	211MRPAL	--	--	7.0	--	200	68	42	24
	51-12-20	211MRPAL	--	--	7.1	--	200	72	40	25
	52-01-30	211MRPAL	--	--	7.0	--	200	92	40	24
	52-02-28	211MRPAL	--	--	7.0	--	210	120	42	26
	52-03-27	211MRPAL	--	--	7.0	--	220	89	46	26
	52-04-28	211MRPAL	--	--	7.1	--	230	100	47	28

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	106	73	27	--	18	267	.03	0	--	6
--	--	102	74	23	--	20	304	.01	0	--	
--	--	111	77	20	--	40	300	.00	35	--	
--	--	98	76	20	--	17	275	.02	0	--	
--	--	104	77	20	--	17	260	.00	0	--	
--	--	110	77	20	--	22	270	.03	0	--	
--	--	110	78	20	--	18	280	.05	0	--	
--	--	115	81	22	--	18	276	.03	70	--	
--	--	96	97	18	--	17	288	.04	0	--	
--	--	100	101	18	--	16	250	.04	0	--	
--	--	100	102	18	--	16	313	.03	0	--	
--	--	102	91	18	--	17	318	.00	0	--	
--	--	106	88	18	--	19	314	.03	70	--	
--	--	104	87	22	--	17	316	.02	140	--	
--	--	95	86	22	--	18	287	2.71	0	--	
--	--	107	86	20	--	19	274	.03	0	--	
--	--	107	86	20	--	18	289	.03	0	--	
--	--	--	85	--	--	--	--	--	0	--	
--	--	105	81	24	--	18	154	.03	0	--	
--	--	--	84	--	--	--	--	--	0	--	
--	--	--	84	--	--	--	--	--	0	--	
--	--	104	83	25	--	18	280	.03	0	--	
--	--	102	79	29	--	15	245	.04	0	--	
--	--	107	78	27	--	18	239	2.30	0	--	
17	5.0	82	83	18	.1	19	264	2.94	500	--	
--	--	99	77	20	--	14	298	.03	0	--	
--	--	107	80	26	--	15	285	2.71	0	--	
--	--	107	85	26	--	12	281	.03	0	--	
--	--	103	85	25	--	18	275	.00	0	--	
--	--	--	80	25	--	15	298	--	0	--	
--	--	106	81	25	--	16	299	.00	0	--	
--	--	107	82	31	--	14	300	.00	0	--	
--	--	128	85	28	--	19	280	.00	0	--	
--	--	--	--	--	--	10	265	--	0	--	
--	--	102	86	24	--	10	270	.01	0	--	
--	--	103	80	25	--	15	298	.00	0	--	
--	--	128	85	28	--	19	280	.00	0	--	
--	--	139	85	48	--	10	--	2.30	0	--	
--	--	109	85	45	--	9.0	338	.00	0	--	
--	--	138	85	35	--	10	147	.00	0	--	
--	--	150	83	28	--	14	220	.00	30	--	
--	--	120	75	31	--	12	289	.02	35	--	
--	--	112	76	28	--	17	308	.04	14	--	
--	--	134	76	31	--	7.0	281	.21	0	--	
--	--	139	78	29	--	7.0	213	.06	50	--	
--	--	137	86	31	--	12	218	.10	30	--	
--	--	--	87	30	--	6.0	250	--	0	--	
--	--	139	80	31	--	12	250	.20	35	--	
--	--	163	80	31	--	12	250	.20	35	--	
--	--	165	86	40	--	10	250	--	0	--	
--	--	159	93	40	--	13	260	--	0	--	
--	--	130	89	40	--	12	250	--	0	--	
--	--	110	89	35	--	12	240	--	0	--	
--	--	162	91	40	--	10	279	--	0	--	
--	--	161	40	--	--	10	236	--	0	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE
IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
6	52-05-28	211MRPAL	--	--	7.0	--	230	100	47	28
	52-06-26	211MRPAL	--	--	6.9	--	170	34	38	17
	52-08-21	211MRPAL	--	--	7.0	--	--	--	--	--
	52-09-26	211MRPAL	--	--	7.0	--	240	--	42	32
	52-10-23	211MRPAL	--	--	7.0	--	--	--	--	--
	53-02-15	211MRPAL	--	--	6.9	--	--	--	--	--
	53-03-17	211MRPAL	--	--	6.9	--	--	--	34	--
	53-04-29	211MRPAL	--	--	6.7	--	--	--	--	--
	53-05-28	211MRPAL	--	--	6.9	--	--	--	--	--
	54-04-12	211MRPAL	--	--	6.5	--	230	130	46	28
	54-04-12	211MRPAL	1028	500	--	15.0	--	--	--	--
	56-06-11	211MRPAL	--	--	6.9	--	190	120	40	21
	57-07-23	211MRPAL	1028	582	6.1	14.0	240	100	50	27
	79-08-13	211MRPAL	84240	925	6.3	15.0	360	87	44	60
	80-11-04	211MRPAL	80010	765	6.3	14.0	320	44	54	44
	82-11-23	211MRPAL	80010	730	6.4	14.0	310	25	56	40
7	44-02-15	211MRPAL	704	--	5.1	--	--	--	9.1	--
	44-06-19	211MRPAL	--	--	7.4	--	69	4	24	2.3
	44-10-03	211MRPAL	--	--	7.2	--	29	0	8.3	1.9
	45-10-11	211MRPAL	704	--	7.0	--	36	0	8.0	3.9
	45-11-15	211MRPAL	1028	206	7.2	14.0	29	0	8.3	2.1
	45-12-13	211MRPAL	1028	204	7.0	14.0	--	--	--	--
	45-12-13	211MRPAL	1028	204	7.0	14.0	--	--	--	--
	45-12-13	211MRPAL	704	--	7.1	--	34	0	8.2	3.2
	46-01-10	211MRPAL	704	--	7.1	--	39	0	11	2.8
	46-01-17	211MRPAL	1028	206	7.1	--	36	0	--	--
	46-02-14	211MRPAL	1028	204	7.4	14.0	33	0	--	--
	46-02-15	211MRPAL	704	--	7.1	--	31	0	6.4	3.7
	46-03-14	211MRPAL	1028	203	7.2	--	33	0	--	--
	46-03-15	211MRPAL	704	--	7.1	--	27	0	8.5	1.5
	46-03-28	211MRPAL	1028	207	7.0	14.0	28	0	--	--
	46-04-11	211MRPAL	1028	206	7.2	14.0	32	0	--	--
	46-04-12	211MRPAL	704	--	7.1	--	33	0	9.0	2.6
	46-05-09	211MRPAL	1028	207	7.2	14.0	34	0	--	--
	46-05-17	211MRPAL	704	--	7.1	--	30	0	7.7	2.6
	46-06-20	211MRPAL	1028	205	7.2	14.0	32	0	--	--
	46-06-28	211MRPAL	704	--	7.1	--	41	0	8.7	4.6
	46-07-11	211MRPAL	1028	204	7.2	14.0	28	0	--	--
	46-07-26	211MRPAL	1028	207	7.2	14.0	32	0	--	--
	46-08-15	211MRPAL	1028	205	7.4	14.0	31	0	8.7	2.2
	46-09-03	211MRPAL	704	--	7.0	--	29	0	8.8	1.7
	46-10-02	211MRPAL	704	--	7.1	--	28	0	8.1	1.8
	46-10-10	211MRPAL	1028	204	7.2	14.0	33	0	--	--
	46-11-04	211MRPAL	704	--	7.0	--	29	0	7.1	2.8
	46-12-05	211MRPAL	1028	204	7.2	14.0	36	0	--	--
	46-12-30	211MRPAL	704	--	7.0	--	30	0	7.3	2.8
	47-01-30	211MRPAL	704	--	6.7	--	27	0	8.8	1.3
	47-02-28	211MRPAL	704	--	7.1	--	36	0	8.7	3.4
	47-03-31	211MRPAL	704	--	7.1	--	34	0	9.7	2.4
	47-07-05	211MRPAL	704	--	7.1	--	44	11	16	1.3
	47-07-07	211MRPAL	704	--	7.1	--	33	0	10	2.0
	47-07-31	211MRPAL	704	--	7.1	--	34	3	10	2.1
	47-09-05	211MRPAL	704	--	7.1	--	45	12	16	1.3
	48-04-09	211MRPAL	704	--	7.1	--	21	0	5.7	1.7
	48-05-07	211MRPAL	704	--	7.1	--	30	0	8.2	2.3

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	162	92	40	--	10	--	--	0	--	6
--	--	159	--	36	--	12	--	--	0	--	
--	--	--	92	--	--	--	--	--	0	--	
--	--	--	92	35	--	--	--	--	0	--	
--	--	--	91	34	--	--	--	--	0	1200	
--	--	--	--	--	--	--	--	--	--	--	
--	--	124	89	26	--	12	--	--	210	--	
--	--	264	90	24	--	12	--	--	0	--	
--	--	--	--	21	--	--	--	--	--	--	
--	--	120	98	37	--	10	--	--	1700	--	
--	--	--	--	20	--	--	--	--	--	--	
--	--	85	104	24	--	14	298	.00	20	--	
18	5.4	162	115	16	.5	13	381	3.84	12000	--	
32	6.0	327	170	41	.2	17	776	.01	26000	740	
28	3.9	336	130	40	--	17	526	--	26000	6200	
27	3.4	--	120	44	.2	17	494	--	23000	6100	
--	--	85	12	19	--	25	122	.25	610	--	7
--	--	79	13	22	--	16	125	.07	700	--	
--	--	79	12	19	--	--	129	.14	1000	--	
--	--	84	9.3	32	.0	9.0	131	.09	800	--	
30	4.2	85	14	12	.5	8.8	122	.02	820	--	
--	--	83	--	13	--	--	--	.00	--	--	
--	--	83	--	13	--	--	--	.00	--	--	
--	--	83	14	17	--	8.0	124	.10	1000	--	
--	--	89	19	17	--	27	131	.03	3150	--	
--	--	86	--	13	--	--	--	.02	680	--	
--	--	86	14	14	--	--	--	.02	600	--	
--	--	82	7.4	17	--	26	86	.00	3000	--	
--	--	85	16	14	--	--	--	.05	520	--	
--	--	81	13	17	--	11	124	.01	1300	--	
--	--	86	17	15	--	--	--	.02	480	--	
--	--	85	16	12	--	--	--	.02	600	--	
--	--	83	15	19	--	7.0	123	.01	900	--	
--	--	84	23	13	--	--	--	.00	620	--	
--	--	87	14	17	--	8.0	117	.00	800	--	
--	--	84	19	13	--	--	--	.09	520	--	
--	--	89	14	17	--	3.2	123	.00	700	--	
--	--	84	18	12	--	--	--	.02	680	--	
--	--	84	23	12	--	--	--	.02	600	--	
30	2.9	82	13	12	.5	9.5	122	.02	700	--	
--	--	79	15	16	--	12	126	.00	500	--	
--	--	83	16	20	--	15	132	.00	800	--	
--	--	87	16	11	--	--	--	.02	--	--	
--	--	84	15	16	--	18	121	.00	800	--	
--	--	86	13	11	--	--	--	.02	--	--	
--	--	89	14	16	--	13	132	.00	1100	--	
--	--	77	15	14	--	12	132	.00	800	--	
--	--	82	16	16	--	16	129	.00	910	--	
--	--	92	27	20	--	61	180	.00	910	--	
--	--	41	14	16	--	28	132	.00	%pP 490	--	
--	--	85	15	18	--	14	98	.00	770	--	
--	--	37	16	18	--	20	168	.00	910	--	
--	--	41	14	16	--	28	132	.00	490	--	
--	--	86	14	14	--	12	127	.02	910	--	
--	--	86	16	12	--	12	166	.02	980	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
7	48-07-09	211MRPAL	704	--	7.1	--	89	14	11	15
	48-08-06	211MRPAL	704	--	7.0	--	30	0	10	1.2
	48-09-03	211MRPAL	704	--	7.1	--	30	0	8.4	2.1
	48-10-08	211MRPAL	704	--	7.2	--	31	0	8.8	2.2
	48-11-05	211MRPAL	704	--	7.1	--	29	0	8.0	2.2
	48-12-13	211MRPAL	704	--	7.3	--	29	0	8.0	2.2
	49-01-06	211MRPAL	--	--	7.3	--	--	--	--	--
	49-01-19	211MRPAL	704	--	7.2	--	35	0	11	1.8
	49-01-21	211MRPAL	--	--	7.3	--	--	--	--	--
	49-01-27	211MRPAL	--	--	7.3	--	--	--	--	--
	49-02-18	211MRPAL	704	--	7.4	--	120	46	8.0	24
	49-03-17	211MRPAL	704	--	7.2	--	29	0	8.2	2.0
	49-04-21	211MRPAL	704	--	7.2	--	37	0	8.2	4.1
	49-04-25	211MRPAL	1028	203	7.2	14.0	29	0	8.2	2.1
	49-05-26	211MRPAL	704	--	7.4	--	35	0	9.0	3.0
	49-06-30	211MRPAL	704	--	7.3	--	31	0	9.0	2.0
	49-07-28	211MRPAL	704	--	7.2	--	72	0	13	9.7
	49-08-25	211MRPAL	--	--	7.2	--	73	0	16	8.0
	49-09-29	211MRPAL	--	--	--	--	73	--	16	8.0
	49-10-27	211MRPAL	--	--	7.1	--	60	0	11	8.0
	49-12-29	211MRPAL	704	--	7.1	--	69	1	11	10
	50-01-19	211MRPAL	--	--	7.1	--	80	0	17	9.0
	50-01-26	211MRPAL	--	--	--	--	70	--	10	11
	50-02-23	211MRPAL	--	--	7.1	--	62	0	8.8	9.7
	50-03-23	211MRPAL	--	--	7.2	--	73	0	16	8.0
	50-04-18	211MRPAL	1028	466	--	14.0	--	--	--	--
	50-04-27	211MRPAL	--	--	7.1	--	80	0	17	9.0
	50-05-18	211MRPAL	704	--	7.1	--	--	--	--	--
	50-07-25	211MRPAL	--	--	7.2	--	97	8	34	3.0
	50-09-26	211MRPAL	--	--	7.1	--	52	0	11	6.0
	50-09-28	211MRPAL	--	--	7.1	--	70	0	18	6.0
	50-10-27	211MRPAL	--	--	7.1	--	54	0	10	7.0
	50-11-15	211MRPAL	--	--	7.1	--	57	0	8.0	9.0
	50-12-28	211MRPAL	--	--	7.2	--	62	0	9.0	9.7
	51-01-30	211MRPAI	--	--	7.2	--	59	0	12	7.1
	51-02-28	211MRPAL	--	--	7.1	--	41	0	10	4.0
	51-03-30	211MRPAL	--	--	7.1	--	43	0	9.8	4.5
	51-09-28	211MRPAL	--	--	7.0	--	70	--	18	6.0
	51-10-15	211MRPAL	--	--	7.1	--	83	13	20	8.0
	51-10-30	211MRPAL	--	--	7.1	--	83	13	20	8.0
	51-11-26	211MRPAL	--	--	7.1	--	90	14	21	9.0
	51-12-20	211MRPAL	--	--	7.2	--	85	9	21	8.0
	52-01-30	211MRPAL	--	--	7.2	--	83	21	20	8.0
	52-02-28	211MRPAL	--	--	7.1	--	94	24	21	10
	52-03-27	211MRPAL	--	--	7.1	--	57	0	11	7.0
	52-04-28	211MRPAL	--	--	7.1	--	60	0	11	8.0
	52-05-28	211MRPAL	--	--	7.1	--	58	0	10	8.0
	52-06-26	211MRPAL	--	--	7.1	--	63	0	12	8.0
	52-08-21	211MRPAL	--	--	7.0	--	38	--	--	--
	52-09-26	211MRPAL	--	--	7.2	--	43	--	12	3.2
	52-10-23	211MRPAL	--	--	7.2	--	--	--	--	--
	53-02-15	211MRPAL	--	--	7.1	--	--	--	--	--
	53-03-17	211MRPAL	--	--	7.1	--	--	--	28	--
	53-04-29	211MRPAL	--	--	7.3	--	--	--	--	--
	54-04-12	211MRPAL	--	--	6.9	--	160	45	17	29

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	92	14	14	--	10	138	.02	910	--	7
--	--	88	14	12	--	11	142	.02	700	--	
--	--	85	13	16	--	9.2	129	.03	770	--	
--	--	81	14	14	--	11	124	3.20	910	--	
--	--	100	9.7	14	--	10	133	.02	840	--	
--	--	87	16	14	--	11	129	.03	1050	--	
--	--	--	19	--	--	--	--	--	840	--	
--	--	88	14	18	--	12	77	.02	910	--	
--	--	--	16	--	--	--	--	--	980	--	
--	--	--	18	--	--	--	--	--	840	--	
--	--	89	13	16	--	10	124	.03	770	--	
--	--	84	15	20	--	12	165	.02	903	--	
--	--	95	15	20	--	12	154	2.71	1001	--	
29	3.5	82	14	12	.2	9.5	124	.23	830	--	
--	--	88	14	23	--	10	211	.02	700	--	
--	--	90	15	14	--	10	130	2.94	980	--	
--	--	93	16	17	--	10	125	.02	1000	--	
--	--	99	16	18	--	10	124	.02	1030	--	
--	--	--	12	18	--	14	210	.03	700	--	
--	--	82	9.0	8.0	--	14	208	.03	840	--	
--	--	82	16	--	--	10	210	.03	980	--	
--	--	103	14	19	--	10	130	.00	1220	--	
--	--	--	--	--	--	10	180	--	1000	--	
--	--	93	15	21	--	9.0	130	.03	980	--	
--	--	89	12	18	--	14	120	.03	700	--	
--	--	--	--	35	--	--	--	--	--	--	
--	--	102	14	19	--	10	130	.00	1140	--	
--	--	--	19	--	--	--	--	--	1000	--	
--	--	109	20	17	--	6.0	--	2.94	1120	--	
--	--	96	18	20	--	7.0	187	.00	1820	--	
--	--	96	19	21	--	11	180	.00	1540	--	
--	--	101	20	17	--	9.0	181	.00	770	--	
--	--	88	16	16	--	8.0	170	.02	850	--	
--	--	92	17	19	--	12	122	.02	1890	--	
--	--	93	14	22	--	7.0	175	.05	300	--	
--	--	97	15	22	--	6.0	182	.01	1386	--	
--	--	104	16	23	--	8.5	175	.07	1092	--	
--	--	--	18	22	--	7.0	160	--	1070	--	
--	--	85	19	20	--	10	180	.08	980	--	
--	--	85	19	20	--	10	180	.08	980	--	
--	--	92	22	29	--	6.0	175	--	700	--	
--	--	93	20	28	--	7.0	180	--	700	--	
--	--	76	21	28	--	10	170	--	840	--	
--	--	85	21	35	--	10	160	--	1050	--	
--	--	93	22	24	--	9.0	160	--	1260	--	
--	--	95	--	24	--	9.0	150	--	1190	--	
--	--	86	26	24	--	9.0	--	--	940	--	
--	--	88	--	30	--	9.0	--	--	940	--	
--	--	--	26	--	--	--	--	--	770	--	
--	--	--	26	35	--	--	--	--	840	--	
--	--	--	26	28	--	--	--	--	980	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	54	11	17	--	10	--	--	840	300	
--	--	53	18	14	--	9.0	--	--	5520	--	
--	--	142	43	47	--	9.0	--	--	1260	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
7	54-04-12	211MRPAL	1028	466	--	14.0	--	--	--	--
	56-01-17	211MRPAL	1028	208	7.8	--	34	0	10	2.3
8	44-10-03	211MRPAL	--	--	5.7	--	85	60	21	7.9
	44-10-26	211MRPAL	--	--	7.5	--	25	0	5.4	2.8
	44-10-27	211MRPAL	--	--	7.3	--	29	0	6.4	3.2
	44-10-28	211MRPAL	--	--	7.4	--	30	0	7.1	3.0
	44-10-30	211MRPAL	--	--	7.4	--	23	0	3.6	3.3
	44-11-01	211MRPAL	--	--	7.6	--	30	0	7.9	2.4
	44-11-03	211MRPAL	--	--	7.6	--	24	0	6.9	1.6
	45-10-04	211MRPAL	--	--	7.0	--	28	0	5.4	3.5
	45-10-11	211MRPAL	704	--	7.0	--	33	0	7.0	3.8
	45-11-15	211MRPAL	1028	285	7.3	14.0	23	0	6.0	1.9
	45-12-13	211MRPAL	1028	286	7.0	14.0	--	--	--	--
	45-12-13	211MRPAL	--	--	7.1	--	24	0	6.0	2.1
	46-01-10	211MRPAL	704	--	7.1	--	33	0	6.3	4.1
	46-01-17	211MRPAL	1028	285	7.2	--	24	0	--	--
	46-02-14	211MRPAL	1028	286	7.3	14.0	24	0	--	--
	46-02-15	211MRPAL	704	--	7.1	--	24	0	3.9	3.5
	46-03-14	211MRPAL	1028	287	7.3	15.0	22	0	--	--
	46-03-15	211MRPAL	704	--	7.1	--	31	0	7.1	3.7
	46-03-28	211MRPAL	1028	289	6.9	14.0	24	0	--	--
	46-04-11	211MRPAL	1028	288	7.1	14.0	24	0	--	--
	46-04-12	211MRPAL	704	--	7.1	--	24	0	6.2	2.1
	46-04-25	211MRPAL	1028	288	7.1	14.0	26	0	--	--
	46-05-09	211MRPAL	1028	292	7.1	14.0	24	0	--	--
	46-05-17	211MRPAL	704	--	7.3	--	18	0	4.9	1.3
	46-06-20	211MRPAL	1028	288	7.3	14.0	24	0	--	--
	46-06-28	211MRPAL	--	--	7.1	--	32	0	6.8	3.7
	46-07-11	211MRPAL	1028	288	7.3	--	--	--	--	--
	46-08-15	211MRPAL	1028	288	7.6	14.0	25	0	7.2	1.8
	46-09-03	211MRPAL	704	--	7.0	--	20	0	5.6	1.4
	46-09-12	211MRPAL	1028	290	7.3	14.0	30	0	--	--
	46-10-02	211MRPAL	704	--	7.2	--	36	0	6.1	5.1
	46-10-24	211MRPAL	1028	290	7.3	14.0	--	--	--	--
	46-11-04	211MRPAL	704	--	7.1	--	17	0	5.5	.7
	46-12-30	211MRPAL	704	--	7.1	--	30	0	4.4	4.6
	47-01-30	211MRPAL	704	--	7.1	--	22	0	7.4	.9
	47-02-28	211MRPAL	704	--	7.1	--	26	0	6.2	2.6
	47-03-27	211MRPAL	1028	286	7.3	18.0	--	--	--	--
	47-03-31	211MRPAL	704	--	7.1	--	22	0	6.7	1.4
	47-05-02	211MRPAL	704	--	7.0	--	25	0	6.5	2.2
	47-06-05	211MRPAL	704	--	7.0	--	29	0	8.3	1.9
	47-07-07	211MRPAL	704	--	7.1	--	26	0	7.0	2.0
	47-07-31	211MRPAL	704	--	7.1	--	28	0	8.0	1.9
	47-09-05	211MRPAL	704	--	7.1	--	32	0	9.9	1.7
	47-10-02	211MRPAL	704	--	7.1	--	79	0	29	1.7
	47-10-30	211MRPAL	704	--	7.1	--	43	0	14	2.0
	48-01-09	211MRPAL	704	--	7.1	--	19	0	6.0	1.0
	48-02-05	211MRPAL	704	--	7.1	--	26	0	7.2	2.0
	48-03-05	211MRPAL	704	--	7.1	--	27	0	6.0	3.0
	48-04-09	211MRPAL	704	--	--	--	30	0	9.9	1.4
	48-05-07	211MRPAL	704	--	7.0	--	24	0	6.2	2.0
	48-06-14	211MRPAL	704	--	7.1	--	18	0	6.0	.8
	48-07-09	211MRPAL	704	--	--	--	26	0	7.4	1.9
	48-08-06	211MRPAL	704	--	7.0	--	20	0	7.0	.6

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	--	--	35	--	--	--	--	--	--	7
--	--	84	13	12	.3	10	127	.20	1700	0	
--	--	31	10	31	--	7.0	203	1.24	700	--	8
--	--	85	14	31	--	21	190	.05	400	--	
--	--	95	17	32	--	30	195	.02	420	--	
--	--	88	42	31	--	26	209	.02	630	--	
--	--	85	8.8	33	--	20	176	.05	280	--	
--	--	92	11	34	--	14	163	.06	420	--	
--	--	88	9.6	35	--	8.0	160	.04	140	--	
--	--	73	9.5	39	--	4.5	173	.06	490	--	
--	--	98	6.6	44	--	10	173	.06	700	--	
50	2.9	96	9.1	32	.8	8.6	163	.02	810	--	
--	--	102	--	33	--	--	--	.09	--	--	
--	--	99	9.1	38	--	9.6	166	.10	840	--	
--	--	101	8.4	43	--	20	164	.01	770	--	
--	--	97	--	34	--	--	--	.14	800	--	
--	--	102	14	35	--	--	--	.02	720	--	
--	--	97	4.1	36	--	19	126	.00	910	--	
--	--	102	11	36	--	--	--	.02	800	--	
--	--	100	6.6	38	--	6.4	165	.01	1200	--	
--	--	100	13	36	--	--	--	.14	480	--	
--	--	102	11	33	--	--	--	.02	720	--	
--	--	94	8.6	38	--	5.0	163	.01	980	--	
--	--	102	11	33	--	--	--	.05	800	--	
--	--	101	13	34	--	--	--	.00	640	--	
--	--	113	7.7	21	--	23	139	.00	980	--	
--	--	104	11	33	--	--	--	.05	520	--	
--	--	103	11	34	--	--	--	.00	840	--	
--	--	102	14	33	--	--	--	.11	720	--	
51	2.1	102	7.7	32	.8	8.9	165	.02	1030	--	
--	--	100	7.6	36	--	8.8	175	.00	540	--	
--	--	104	10	30	--	--	--	<.02	--	--	
--	--	113	7.1	34	--	8.4	168	.00	840	--	
--	--	104	--	--	--	--	--	--	--	--	
--	--	99	10	35	--	7.0	174	.00	840	--	
--	--	102	4.9	38	--	21	164	.00	1050	--	
--	--	105	7.9	36	--	7.0	172	.00	350	--	
--	--	105	7.1	36	--	13	159	.00	350	--	
--	--	102	--	--	--	--	--	--	--	--	
--	--	92	6.6	36	--	14	146	.00	630	--	
--	--	99	4.9	36	--	10	169	.00	1100	--	
--	--	107	9.9	36	--	11	171	.00	700	--	
--	--	101	8.0	37	--	9.0	157	.00	910	--	
--	--	100	7.0	36	--	11	190	.00	1050	--	
--	--	102	8.0	36	--	20	168	.00	980	--	
--	--	99	7.0	34	--	12	168	.00	210	--	
--	--	98	8.0	32	--	10	180	.00	280	--	
--	--	108	8.0	34	--	13	170	.00	980	--	
--	--	98	9.0	32	--	10	173	.01	980	--	
--	--	112	8.0	38	--	10	176	.03	910	--	
--	--	96	7.4	20	--	11	168	.03	1100	--	
--	--	96	8.2	32	--	10	181	.03	980	--	
--	--	104	8.0	32	--	9.4	189	.03	1300	--	
--	--	98	7.7	30	--	10	180	.00	980	--	
--	--	98	8.6	32	--	10	176	.03	1050	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
8	48-09-03	211MRPAL	704	--	7.1	--	22	0	6.2	1.7
	48-10-08	211MRPAL	704	--	7.2	--	24	0	6.8	1.7
	48-11-05	211MRPAL	704	--	7.1	--	23	0	6.0	1.9
	48-12-13	211MRPAL	704	--	7.4	--	24	0	6.0	2.1
	49-01-06	211MRPAL	--	--	7.3	--	--	--	--	--
	49-01-19	211MRPAL	704	--	7.3	--	27	0	7.0	2.2
	49-01-21	211MRPAL	--	--	7.0	--	--	--	--	--
	49-01-27	211MRPAL	--	--	7.2	--	--	--	--	--
	49-02-18	211MRPAL	704	--	7.3	--	15	0	2.0	2.4
	49-03-17	211MRPAL	704	--	7.3	--	24	0	6.2	2.0
	49-04-21	211MRPAL	704	--	7.1	--	37	0	13	1.2
	49-04-25	211MRPAL	1028	288	7.2	14.0	27	0	7.0	2.2
	49-05-26	211MRPAL	704	--	7.1	--	31	0	6.0	4.0
	49-06-30	211MRPAL	704	--	7.1	--	26	0	7.0	2.0
	49-07-28	211MRPAL	704	--	7.3	--	33	0	9.0	2.5
	49-08-25	211MRPAL	--	--	7.1	--	31	0	9.0	2.0
	49-09-29	211MRPAL	--	--	--	--	31	--	9.0	2.0
	49-10-27	211MRPAL	--	--	7.2	--	37	0	10	3.0
	49-12-29	211MRPAL	--	--	7.2	--	46	0	12	4.0
	50-01-19	211MRPAL	--	--	7.2	--	37	0	10	3.0
	50-01-26	211MRPAL	--	--	--	--	28	--	7.1	2.6
	50-02-23	211MRPAL	--	--	7.0	--	32	0	7.3	3.3
	50-03-06	211MRPAL	--	--	7.0	--	--	--	--	--
	50-03-23	211MRPAL	--	--	7.2	--	31	0	9.0	2.0
	50-04-27	211MRPAL	--	--	7.2	--	37	0	10	3.0
	50-05-18	211MRPAL	704	--	7.2	--	--	--	--	--
	50-07-25	211MRPAL	--	--	7.2	--	86	0	28	4.0
	50-09-26	211MRPAL	--	--	6.9	--	64	0	19	4.0
	50-09-28	211MRPAL	--	--	6.9	--	80	0	22	6.0
	50-10-27	211MRPAL	--	--	6.9	--	110	0	21	14
	50-11-15	211MRPAL	--	--	7.0	--	46	0	7.0	7.0
	50-12-28	211MRPAL	--	--	7.0	--	40	0	7.2	5.3
	51-01-30	211MRPAL	--	--	7.1	--	46	0	8.0	6.4
	51-02-28	211MRPAL	--	--	7.0	--	87	0	20	9.0
	51-03-30	211MRPAL	--	--	6.8	--	77	0	18	7.7
	51-09-28	211MRPAL	--	--	6.7	--	86	--	18	10
	51-10-15	211MRPAL	--	--	6.7	--	81	0	16	10
	51-10-30	211MRPAL	--	--	6.7	--	81	0	16	10
	51-11-26	211MRPAL	--	--	6.8	--	88	0	17	11
	51-12-20	211MRPAL	--	--	6.8	--	81	0	16	10
	52-01-30	211MRPAL	--	--	6.7	--	81	0	16	10
	52-02-28	211MRPAL	--	--	6.8	--	93	3	19	11
	52-03-27	211MRPAL	--	--	6.8	--	76	0	24	4.0
	52-04-28	211MRPAL	--	--	6.8	--	83	0	25	5.0
	52-05-28	211MRPAL	--	--	6.9	--	100	0	25	10
	52-06-26	211MRPAL	--	--	6.9	--	95	0	20	11
	52-08-21	211MRPAL	--	--	6.9	--	60	--	--	--
	52-09-26	211MRPAL	--	--	6.9	--	66	--	20	3.8
	52-10-23	211MRPAL	--	--	6.9	--	--	--	--	--
	52-12-15	211MRPAL	--	--	6.8	--	--	--	--	--
	53-02-15	211MRPAL	--	--	6.9	--	--	--	--	--
	53-03-17	211MRPAL	--	--	6.9	--	78	0	34	--
	53-04-29	211MRPAL	--	--	6.9	--	75	0	--	--
	53-05-28	211MRPAL	--	--	6.9	--	--	--	--	--
	54-04-12	211MRPAL	--	--	6.8	--	120	17	36	7.5

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	104	7.0	34	--	10	171	.03	1050	--	8
--	--	109	7.8	34	--	9.4	162	2.71	1300	--	
--	--	99	6.6	34	--	8.8	167	.02	2430	--	
--	--	105	8.9	34	--	8.8	178	.02	1400	--	
--	--	--	9.0	--	--	--	--	--	840	--	
--	--	102	8.4	34	--	11	85	.02	1190	--	
--	--	--	10	--	--	--	--	--	1470	--	
--	--	--	10	--	--	--	--	--	1470	--	
--	--	98	9.0	37	--	11	168	.02	700	--	
--	--	95	9.0	35	--	10	180	.03	707	--	
--	--	105	14	34	--	10	109	2.71	1610	--	
48	3.0	106	8.5	30	.4	10	167	.23	1000	--	
--	--	95	10	44	--	8.0	283	.02	1001	--	
--	--	101	10	34	--	8.0	165	3.00	1330	--	
--	--	101	10	37	--	8.0	169	.02	1330	--	
--	--	105	6.0	36	--	10	165	.03	1001	--	
--	--	--	11	36	--	10	270	.03	980	--	
--	--	110	11	36	--	10	216	.03	770	--	
--	--	110	14	37	--	8.0	225	.03	980	--	
--	--	132	13	34	--	10	166	.00	1960	--	
--	--	--	--	--	--	10	171	--	1470	--	
--	--	107	12	42	--	12	168	.02	1400	--	
--	--	--	--	32	--	--	164	--	875	--	
--	--	106	11	37	--	10	180	.02	1120	--	
--	--	132	13	34	--	10	166	.00	1960	--	
--	--	--	11	--	--	--	--	--	1106	--	
--	--	134	16	37	--	8.0	--	3.16	1750	--	
--	--	173	12	30	--	11	216	.00	3010	--	
--	--	170	11	38	--	13	161	.00	4200	--	
--	--	193	12	31	--	9.0	193	.00	3990	--	
--	--	134	15	35	--	9.0	220	.02	2590	--	
--	--	109	16	41	--	13	262	.04	2254	--	
--	--	102	21	34	--	9.0	235	.02	3360	--	
--	--	153	14	34	--	5.0	234	.00	4515	--	
--	--	140	17	36	--	6.8	230	.10	3675	--	
--	--	--	29	32	--	7.0	150	--	3920	--	
--	--	128	29	33	--	8.0	260	.05	3640	--	
--	--	128	29	33	--	8.0	260	.05	3640	--	
--	--	134	30	33	--	7.0	250	--	3570	--	
--	--	134	31	32	--	8.0	260	--	3150	--	
--	--	110	32	32	--	10	240	--	3360	--	
--	--	110	32	40	--	11	230	--	3250	--	
--	--	146	32	44	--	10	230	--	2940	--	
--	--	152	--	45	--	11	235	--	2800	--	
--	--	153	50	45	--	12	--	--	3920	--	
--	--	159	--	34	--	14	--	--	3143	--	
--	--	--	22	--	--	--	--	--	2520	--	
--	--	--	22	40	--	--	--	--	2800	--	
--	--	--	23	31	--	--	--	--	2940	78	
--	--	--	--	--	--	--	--	--	2420	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	95	48	20	--	14	--	--	4200	390	
--	--	92	45	34	--	14	--	--	3700	--	
--	--	--	--	34	--	--	--	--	--	--	
--	--	127	12	37	--	10	--	--	1680	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
8	54-04-12	211MRPAL	1028	325	--	15.0	--	--	--	--
	56-01-17	211MRPAL	1028	348	8.3	--	53	0	14	4.5
	57-07-23	211MRPAL	1028	367	6.8	14.0	230	100	19	4.5
	67-08-04	211MRPAL	1028	546	6.7	--	220	0	44	26
10	51-04-13	211MRPAM	704	--	6.9	14.0	100	0	--	--
	53-12-23	211MRPAM	1028	473	6.9	14.0	164	0	--	--
	54-02-19	211MRPAM	1028	469	7.2	14.0	150	0	38	14
	54-10-08	211MRPAM	1028	503	6.7	14.0	156	0	--	--
12	79-08-14	211MRPAM	84240	690	7.0	16.0	170	0	39	18
	80-11-18	211MRPAM	80010	650	7.0	16.0	140	0	33	14
	82-11-24	211MRPAM	80010	630	7.1	15.5	140	0	33	14
13	51-02-24	112TRNN	1028	464	6.7	14.0	120	39	28	12
14	51-02-27	112TRNN	1028	490	6.8	17.0	140	21	34	13
	79-08-15	112TRNN	84240	730	6.7	18.5	160	0	40	15
15	51-02-28	211MRPAU	1028	366	6.7	14.0	96	0	22	10
	80-06-04	211MRPAU	84240	600	6.6	20.5	220	0	62	15
16	51-02-26	112TRNN	1028	385	6.7	16.0	110	15	24	13
19	79-08-15	211MRPAL	84240	1000	6.3	16.0	380	67	78	44
	80-11-18	211MRPAL	80010	1040	6.4	16.0	290	0	60	33
	82-11-24	211MRPAL	80010	950	6.4	15.5	280	0	60	32
20	79-08-14	211MRPAL	84240	730	6.0	16.5	250	24	53	29
	80-11-18	211MRPAL	80010	590	6.4	16.0	190	0	41	22
	82-11-24	211MRPAL	80010	645	6.4	15.5	210	0	45	24
25	57-07-23	211MRPAL	1028	320	7.0	14.0	54	0	16	3.3
	67-08-04	211MRPAL	1028	992	6.6	--	350	220	84	33
	71-12-08	211MRPAL	1028	1030	6.2	14.0	410	230	100	38
	73-06-06	211MRPAL	1028	1030	7.2	14.5	400	190	100	36
26	56-01-17	211MRPAL	1028	615	7.8	--	240	110	48	28
	57-07-23	211MRPAL	1028	671	6.5	16.0	210	78	46	24
27	67-08-04	211MRPAL	1028	966	6.6	--	400	210	88	44
	71-06-02	211MRPAL	1028	727	6.5	14.9	290	53	70	28
	71-06-02	211MRPAL	1028	--	--	--	--	--	--	--
	73-06-06	211MRPAL	1028	708	6.5	15.0	294	110	75	26
28	57-07-23	211MRPAL	1028	513	6.5	14.0	170	44	36	20
32	79-08-16	300WSCKO	84240	625	6.4	18.0	150	0	39	13
43	53-08-11	211MRPAL	1028	538	6.1	13.0	222	--	--	--
	54-10-01	211MRPAL	1028	571	6.3	14.0	230	68	--	--
44	52-12-22	211MRPAL	1028	624	6.1	12.0	240	66	--	--
	53-05-18	211MRPAL	1028	560	7.9	13.0	252	78	--	--
	53-12-22	211MRPAL	1028	624	6.1	12.0	240	66	--	--
	54-02-18	211MRPAL	1028	549	6.6	13.0	190	23	40	21
	56-02-24	211MRPAL	1028	625	7.0	--	250	0	45	34
	67-07-31	211MRPAL	1028	629	6.9	13.0	280	19	52	36
	71-05-13	211MRPAL	1028	563	6.2	16.0	210	49	40	26
	79-08-16	211MRPAL	84240	520	6.3	23.0	210	69	34	30
	80-06-11	211MRPAL	84240	600	--	16.5	--	--	--	--
	80-11-06	211MRPAL	80010	648	6.1	26.0	180	40	32	25
45	54-05-07	112TRNN	1028	1380	6.5	--	734	540	--	--
	56-01-18	112TRNN	1028	1310	6.8	--	740	530	72	135
	56-06-20	112TRNN	1028	1270	6.6	14.0	--	--	--	--
48	46-01-14	211MRPAL	1028	781	6.0	15.0	225	100	--	--
	46-04-16	211MRPAL	1028	768	6.1	16.0	270	150	46	38
	47-04-10	211MRPAL	1028	804	6.1	15.0	300	180	52	42
	53-02-16	211MRPAL	1028	--	6.4	--	220	79	52	21
	53-04-20	211MRPAL	1028	751	7.5	16.0	276	160	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	--	--	32	--	--	--	--	--	--	8
--	--	149	5.8	29	.6	12	201	.56	9400	--	
50	5.4	162	4.0	26	.9	9.6	226	.72	6000	210	
25	8.0	279	22	24	.6	8.9	295	.05	46000	430	
--	--	204	5.4	14	--	--	--	.07	6300	--	10
--	--	224	2.9	18	--	--	--	.41	6300	--	
30	7.0	230	1.1	16	.6	7.3	246	.14	29000	--	
--	--	226	5.6	17	--	--	--	.05	5900	--	
40	7.0	376	<1.0	39	.6	12	544	.02	53000	1700	12
27	4.5	375	.9	31	--	11	312	--	47000	800	
27	4.7	--	8.0	34	.7	12	219	--	46000	800	
19	6.6	98	9.0	23	.0	18	194	.93	292000	100	13
13	7.7	143	4.9	28	.1	19	283	.23	429000	100	14
30	5.0	400	2.0	55	.3	30	830	.02	53000	1600	
21	7.0	129	5.9	11	.1	7.5	172	.23	166000	300	15
54	7.7	334	5.0	29	.3	13	400	.09	44000	570	
12	7.2	120	4.0	18	.2	11	174	.23	182000	--	16
84	7.9	376	200	57	.2	14	1100	.02	56000	3700	19
54	6.0	388	170	59	--	14	596	--	56000	4100	
50	5.0	--	130	44	.2	14	487	--	53000	3700	
34	7.2	285	--	33	.3	15	662	.02	35000	1700	20
27	4.4	290	68	34	--	14	360	--	32000	2000	
26	3.7	--	68	44	.2	15	355	--	28000	2200	
38	5.6	136	13	14	.6	11	176	.07	3300	110	25
70	12	152	247	102	.0	13	700	.05	17000	200	
65	.7	221	281	82	.2	11	709	.02	24000	210	
64	10	249	240	68	.2	13	752	.31	--	20	
--	--	153	124	35	.5	12	390	2.21	11000	--	26
37	4.8	165	124	33	.3	15	396	.84	2400	--	
59	10	238	250	58	.0	13	691	.05	8700	0	27
40	8.1	289	107	38	.4	10	414	.09	6300	3200	
--	--	--	--	--	--	--	--	--	6000	130	
37	8.0	230	92	36	.2	11	495	2.20	--	250	
23	3.5	156	58	26	.3	11	290	1.83	11000	2900	28
42	6.6	307	2.0	39	.1	50	740	.01	25000	1600	32
--	--	196	55	25	--	20	--	.25	2600	--	43
--	--	198	57	28	--	--	--	.11	3300	--	
--	--	212	78	28	--	--	--	.05	6100	--	44
--	--	212	--	28	--	--	--	--	9900	--	
--	--	212	78	28	--	--	--	.05	6100	--	
22	1.9	199	55	29	.1	22	310	.18	4200	--	
--	--	310	35	31	.4	20	345	.07	25000	10	
26	4.9	316	38	32	.0	23	372	.02	33000	2500	
29	3.8	193	57	51	.2	23	337	.00	26000	3100	
36	3.8	173	110	46	.1	29	564	.01	22000	6300	
--	--	--	--	--	--	--	--	--	--	--	
33	2.9	171	91	50	--	30	363	--	22000	8600	
--	--	240	457	40	--	7.6	--	.13	180	--	45
--	--	252	428	32	.1	7.3	1150	23.1	150	0	
--	--	--	--	--	--	--	--	39.1	--	--	
--	--	150	113	70	--	--	--	8.13	--	--	48
44	2.4	148	116	70	.2	15	471	7.91	--	50	
--	--	152	128	70	--	--	--	14.0	170	--	
--	--	171	100	70	--	--	458	--	--	--	
--	--	148	--	70	--	--	--	--	1500	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
48	53-09-03	211MRPAL	1028	778	6.1	16.0	298	200	--	--
	53-12-22	211MRPAL	1028	765	6.2	16.0	272	180	--	--
	54-02-19	211MRPAL	1028	740	7.0	16.0	290	190	44	43
	54-10-08	211MRPAL	1028	738	6.3	17.0	260	170	--	--
	56-01-20	211MRPAL	1028	732	8.0	--	270	170	43	40
49	49-12-02	300WSCKO	1028	816	6.1	16.0	260	180	48	34
	50-01-06	300WSCKO	1028	811	6.3	--	241	160	--	--
	50-03-08	300WSCKO	1028	784	6.1	16.0	--	--	--	--
	50-04-06	300WSCKO	1028	787	6.1	--	--	--	--	--
	50-05-08	300WSCKO	1028	779	6.2	16.0	242	160	--	--
	50-06-08	300WSCKO	1028	763	6.1	16.0	236	150	--	--
50	46-01-14	211MRPAL	1028	781	6.0	15.0	225	100	--	--
	46-04-16	211MRPAL	1028	768	6.1	--	270	150	46	38
	47-04-10	211MRPAL	1028	804	6.1	15.0	300	180	52	42
	53-02-16	211MRPAL	1028	--	6.1	--	200	76	47	19
60	46-01-14	300WSCKO	1028	1320	6.0	14.0	570	430	--	--
	53-04-22	300WSCKO	1028	1430	6.9	--	614	540	--	--
	53-08-11	300WSCKO	1028	1710	3.0	16.0	460	460	--	--
	53-12-22	300WSCKO	1028	1310	5.7	14.0	--	--	--	--
	54-02-19	300WSCKO	1028	1180	6.4	14.0	440	370	96	48
	54-10-01	300WSCKO	1028	1300	5.8	14.0	510	450	--	--
62	53-08-11	211MRPAL	1028	719	6.1	13.0	264	230	--	--
64	79-08-23	112TRNN	84240	700	6.3	14.0	97	0	19	12
	79-12-05	112TRNN	84240	675	6.2	14.0	--	--	--	--
	80-07-31	112TRNN	84240	700	6.0	14.0	230	0	42	31
	80-11-06	112TRNN	80010	--	--	--	--	--	--	--
	80-11-19	112TRNN	80010	566	6.7	14.0	230	0	47	27
	82-08-05	112TRNN	80010	650	6.4	14.0	270	--	55	31
66	46-01-15	300WSCKO	1028	555	6.9	13.0	52	0	--	--
73	45-11-19	112TRNN	1028	--	3.7	14.0	945	950	--	--
	53-08-11	112TRNN	1028	2370	6.2	17.0	870	500	--	--
76	45-11-19	112TRNN	1028	1010	6.4	15.0	442	27	--	--
83	47-04-11	211MRPAL	1028	1730	6.5	18.0	810	660	136	114
	53-12-28	211MRPAL	1028	1300	6.4	21.0	605	420	--	--
	54-02-24	211MRPAL	1028	1580	6.8	20.0	690	530	118	95
	54-09-29	211MRPAL	1028	1510	6.2	21.0	650	480	--	--
	56-01-19	211MRPAL	1028	1670	7.0	--	700	560	117	100
	79-08-20	211MRPAL	84240	1200	7.0	19.0	640	37	150	65
84	54-09-29	112TRNN	1028	2110	6.2	19.0	760	550	--	--
85	45-11-14	211MRPAL	1028	1230	6.2	13.0	--	--	--	--
	53-12-30	211MRPAL	1028	1100	6.3	14.0	420	200	--	--
	54-02-19	211MRPAL	1028	976	7.7	14.0	430	240	69	62
	54-09-30	211MRPAL	1028	1080	6.5	14.0	475	240	--	--
86	80-12-03	211MRPAL	84240	1020	6.7	15.5	390	0	54	62
	82-11-19	211MRPAL	80010	938	6.7	15.5	450	0	68	67
87	45-11-14	300WSCKO	1028	1320	7.3	13.0	690	270	--	--
	80-07-22	300WSCKO	84240	1050	6.6	16.0	270	65	29	48
88	46-04-10	112TRNN	1028	1260	6.2	--	562	410	--	--
	47-04-11	112TRNN	1028	1230	6.2	14.0	550	420	102	71
90	47-04-11	300WSCKO	1028	1730	6.5	--	810	660	136	114
92	46-01-14	211MRPAL	1028	1910	6.1	16.0	620	490	98	90
93	47-04-11	211MRPAL	1028	2450	6.1	15.0	860	740	156	113
	53-05-19	211MRPAL	1028	1320	7.9	17.0	614	530	--	--
	53-08-11	211MRPAL	1028	1330	5.9	15.0	602	530	--	--
	53-12-22	211MRPAL	1028	1410	5.9	16.0	650	590	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	124	126	70	--	26	--	14.0	--	--	48
--	--	118	121	68	--	--	--	5.65	800	--	
44	6.0	120	110	68	.2	20	467	12.0	1500	--	
--	--	110	127	65	--	--	--	9.04	900	--	
--	--	127	125	66	.3	22	468	9.50	330	--	
45	12	98	118	88	.0	14	494	11.1	1000	0	49
--	--	98	121	86	--	.4	--	9.50	--	--	
61	3.0	101	124	84	.5	--	--	11.0	--	--	
57	3.0	102	121	84	--	--	--	11.3	--	--	
--	--	102	122	86	.6	--	--	--	--	--	
--	--	103	117	84	--	--	--	7.45	--	--	
--	--	150	113	70	--	--	--	8.13	--	--	50
44	2.4	148	116	70	.2	15	471	7.91	--	--	
--	--	152	128	70	--	--	--	14.0	--	--	
--	--	146	115	70	--	--	423	--	--	--	
--	--	166	496	64	--	--	--	.36	34000	--	60
--	--	92	--	118	--	--	--	--	8500	--	
--	--	0	244	289	--	28	--	.07	1700	--	
--	--	64	442	120	--	--	--	.18	6100	--	
77	3.4	84	360	94	.1	29	854	.16	25000	--	
--	--	68	412	132	--	--	--	.29	3300	--	
--	--	40	209	43	--	20	--	4.30	20	--	62
26	3.6	302	51	29	.2	16	526	.43	11000	1300	64
--	--	291	41	--	.2	--	400	.28	10000	1400	
34	5.9	305	120	26	.2	15	460	.14	12000	1300	
--	--	--	--	--	--	--	--	--	--	--	
22	6.4	322	1.3	18	--	13	374	--	16000	1200	
32	4.4	--	57	31	.2	17	337	--	11000	1100	
--	--	260	51	16	--	--	--	.05	--	--	66
--	--	0	995	235	--	--	--	.18	64400	--	73
--	--	450	498	302	--	15	1360	.11	2800	--	
--	--	506	84	52	--	--	600	.02	82000	--	76
--	--	184	667	122	--	--	--	.45	170	--	83
--	--	230	440	70	--	--	--	.02	6000	--	
81	2.8	188	510	108	.2	39	1210	.18	--	--	
--	--	204	502	102	--	--	--	.02	6100	--	
--	--	171	650	114	--	37	1270	.45	8400	--	
140	14	744	70	72	.5	23	1100	.02	19000	4800	
--	--	260	580	226	--	--	--	.02	6300	--	84
--	--	320	259	78	--	--	--	7.70	--	--	85
--	--	266	249	40	--	--	--	.02	6100	--	
50	2.7	230	218	52	.1	25	668	.16	5500	--	
--	--	284	242	44	--	--	--	.02	3000	--	
43	3.2	612	21	50	.3	17	590	.04	5200	2200	86
47	3.4	--	20	50	.3	18	515	--	2100	2700	
--	--	515	306	30	--	--	--	5.65	--	--	87
52	5.3	250	100	--	.1	12	970	6.60	100	20	
--	--	181	357	79	--	--	--	11.3	--	--	88
--	--	156	349	80	--	--	--	20.0	120	--	
97	3.0	184	667	122	--	--	--	.45	--	--	90
--	--	150	579	185	--	--	--	--	--	--	92
--	--	144	946	205	--	--	--	2.94	4600	--	93
--	--	100	--	61	--	--	--	--	250	--	
--	--	84	523	58	--	20	--	4.10	400	--	
--	--	71	598	62	--	--	--	5.20	800	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
93	54-02-18	211MRPAL	1028	1410	6.6	15.0	710	640	123	97
	54-10-07	211MRPAL	1028	1700	6.3	16.0	840	780	--	--
	56-01-19	211MRPAL	1028	2280	6.8	--	1500	1400	270	195
98	54-05-27	112TRNN	1028	4830	6.3	17.0	775	690	--	--
	56-02-24	112TRNN	1028	7460	7.4	--	670	540	92	106
	68-12-11	112TRNN	1028	1230	--	8.0	--	--	--	--
	79-08-23	112TRNN	84240	1800	6.5	18.0	330	84	48	51
100	79-08-21	112TRNN	84240	1030	6.4	17.0	420	300	72	58
108	46-07-19	112TRNN	1028	1040	6.9	--	420	160	75	56
	53-05-13	112TRNN	1028	1050	7.9	17.0	432	180	--	--
	56-08-31	112TRNN	1028	1070	8.1	19.0	460	210	84	60
120	53-11-05	300WSCKO	1028	802	6.9	15.0	290	130	--	--
	53-12-28	300WSCKO	1028	822	7.0	15.0	300	130	--	--
	54-02-18	300WSCKO	1028	733	7.5	14.0	240	63	69	16
	54-10-01	300WSCKO	1028	813	7.5	17.0	285	120	--	--
	56-01-19	300WSCKO	1028	680	8.0	--	200	66	56	15
122	53-09-25	300WSCKO	1028	241	6.0	18.0	84	36	--	--
	53-12-23	300WSCKO	1028	269	6.3	17.0	96	41	--	--
	54-02-18	300WSCKO	1028	229	6.7	17.0	80	25	21	6.6
	54-09-27	300WSCKO	1028	240	6.8	18.0	72	47	--	--
124	53-06-16	211MRPAL	1028	1540	6.6	--	856	400	--	--
	71-06-08	211MRPAL	1028	970	7.4	15.6	470	260	60	78
	79-08-28	211MRPAL	84240	1100	6.5	17.0	550	260	70	92
126	53-05-16	211MRPAL	1028	875	7.9	16.0	308	190	--	--
127	53-05-13	211MRPAL	1028	778	7.4	16.0	240	210	--	--
	53-09-04	211MRPAL	1028	806	5.9	17.0	248	210	--	--
	53-12-21	211MRPAL	1028	812	6.0	16.0	236	190	--	--
	56-02-23	211MRPAL	1028	765	7.2	16.0	220	180	43	27
128	53-05-18	211MRPAL	1028	1310	7.6	14.0	520	160	--	--
	56-02-09	211MRPAL	1028	1280	6.9	--	570	240	88	84
	67-07-30	211MRPAL	1028	1050	7.4	16.0	460	130	74	67
129	54-10-08	211MRPAL	1028	651	8.2	15.0	130	17	29	14
	56-02-24	211MRPAL	1028	715	8.0	16.0	190	110	38	24
132	46-04-22	211MRPAL	1028	737	5.7	16.0	240	200	42	32
133	46-04-10	211MRPAL	1028	861	5.9	14.0	285	260	--	--
	47-04-10	211MRPAL	1028	856	6.0	15.0	260	190	48	34
134	46-07-22	211MRPAL	1028	861	6.7	16.0	310	180	55	43
137	45-11-14	211MRPAL	1028	380	5.8	--	99	51	--	--
	46-04-22	211MRPAL	1028	355	5.8	13.0	94	48	21	10
139	45-11-14	211MRPAL	1028	380	5.8	--	99	51	--	--
	46-04-22	211MRPAL	1028	355	5.8	13.0	94	48	21	10
	49-05-06	211MRPAL	1028	333	6.0	13.0	96	52	22	10
140	45-11-14	211MRPAL	1028	459	5.5	13.0	135	93	--	--
	47-04-10	211MRPAL	1028	634	5.6	13.0	210	160	46	23
	49-04-29	211MRPAL	1028	898	5.9	--	330	240	72	36
143	45-11-15	211MRPAL	1028	582	6.1	13.0	172	54	--	--
	46-04-16	211MRPAL	1028	603	6.1	13.0	180	52	36	21
	47-04-10	211MRPAL	1028	673	6.1	13.0	210	58	45	23
	50-01-06	211MRPAL	1028	713	6.2	13.0	210	110	46	23
144	50-02-07	211MRPAL	1028	649	6.0	--	186	33	--	--
	50-03-08	211MRPAL	1028	814	6.4	--	176	0	--	--
	50-04-06	211MRPAL	1028	627	6.0	13.0	172	29	--	--
	50-05-08	211MRPAL	1028	670	6.2	13.0	188	19	--	--
	50-06-08	211MRPAL	1028	656	6.3	--	173	7	--	--
	50-07-10	211MRPAL	1028	667	5.9	--	190	23	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
28	2.5	86	540	62	.2	27	1140	9.50	720	--	93
--	--	68	789	31	--	--	--	7.00	850	--	
--	--	61	1340	44	.1	36	2220	5.65	4300	10	
--	--	100	328	1220	--	17	--	14.5	3600	--	98
--	--	158	247	2180	.1	14	4270	8.81	3000	0	
--	--	--	158	--	--	--	--	--	--	--	
300	13	300	170	300	.2	12	1140	8.50	2200	850	
100	12	151	230	130	.2	22	752	8.60	50	50	100
68	3.2	316	189	67	.0	15	670	3.40	7400	--	108
--	--	302	--	68	--	--	--	--	1100	--	
--	--	306	246	67	.2	14	717	1.22	--	--	
--	--	198	128	62	--	--	--	.10	--	--	120
--	--	209	109	66	--	--	--	.16	5900	--	
62	3.4	214	92	66	.1	22	497	.11	12000	--	
--	--	202	104	64	--	--	--	.23	6100	--	
--	--	165	101	62	.2	28	402	.23	1400	0	
--	--	58	18	25	--	21	--	.16	6200	--	122
--	--	67	21	24	--	--	--	.11	6300	--	
15	4.5	67	18	24	.2	21	151	.14	21000	--	
--	--	30	15	30	--	--	--	.05	5800	--	
--	--	552	354	33	--	--	--	.90	2600	--	124
38	7.6	259	276	57	.3	24	708	.27	23000	640	
37	10	363	230	51	.1	20	984	.01	7800	330	
--	--	148	--	78	--	--	--	--	--	--	126
--	--	40	--	--	--	--	--	--	10	--	127
--	--	44	143	80	--	20	--	29.0	--	--	
--	--	61	126	76	--	--	--	.14	--	--	
--	--	53	135	66	.1	18	521	28.0	450	0	
--	--	436	--	94	--	--	--	--	540	--	128
--	--	402	231	83	.6	16	815	4.52	120	0	
62	10	400	162	68	.0	14	665	2.30	40	420	
--	--	138	90	50	.1	20	396	6.55	400	--	129
--	--	106	117	59	.1	12	455	18.1	90	0	
40	7.1	40	133	50	.2	16	477	25.5	2300	250	132
--	--	36	154	78	--	--	--	17.0	--	--	133
--	--	80	170	68	--	--	--	23.0	80	--	
52	4.3	163	133	73	.1	17	554	17.2	240	--	134
--	--	59	52	46	--	--	--	3.40	--	--	137
26	4.7	56	43	44	.2	13	201	1.85	20	50	
--	--	59	52	46	--	--	--	3.39	--	--	139
26	4.7	56	43	44	.2	13	201	1.85	--	50	
25	3.0	54	44	41	.1	16	207	.72	500	--	
--	--	51	63	56	--	--	--	6.10	--	--	140
--	--	64	116	70	--	--	--	3.16	170	--	
57	16	104	211	90	.1	18	600	5.00	330	--	
--	--	144	61	72	--	--	--	.05	--	--	143
46	6.8	152	59	72	.2	9.0	326	.05	22000	1500	
--	--	182	86	68	--	--	--	.05	10000	--	
32	3.2	124	77	77	.2	9.2	375	.45	42000	2700	
--	--	187	62	71	--	--	--	.02	--	--	144
--	--	312	60	72	--	--	--	.05	--	--	
--	--	174	57	70	--	--	--	.05	--	--	
--	--	206	57	70	--	--	--	.27	--	--	
--	--	202	53	71	--	--	--	.23	--	--	
--	--	204	59	67	--	--	--	.02	--	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
144	50-09-07	211MRPAL	1028	786	6.2	--	190	29	--	--
	50-10-11	211MRPAL	1028	668	6.1	13.0	180	55	--	--
	50-11-03	211MRPAL	1028	712	6.1	13.0	199	50	--	--
	51-01-08	211MRPAL	1028	944	6.1	13.0	225	110	--	--
	51-04-06	211MRPAL	1028	1030	6.2	13.0	224	40	--	--
	52-02-07	211MRPAL	1028	814	7.6	13.0	240	210	--	--
	52-06-09	211MRPAL	1028	765	6.9	13.0	110	5	--	--
	52-12-22	211MRPAL	1028	1080	--	13.0	350	--	--	--
	53-05-25	211MRPAL	1028	754	5.8	13.0	230	160	--	--
	53-09-04	211MRPAL	1028	778	5.7	13.0	232	170	--	--
	54-09-29	211MRPAL	1028	824	6.2	13.0	234	170	--	--
145	49-12-02	211MRPAL	1028	722	5.9	13.0	240	120	51	28
	50-08-08	211MRPAL	1028	653	6.0	13.0	210	89	--	--
	50-12-08	211MRPAL	1028	709	5.7	13.0	216	150	--	--
	51-02-02	211MRPAL	1028	652	5.8	13.0	220	140	--	--
	51-05-31	211MRPAL	1028	684	6.2	13.0	210	99	--	--
	51-12-03	211MRPAL	1028	714	5.8	13.0	--	--	--	--
	52-04-08	211MRPAL	1028	751	6.8	13.0	140	55	--	--
	52-09-16	211MRPAL	1028	871	--	14.0	286	--	--	--
	53-01-29	211MRPAL	1028	1010	--	14.0	350	--	--	--
	53-12-28	211MRPAL	1028	1130	6.3	14.0	400	220	--	--
	54-02-08	211MRPAL	1028	997	6.8	13.0	360	180	59	52
146	45-09-20	211MRPAL	1028	1590	6.8	14.0	652	280	--	--
	46-04-16	211MRPAL	1028	1620	6.8	14.0	660	310	96	103
	56-02-09	211MRPAL	1028	1100	7.8	--	470	200	63	75
147	45-11-20	211MRPAL	1028	1210	6.1	--	435	200	--	--
148	45-11-20	211MRPAL	1028	1210	6.1	14.0	435	200	--	--
	45-11-20	211MRPAL	1028	--	6.3	--	728	320	--	--
152	49-12-02	211MRPAL	1028	205	6.7	13.0	46	0	13	3.2
	53-12-28	211MRPAL	1028	424	7.2	13.0	156	0	--	--
	54-02-08	211MRPAL	1028	388	7.1	12.0	160	0	42	13
	54-09-29	211MRPAL	1028	418	7.3	13.0	156	0	--	--
	56-01-20	211MRPAL	1028	416	7.9	--	170	0	49	12
155	53-10-15	211MRPA	1028	820	6.5	16.0	214	130	--	--
	56-02-09	211MRPA	1028	765	7.0	--	220	160	37	30
156	68-12-13	211MRPAL	1028	815	--	16.0	--	--	--	--
159	46-01-10	211MRPAL	1028	769	6.1	17.0	278	210	--	--
160	46-01-10	211MRPAL	1028	774	5.9	16.0	252	200	--	--
	47-04-10	211MRPAL	1028	769	6.0	16.0	240	200	45	32
	53-10-13	211MRPAL	1028	724	6.1	--	250	190	--	--
163	47-04-10	112TRNN	1028	713	5.8	15.0	220	160	45	25
	53-10-13	112TRNN	1028	735	6.2	16.0	240	190	--	--
	53-12-22	112TRNN	1028	779	6.3	16.0	260	210	--	--
	54-02-08	112TRNN	1028	665	6.9	14.0	230	190	41	32
	54-09-27	112TRNN	1028	741	6.6	16.0	230	190	--	--
	56-02-23	112TRNN	1028	721	7.5	17.0	210	170	41	26
164	53-10-13	211MRPAL	1028	875	6.0	16.0	300	240	--	--
	56-02-13	211MRPAL	1028	756	7.4	--	240	180	46	30
	67-07-30	211MRPAL	1028	686	7.0	--	210	150	40	27
172	54-10-08	211MRPAL	1028	366	8.2	15.0	130	41	24	16
	56-02-09	211MRPAL	1028	323	7.4	--	100	0	19	13
175	54-05-06	112TRNN	1028	699	6.9	17.0	216	170	--	--
	54-09-27	112TRNN	1028	631	8.0	16.0	180	130	38	20
	56-02-23	112TRNN	1028	719	8.1	17.0	220	150	47	26
180	54-05-13	211MRPAL	1028	624	6.5	15.0	188	81	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	196	82	64	--	--	--	.05	--	--	144
--	--	152	110	83	--	--	--	.07	--	--	
--	--	182	71	84	--	--	--	.07	--	--	
--	--	144	141	116	--	--	--	.07	--	--	
--	--	224	179	118	--	--	--	.05	79000	--	
--	--	34	181	103	--	--	--	4.74	--	--	
--	--	128	122	92	--	--	--	.05	31000	--	
--	--	--	--	111	--	--	--	--	--	--	
--	--	88	141	87	--	13	--	.61	5900	--	
--	--	82	156	88	--	10	--	.10	5800	--	
--	--	74	183	98	--	--	--	.14	6100	--	
46	2.8	151	98	76	.0	10	406	1.02	21000	1300	145
--	--	148	91	73	--	--	--	.05	--	--	
--	--	86	157	74	--	--	--	.07	--	--	
--	--	96	110	80	--	--	--	1.54	--	--	
--	--	135	109	82	--	--	--	.16	27000	--	
--	--	104	112	93	--	--	--	1.70	1400	--	
--	--	104	121	95	--	--	--	1.90	910	--	
--	--	--	--	99	--	--	--	--	--	--	
--	--	--	--	100	--	--	--	--	--	--	
--	--	218	208	105	--	--	--	1.13	7400	--	
60	2.5	220	172	101	.3	15	697	1.06	10000	--	
--	--	452	298	127	--	--	--	6.33	--	--	146
100	12	430	304	135	.2	14	1070	7.45	1200	50	
--	--	330	200	76	.1	20	709	5.42	360	0	
--	--	284	216	124	--	--	--	3.61	80	--	147
--	--	284	216	124	--	--	--	3.61	--	--	148
--	--	502	371	132	--	--	--	4.97	--	--	
20	4.1	80	16	9.5	.1	7.5	116	.16	1000	0	152
--	--	210	3.6	10	--	--	--	.05	3300	--	
17	10	210	7.6	10	.3	8.6	246	.16	6100	--	
--	--	200	6.2	10	--	--	--	1.20	5600	--	
--	--	246	5.8	8.0	.3	11	261	1.74	5300	0	
--	--	108	127	71	--	--	--	5.42	60	--	155
--	--	66	118	67	.2	17	470	12.2	1900	0	
--	--	--	139	--	--	--	--	--	--	--	156
--	--	84	139	62	--	--	--	16.0	--	--	159
--	--	70	150	62	--	--	--	16.0	--	--	160
--	--	56	158	65	--	--	--	16.0	<100	--	
--	--	68	164	60	--	--	--	5.90	140	--	
--	--	68	125	82	--	--	--	10.2	80	--	163
--	--	57	166	70	--	--	--	5.20	150	--	
--	--	65	146	76	--	--	--	5.43	1400	--	
43	5.5	54	130	68	.1	18	449	16.0	250	--	
--	--	50	155	70	--	--	--	10.2	570	--	
--	--	54	146	68	.1	20	476	12.0	590	0	
--	--	70	172	78	--	--	--	5.65	140	--	164
--	--	67	154	64	.1	19	491	18.0	560	0	
54	6.4	70	148	67	.0	19	467	6.10	20	200	
--	--	104	16	29	.3	11	212	4.74	400	--	172
--	--	156	9.0	18	.3	13	182	.27	1300	0	
--	--	60	122	56	--	--	--	6.55	40	--	175
--	--	56	135	52	.1	14	420	11.3	100	--	
--	--	89	155	46	.1	15	469	14.0	370	0	
--	--	131	58	50	--	--	--	5.00	1100	--	180

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
180	54-10-08	211MRPAL	1028	628	8.2	15.0	170	87	36	20
	56-02-09	211MRPAL	1028	656	7.4	--	190	90	39	23
181	46-01-11	211MRPAL	1028	720	6.2	--	234	140	--	--
	52-04-08	211MRPAL	1028	814	6.3	16.0	260	180	--	--
	52-09-16	211MRPAL	1028	1000	--	16.0	280	--	--	--
	53-05-25	211MRPAL	1028	804	6.1	16.0	250	180	--	--
184	49-12-02	211MRPAL	1028	816	6.1	16.0	260	180	48	34
	50-01-06	211MRPAL	1028	811	6.3	16.0	241	160	--	--
	50-03-08	211MRPAL	1028	784	6.1	16.0	238	160	--	--
	50-04-06	211MRPAL	1028	787	6.1	16.0	244	160	--	--
	50-05-08	211MRPAL	1028	779	6.2	16.0	242	160	--	--
	50-06-08	211MRPAL	1028	763	6.1	16.0	236	150	--	--
	50-10-11	211MRPAL	1028	635	6.2	16.0	200	150	--	--
	51-12-03	211MRPAL	1028	882	6.4	16.0	280	190	--	--
	52-02-07	211MRPAL	1028	835	6.4	16.0	280	190	--	--
	52-04-08	211MRPAL	1028	829	6.3	16.0	250	160	--	--
	52-06-09	211MRPAL	1028	870	6.2	16.0	155	75	--	--
	52-09-16	211MRPAL	1028	797	--	16.0	238	--	--	--
	52-12-22	211MRPAL	1028	807	--	16.0	250	--	--	--
	53-01-29	211MRPAL	1028	803	6.4	16.0	242	170	--	--
	56-02-08	211MRPAL	1028	781	7.6	--	260	170	46	36
185	46-01-11	211MRPAL	1028	717	6.4	16.0	210	130	--	--
	47-04-11	211MRPAL	1028	789	6.2	16.0	240	160	45	30
	50-07-10	211MRPAL	1028	716	6.0	16.0	260	150	--	--
	50-08-08	211MRPAL	1028	719	6.3	16.0	240	140	--	--
	50-09-07	211MRPAL	1028	740	6.3	16.0	240	140	--	--
	50-10-11	211MRPAL	1028	738	6.3	16.0	230	130	--	--
	50-11-03	211MRPAL	1028	743	6.4	16.0	236	140	--	--
	50-12-08	211MRPAL	1028	762	6.3	16.0	242	140	--	--
	51-01-08	211MRPAL	1028	765	6.3	14.0	241	150	--	--
	51-02-02	211MRPAL	1028	757	6.7	16.0	260	170	--	--
	51-04-06	211MRPAL	1028	760	6.3	16.0	240	150	--	--
	51-05-31	211MRPAL	1028	765	6.7	16.0	250	150	--	--
	53-09-04	211MRPAL	1028	704	6.1	16.0	264	180	--	--
	53-12-21	211MRPAL	1028	744	6.5	16.0	235	150	--	--
	54-02-08	211MRPAL	1028	627	7.3	15.0	240	160	39	34
	54-09-24	211MRPAL	1028	716	6.5	16.0	228	140	--	--
	66-08-29	211MRPAL	1028	816	6.6	16.0	290	190	52	38
	67-07-30	211MRPAL	1028	843	7.6	--	290	190	50	40
195	79-08-29	300WSCKO	84240	440	6.7	20.0	130	70	34	10
202	54-05-12	211MRPAL	1028	739	6.7	15.0	240	120	--	--
203	56-02-08	211MRPAL	1028	944	8.0	--	330	33	54	47
205	45-12-12	211MRPAL	1028	583	6.5	--	168	120	--	--
	49-12-06	211MRPAL	1028	1020	6.3	15.0	400	350	85	45
	50-01-06	211MRPAL	1028	978	6.5	--	358	310	--	--
	50-02-07	211MRPAL	1028	806	6.3	15.0	294	250	--	--
	50-03-08	211MRPAL	1028	905	6.3	--	336	290	--	--
	50-04-06	211MRPAL	1028	863	6.3	15.0	316	270	--	--
	50-05-08	211MRPAL	1028	--	6.8	16.0	290	240	--	--
	50-06-08	211MRPAL	1028	821	6.3	16.0	298	250	--	--
	50-07-10	211MRPAL	1028	842	6.2	15.0	320	270	--	--
	50-08-08	211MRPAL	1028	823	6.4	15.0	300	250	--	--
	50-09-07	211MRPAL	1028	840	6.5	15.0	300	250	--	--
	51-01-08	211MRPAL	1028	618	6.6	14.0	210	150	--	--
	51-02-03	211MRPAL	1028	622	6.9	14.0	220	160	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	104	64	56	.1	16	410	12.4	30	--	180
--	--	124	63	66	.2	17	417	6.80	320	0	
--	--	114	119	78	--	--	--	4.52	--	--	181
--	--	104	120	97	--	--	--	6.33	120	--	
--	--	--	--	123	--	--	--	--	--	--	
--	--	90	119	94	--	16	--	4.30	290	--	
45	12	98	118	88	.0	14	494	11.1	1000	0	184
--	--	98	121	86	--	--	--	9.50	420	--	
--	--	101	124	84	--	--	--	11.1	--	--	
--	--	102	121	84	--	--	--	11.3	--	--	
--	--	102	122	86	--	--	--	14.0	--	--	
--	--	103	117	84	--	--	--	7.45	--	--	
--	--	58	100	55	--	--	--	6.10	--	--	
--	--	108	126	108	--	--	--	6.80	920	--	
--	--	108	125	106	--	--	--	5.42	--	--	
--	--	114	121	100	--	--	--	4.74	190	--	
--	--	98	128	102	--	--	--	7.23	--	--	
--	--	--	--	87	--	--	--	--	--	--	
--	--	--	--	90	--	--	--	--	--	--	
--	--	90	--	89	--	--	--	--	--	--	
--	--	112	127	83	.1	17	499	13.1	130	0	
--	--	100	117	78	--	--	--	7.45	--	--	185
--	--	88	135	75	--	--	--	14.0	--	--	
--	--	132	99	74	--	--	--	5.20	--	--	
--	--	122	106	79	--	--	--	6.33	--	--	
--	--	118	104	81	--	--	--	6.55	--	--	
--	--	121	102	80	--	--	--	4.74	--	--	
--	--	117	105	81	--	--	--	4.30	--	--	
--	--	119	103	84	--	--	--	3.84	--	--	
--	--	116	106	86	--	--	--	3.20	--	--	
--	--	112	110	88	--	--	--	7.00	--	--	
--	--	116	112	91	--	--	--	7.23	770	--	
--	--	120	110	91	--	--	--	6.33	380	--	
--	--	102	97	88	--	8.4	--	8.81	--	--	
--	--	100	97	85	--	--	--	4.74	100	--	
35	11	100	83	78	.1	14	406	9.71	320	--	
--	--	104	96	78	--	--	--	7.00	110	--	
48	16	115	159	79	.0	15	541	9.71	50	0	
56	18	119	172	80	.2	14	566	8.81	30	0	
24	5.3	73	48	43	.9	11	252	.08	270	240	195
--	--	141	73	86	--	--	--	2.10	1600	--	202
--	--	360	17	120	.2	21	541	2.94	5200	0	203
--	--	62	90	80	--	--	--	3.84	--	--	205
22	16	55	108	198	.0	9.2	686	4.30	1000	0	
--	--	56	112	184	--	--	--	4.52	420	--	
--	--	60	115	126	--	--	--	5.20	--	--	
--	--	58	121	159	--	--	--	5.90	--	--	
--	--	60	125	141	--	--	--	5.65	--	--	
--	--	62	131	118	--	--	--	3.61	--	--	
--	--	62	129	126	--	--	--	3.61	--	--	
--	--	66	134	128	--	--	--	2.71	--	--	
--	--	67	142	119	--	--	--	4.10	--	--	
--	--	67	130	128	--	--	--	2.50	--	--	
--	--	76	116	68	--	--	--	2.71	--	--	
--	--	76	107	74	--	--	--	1.90	--	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
205	51-04-06	211MRPAL	1028	597	6.8	15.0	204	140	--	--
	51-05-31	211MRPAL	1028	627	7.0	15.0	220	150	--	--
	51-12-03	211MRPAL	1028	793	6.6	15.0	280	220	--	--
	52-02-08	211MRPAL	1028	778	7.0	15.0	270	200	--	--
	52-04-08	211MRPAL	1028	674	6.6	15.0	230	160	--	--
	52-06-09	211MRPAL	1028	643	6.6	--	230	160	--	--
	52-09-16	211MRPAL	1028	626	6.9	16.0	198	130	--	--
	52-12-22	211MRPAL	1028	590	--	16.0	184	--	--	--
	53-01-29	211MRPAL	1028	573	--	16.0	178	--	--	--
	53-05-25	211MRPAL	1028	609	6.6	16.0	204	130	--	--
	53-09-04	211MRPAL	1028	647	6.6	16.0	224	160	--	--
	53-12-21	211MRPAL	1028	658	6.6	16.0	210	140	--	--
	54-02-08	211MRPAL	1028	601	7.6	15.0	219	150	45	26
	54-09-24	211MRPAL	1028	677	7.1	16.0	214	100	--	--
	56-01-20	211MRPAL	1028	543	8.0	--	160	81	34	19
	79-08-22	211MRPAL	84240	850	6.3	16.5	300	170	52	40
	80-11-06	211MRPAL	80010	1220	6.2	15.0	390	230	73	50
206	54-05-13	211MRPAL	1028	615	6.5	15.0	188	110	--	--
	56-02-10	211MRPAL	1028	500	7.5	--	160	60	31	20
225	53-11-04	300WSCKO	1028	675	6.3	14.0	220	130	--	--
	54-09-24	300WSCKO	1028	637	8.1	--	210	140	64	13
	56-02-10	300WSCKO	1028	626	7.8	--	220	99	65	13
228	54-05-18	300WSCKO	1028	496	6.1	15.0	170	110	--	--
232	79-08-21	112TRNN	84240	1100	6.9	17.0	600	270	110	78
235	45-11-14	211MRPAL	1028	1000	6.3	17.0	368	100	--	--
	47-04-10	211MRPAL	1028	954	6.3	16.0	340	80	60	46
237	46-04-16	211MRPAL	1028	949	6.3	15.0	310	160	62	37
242	46-01-10	211MRPAL	1028	292	6.2	14.0	90	0	--	--
	47-04-10	211MRPAL	1028	347	6.6	14.0	122	0	24	15
	80-06-06	211MRPAL	84240	775	6.1	16.0	170	78	30	22
247	54-05-19	211MRPAL	1028	633	6.3	16.0	198	110	--	--
249	45-11-15	211MRPAL	1028	494	6.4	14.0	120	0	--	--
250	45-11-15	211MRPAL	1028	630	6.3	14.0	158	33	--	--
	47-04-10	211MRPAL	1028	594	6.4	14.0	160	27	28	21
	53-09-03	211MRPAL	1028	674	6.1	14.0	210	140	--	--
	53-12-21	211MRPAL	1028	655	6.2	14.0	204	130	--	--
	54-02-08	211MRPAL	1028	594	6.8	14.0	210	150	35	29
	54-10-07	211MRPAL	1028	670	6.0	14.0	196	140	--	--
	56-01-20	211MRPAL	1028	941	7.4	--	390	320	67	54
	67-07-31	211MRPAL	1028	451	8.1	14.0	140	7	30	15
252	54-05-13	112TRNN	1028	827	6.5	15.0	250	150	--	--
	56-01-20	112TRNN	1028	729	8.1	--	240	150	48	29
270	53-12-03	300WSCKO	1028	734	6.0	16.0	250	200	--	--
	54-02-15	300WSCKO	1028	721	6.5	16.0	240	180	44	32
	54-09-23	300WSCKO	1028	734	6.0	16.0	230	170	--	--
	56-02-10	300WSCKO	1028	727	7.7	--	220	150	37	30
274	45-12-19	300WSCKO	1028	792	6.3	14.0	262	3	--	--
277	46-09-04	300WSCKO	1028	682	6.4	13.0	230	200	51	26
	53-12-03	300WSCKO	1028	158	6.5	12.0	56	42	--	--
281	54-05-12	112TRNN	1028	759	6.5	15.0	270	180	--	--
	56-02-29	112TRNN	1028	664	7.1	--	230	120	42	31
283	80-06-09	300WSCKO	84240	750	6.3	16.0	160	0	30	21
287	79-09-04	112TRNN	84240	1500	6.4	20.0	--	--	--	--
288	54-01-08	112TRNN	1028	599	8.4	24.0	220	110	--	--
	54-02-15	112TRNN	1028	629	7.2	22.0	220	74	48	24

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	84	105	70	--	--	--	3.40	330	--	205
--	--	85	104	78	--	--	--	3.20	330	--	
--	--	78	111	126	--	--	--	2.30	680	--	
--	--	84	119	108	--	--	--	2.30	--	--	
--	--	86	114	74	--	--	--	3.84	200	--	
--	--	82	114	68	--	--	--	1.83	380	--	
--	--	82	--	62	--	--	--	--	--	--	
--	--	--	--	54	--	--	--	--	--	--	
--	--	--	--	51	--	--	--	--	--	--	
--	--	88	105	54	--	12	--	4.10	1200	--	
--	--	80	97	75	--	10	--	5.65	--	--	
--	--	88	100	66	--	--	--	4.30	60	--	
31	16	88	86	73	.1	8.2	417	9.50	130	--	
--	--	138	76	68	--	--	--	7.23	40	--	
--	--	100	80	60	.2	12	331	2.01	430	0	
82	12	154	280	120	.1	12	790	8.30	12000	250	
110	12	190	240	120	--	13	781	--	820	210	
--	--	90	66	62	--	--	--	.95	1200	--	206
--	--	122	65	45	.2	11	311	3.61	290	10	
--	--	113	125	65	--	--	--	.00	6100	--	225
--	--	96	150	54	.1	20	424	.14	6300	--	
--	--	142	137	47	.2	22	432	.00	4800	0	
--	--	70	98	46	--	--	--	.05	6100	--	228
78	18	398	190	110	.3	14	868	4.60	2600	4000	232
--	--	327	82	82	--	--	--	9.50	--	--	235
--	--	316	81	75	--	--	--	12.0	80	--	
63	6.8	180	120	92	.2	11	564	16.0	--	300	237
--	--	120	14	24	--	--	--	.05	--	--	242
--	--	160	13	20	--	--	--	.11	12000	--	
69	15	112	100	72	.1	15	500	9.70	980	750	
--	--	105	103	38	--	--	--	3.40	600	--	247
--	--	149	49	35	--	--	--	4.30	--	--	249
--	--	152	79	49	--	--	--	6.33	--	--	250
--	--	158	64	45	--	--	--	3.40	210	--	
--	--	83	119	62	--	14	--	10.4	2100	--	
--	--	88	108	65	--	--	--	1.31	200	--	
37	12	64	110	70	.3	9.7	382	3.84	80	--	
--	--	74	110	58	--	--	--	5.20	1900	--	
--	--	84	284	66	.1	14	645	7.45	680	0	
30	7.8	158	28	46	.5	12	272	.10	80	3400	
--	--	122	116	90	--	--	--	2.30	300	--	252
--	--	112	100	80	.2	12	455	4.74	160	0	
--	--	67	145	66	--	--	--	1.60	1000	--	270
40	18	76	139	64	.2	11	456	11.1	1100	--	
--	--	72	141	61	--	--	--	7.00	1400	--	
--	--	82	157	62	.1	16	482	6.80	290	0	
--	--	316	67	64	--	--	--	.00	14040	--	274
36	9.2	42	131	77	.0	24	424	9.94	--	--	277
--	--	17	33	13	--	--	--	.29	300	--	
--	--	112	165	44	--	--	--	2.21	100	--	281
--	--	140	133	39	.3	9.0	409	4.30	220	0	
40	10	212	79	81	.1	19	520	.12	13000	4600	283
--	--	500	400	150	.3	30	1260	.95	64000	6400	287
--	--	140	98	28	--	--	--	2.50	1500	--	288
31	17	176	85	26	.1	5.6	401	12.0	570	--	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
288	54-09-24	112TRNN	1028	666	6.7	21.0	246	110	--	--
	56-02-10	112TRNN	1028	699	8.4	--	270	68	72	22
	80-06-19	112TRNN	84240	950	7.2	16.5	340	100	100	21
298	54-05-12	300WSCKO	1028	451	8.3	15.0	104	15	--	--
300	54-05-14	300WSCKO	1028	742	6.3	15.0	280	180	--	--
	54-09-27	300WSCKO	1028	730	8.2	15.0	260	160	54	31
	80-06-11	300WSCKO	84240	700	6.2	16.0	350	170	67	44
304	53-07-16	300WSCKO	1028	1590	6.1	18.0	442	300	--	--
	53-08-19	300WSCKO	1028	1580	5.9	18.0	416	300	--	--
	53-09-28	300WSCKO	1028	1750	6.0	18.0	404	280	--	--
	53-10-19	300WSCKO	1028	1730	6.1	18.0	460	340	--	--
	53-12-29	300WSCKO	1028	1520	6.4	17.0	420	280	--	--
	54-02-03	300WSCKO	1028	1600	7.2	17.0	400	290	106	33
	54-09-22	300WSCKO	1028	1550	6.2	18.0	410	280	--	--
305	45-12-17	300WSCKO	1028	1800	6.6	14.0	780	600	--	--
306	45-12-17	112TRNN	1028	179	6.7	13.0	60	24	--	--
	49-12-02	112TRNN	1028	2810	6.9	--	500	130	--	--
307	79-08-30	112TRNN	84240	1200	6.6	15.0	110	0	22	14
308	45-12-12	112TRNN	1028	1060	6.2	18.0	428	230	--	--
	54-02-04	112TRNN	1028	935	6.5	18.0	345	220	--	--
	56-02-10	112TRNN	1028	684	7.4	--	261	150	52	32
310	79-09-10	300WSCKO	84240	260	6.8	18.0	79	0	23	5.0
311	54-03-03	112TRNN	1028	1410	6.5	17.0	320	190	--	--
317	54-02-18	300WSCKO	1028	578	7.3	13.0	220	100	60	18
	54-09-22	300WSCKO	1028	561	7.1	14.0	226	85	--	--
323	53-07-17	300WSCKO	1028	198	8.0	14.0	64	35	--	--
329	53-07-31	300WSCKO	1028	1340	8.0	17.0	220	150	50	24
	53-08-31	300WSCKO	1028	1150	6.0	15.0	212	130	--	--
	53-09-28	300WSCKO	1028	1080	6.0	17.0	206	120	--	--
	53-10-19	300WSCKO	1028	1050	6.5	17.0	190	100	--	--
	53-12-29	300WSCKO	1028	1010	6.3	17.0	190	110	--	--
	54-02-03	300WSCKO	1028	958	7.8	17.0	198	120	38	25
	54-09-22	300WSCKO	1028	979	6.1	17.0	185	110	--	--
	56-02-10	300WSCKO	1028	730	7.9	--	180	77	42	18
330	54-05-14	300WSCKO	1028	1000	5.7	--	360	330	--	--
336	53-07-28	300WSCKO	1028	663	6.7	16.0	254	200	--	--
337	53-07-28	300WSCKO	1028	709	7.4	--	--	--	--	--
338	53-07-28	300WSCKO	1028	816	7.1	14.0	328	190	--	--
	53-10-19	300WSCKO	1028	775	7.2	14.0	290	160	--	--
340	53-07-28	000HBLD	1028	508	5.7	16.0	184	160	--	--
	53-08-31	000HBLD	1028	501	5.8	14.0	170	140	--	--
	53-09-28	000HBLD	1028	506	5.7	17.0	176	160	--	--
	53-10-19	000HBLD	1028	510	6.2	17.0	164	140	--	--
	53-12-29	000HBLD	1028	505	7.3	16.0	162	140	--	--
	54-02-03	000HBLD	1028	526	6.9	16.0	180	160	37	21
344	53-08-05	300WSCKO	1028	536	8.1	13.0	210	140	62	14
	53-08-26	300WSCKO	1028	599	6.5	13.0	238	140	--	--
	53-09-28	300WSCKO	1028	594	6.4	13.0	252	150	--	--
	53-10-19	300WSCKO	1028	596	6.7	13.0	235	140	--	--
	53-12-29	300WSCKO	1028	642	6.8	13.0	250	150	--	--
	54-02-03	300WSCKO	1028	639	7.5	13.0	255	160	71	19
	54-09-22	300WSCKO	1028	641	6.6	13.0	250	150	--	--
	56-02-10	300WSCKO	1028	595	8.2	--	230	120	67	15
	80-07-01	300WSCKO	84240	750	6.2	14.5	320	190	90	22
347	53-08-04	300WSCKO	1028	272	7.2	15.0	100	62	23	11

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	172	88	30	--	--	--	7.70	900	--	288
--	--	230	104	32	.2	8.0	451	4.74	2100	0	
120	20	293	57	100	.2	11	610	.75	2200	2500	
--	--	102	60	36	--	--	--	.05	2500	--	298
--	--	125	146	70	--	--	--	.29	7200	--	300
--	--	124	152	67	.2	20	497	.88	5800	--	
69	8.2	215	83	79	.2	27	830	.12	14000	2100	
--	--	176	238	305	--	36	--	.27	--	--	304
--	--	148	243	277	--	20	--	.02	1000	--	
--	--	148	247	340	--	40	--	.14	6300	--	
--	--	143	237	324	--	--	--	.23	6300	--	
--	--	176	214	249	--	--	--	.11	6200	--	
168	1.4	136	205	280	.1	22	958	.18	5600	--	
--	--	156	195	282	--	--	--	.05	5900	--	
--	--	216	176	400	--	--	--	.14	23760	--	305
--	--	44	--	11	--	--	--	.81	--	--	306
--	--	455	292	526	.1	8.8	1760	3.20	4200	0	
150	4.6	266	18	240	.1	20	824	.07	120000	2400	307
--	--	240	227	71	--	--	--	14.0	--	--	308
--	--	156	202	52	--	--	--	2.71	2600	--	
--	--	138	105	31	.2	9.0	439	7.50	250	0	
11	5.5	100	32	18	.2	30	310	.02	4600	410	310
--	--	157	227	212	--	--	--	.52	1500	--	311
30	1.6	146	69	42	.1	19	336	2.94	2700	--	317
--	--	172	48	44	--	--	--	.07	5400	--	
--	--	35	5.8	30	--	22	--	.23	--	--	323
170	9.3	89	137	275	.1	25	761	.05	--	--	329
--	--	104	136	213	--	20	--	.10	2100	--	
--	--	102	139	200	--	26	--	.11	6100	--	
--	--	105	128	180	--	--	--	.00	6400	--	
--	--	104	128	172	--	--	--	.07	5200	--	
100	1.8	98	116	144	.2	25	538	.25	21000	--	
--	--	86	116	172	--	--	--	.10	5900	--	
--	--	124	109	100	.2	29	455	.00	5100	0	
--	--	34	244	136	--	--	--	.02	6300	--	330
--	--	62	179	55	--	26	--	4.30	--	--	336
--	--	138	166	45	--	28	--	.11	--	--	337
--	--	170	173	55	--	32	--	.61	--	--	338
--	--	159	157	52	--	--	--	.43	200	--	
--	--	26	59	48	--	23	--	21.0	--	--	340
--	--	34	56	49	--	24	--	4.30	40	--	
--	--	25	59	52	--	--	--	24.4	--	--	
--	--	28	55	51	--	--	--	7.70	150	--	
--	--	24	55	54	--	--	--	7.50	110	--	
22	2.8	28	48	52	.1	24	349	27.1	2200	--	
20	6.8	84	111	47	.1	27	357	.43	--	--	344
--	--	116	118	44	--	20	--	.45	400	--	
--	--	120	110	50	--	23	--	.38	1700	--	
--	--	116	112	47	--	--	--	.23	1800	--	
--	--	118	118	56	--	--	--	.11	2000	--	
23	6.5	120	110	51	.1	25	396	.29	2800	--	
--	--	120	94	58	--	--	--	.23	2600	--	
--	--	132	108	50	.2	27	385	.16	1700	0	
53	9.3	158	130	90	.2	22	550	.05	1400	1200	
10	6.5	50	68	18	.1	32	198	.11	--	--	347

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
347	53-09-01	300WSCKO	1028	271	5.8	16.0	100	73	--	--
	53-09-28	300WSCKO	1028	266	5.8	17.0	100	75	--	--
	53-10-19	300WSCKO	1028	269	6.2	16.0	94	69	--	--
	54-02-03	300WSCKO	1028	271	6.3	17.0	91	67	20	10
	54-09-23	300WSCKO	1028	279	5.9	16.0	96	71	--	--
357	53-08-05	300WSCKO	1028	474	7.8	17.0	180	160	47	16
	53-09-01	300WSCKO	1028	499	5.6	16.0	198	170	--	--
	53-09-28	300WSCKO	1028	490	5.5	16.0	--	--	--	--
	53-10-19	300WSCKO	1028	506	6.0	17.0	192	160	--	--
	53-12-29	300WSCKO	1028	561	6.4	17.0	180	130	--	--
	54-02-03	300WSCKO	1028	552	6.4	--	210	190	51	21
	54-09-23	300WSCKO	1028	548	6.0	18.0	206	190	--	--
373	54-01-25	211MRPAL	1028	349	7.2	13.0	120	50	26	14
	54-09-23	211MRPAL	1028	413	6.5	16.0	114	0	--	--
	56-02-29	211MRPAL	1028	346	7.0	--	130	27	32	13
	67-08-21	211MRPAL	1028	527	6.6	17.0	200	0	44	21
389	53-12-04	112TRNN	1028	1710	6.8	17.0	500	210	--	--
	54-09-27	112TRNN	1028	2600	6.9	18.0	440	330	127	29
392	54-01-08	300WSCKO	1028	2560	4.4	23.0	1050	1100	--	--
	54-09-22	300WSCKO	1028	3280	2.7	21.0	550	550	167	32
395	54-01-08	300WSCKO	1028	724	6.9	--	220	130	--	--
	80-06-19	300WSCKO	84240	--	6.4	15.5	280	140	54	34
	80-09-22	300WSCKO	42010	--	--	--	--	--	--	--
397	79-09-04	112TRNN	84240	275	5.8	14.0	85	57	16	11
398	54-09-23	300WSCKO	1028	180	6.5	15.0	59	20	--	--
400	53-09-24	300WSCKO	1028	165	6.3	13.0	55	16	--	--
	54-01-25	300WSCKO	1028	170	7.1	13.0	59	29	13	8.5
	79-09-10	300WSCKO	80010	400	6.2	14.0	120	51	25	13
	80-09-19	300WSCKO	84240	400	6.0	13.0	100	32	20	13
407	49-12-02	211MRPAL	1028	244	6.5	14.0	81	10	23	5.7
	50-01-06	211MRPAL	1028	244	6.9	14.0	80	6	--	--
	50-02-07	211MRPAL	1028	235	6.8	14.0	80	9	--	--
	50-03-08	211MRPAL	1028	240	6.8	14.0	83	10	--	--
	50-04-06	211MRPAL	1028	240	6.9	14.0	82	8	--	--
	50-05-08	211MRPAL	1028	226	6.8	14.0	79	7	--	--
	50-06-08	211MRPAL	1028	225	6.6	15.0	78	6	--	--
	50-07-10	211MRPAL	1028	228	6.2	14.0	80	7	--	--
	50-08-08	211MRPAL	1028	227	6.8	14.0	82	2	--	--
	50-09-07	211MRPAL	1028	220	6.8	14.0	76	0	--	--
	50-10-11	211MRPAL	1028	221	6.9	14.0	74	0	--	--
	50-11-03	211MRPAL	1028	236	6.7	14.0	79	0	--	--
	51-01-08	211MRPAL	1028	219	6.6	13.0	67	0	--	--
	51-02-02	211MRPAL	1028	219	6.8	13.0	76	5	--	--
	51-04-06	211MRPAL	1028	216	6.8	15.0	78	3	--	--
	51-05-31	211MRPAL	1028	220	7.1	15.0	77	5	--	--
	51-08-06	211MRPAL	1028	227	6.7	--	84	12	84	--
	51-12-03	211MRPAL	1028	276	6.9	13.0	100	34	--	--
	52-02-07	211MRPAL	1028	279	6.8	14.0	100	34	--	--
	53-05-25	211MRPAL	1028	228	6.4	14.0	84	18	--	--
	53-09-04	211MRPAL	1028	223	6.3	14.0	82	23	--	--
	53-12-28	211MRPAL	1028	227	6.8	14.0	80	21	--	--
	54-02-08	211MRPAL	1028	234	7.6	13.0	79	21	21	6.4
	54-09-29	211MRPAL	1028	225	6.5	14.0	78	17	--	--
	56-02-09	211MRPAL	1028	218	7.5	--	73	3	21	5.0
	67-07-31	211MRPAL	1028	235	6.9	14.0	78	0	22	5.5

SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	33	70	17	--	26	--	.11	6100	--	347
--	--	31	72	16	--	22	--	.16	6000	--	
--	--	30	63	20	--	--	--	.07	8200	--	
7.5	5.0	29	61	16	.1	28	182	.18	8300	--	
--	--	31	53	21	--	--	--	.07	6200	--	
14	5.6	35	153	26	.1	29	323	.02	--	--	357
--	--	40	157	30	--	6.0	--	.10	6000	--	
--	--	36	162	30	--	22	--	.10	5700	--	
--	--	34	162	29	--	--	--	.02	7400	--	
--	--	67	161	27	--	--	--	.68	7200	--	
19	5.5	30	168	29	.1	25	353	.18	4600	--	
--	--	26	175	31	--	--	--	.05	6200	--	
15	1.9	88	24	22	.2	19	212	10.4	4600	--	373
--	--	158	22	17	--	--	--	.07	5400	--	
--	--	130	20	18	.3	22	199	.00	4800	10	
31	3.1	240	23	36	.4	20	298	.18	5800	2200	
--	--	354	166	224	--	--	--	.23	4100	--	389
--	--	136	208	625	.3	8.9	1550	.05	6300	--	
--	--	0	1250	150	--	--	--	4.30	16000	--	392
--	--	0	918	270	1.0	22	1810	.07	6300	--	
--	--	106	194	51	--	--	--	.20	18000	--	395
85	3.5	173	300	100	.2	33	750	.00	22000	1400	
--	--	--	--	--	--	--	--	--	--	--	
12	5.2	34	42	16	.1	21	232	.89	920	50	397
--	--	48	21	9.0	--	--	--	.11	5600	--	398
--	--	48	16	7.0	--	--	--	.05	5000	--	400
5.8	3.0	37	28	8.5	.1	18	108	.23	4600	--	
14	3.4	84	27	45	.1	18	402	.27	5900	320	
12	3.5	83	64	43	.1	20	420	.19	3400	320	
11	4.2	86	21	14	.0	8.2	136	.43	4200	0	407
--	--	90	20	14	--	--	--	.47	5200	--	
--	--	86	24	12	--	--	--	.32	--	--	
--	--	89	28	12	--	--	--	.41	--	--	
--	--	90	26	12	--	--	--	.05	--	--	
--	--	88	21	12	--	--	--	.38	--	--	
--	--	88	19	13	--	--	--	.20	--	--	
--	--	89	20	11	--	--	--	.34	--	--	
--	--	98	17	10	--	--	--	.29	--	--	
--	--	93	15	10	--	--	--	.34	--	--	
--	--	95	13	10	--	--	--	.43	--	--	
--	--	103	19	10	--	--	--	.32	--	--	
--	--	89	19	10	--	--	--	.45	--	--	
--	--	87	17	11	--	--	--	.54	--	--	
--	--	92	21	10	--	--	--	.41	12000	--	
--	--	88	21	12	--	--	--	.43	--	--	
--	--	88	19	12	--	--	--	.38	--	--	
--	--	80	34	19	--	--	--	.41	3700	--	
--	--	80	32	19	--	--	--	.32	--	--	
--	--	80	24	10	--	--	--	.52	3300	--	
--	--	72	23	11	--	9.2	--	.50	--	--	
--	--	72	16	16	--	--	--	.56	4900	--	
9.2	5.5	71	19	13	.2	8.6	124	.72	4400	--	
--	--	74	20	11	--	--	--	.32	5600	--	
--	--	85	18	11	.1	10	125	.47	3300	0	
14	8.6	94	22	14	.2	9.5	147	.18	3700	40	

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE
IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
407	71-05-28	211MRPAL	1028	802	6.4	14.8	260	130	60	26
	71-05-28	211MRPAL	1028	--	--	--	--	--	--	--
	80-11-05	211MRPAL	80010	672	6.1	15.0	220	66	56	19
408	79-08-16	211MRPAL	84240	880	6.3	15.5	370	210	71	46
411	53-05-25	112TRNN	1028	234	6.4	15.0	84	22	--	--
	56-02-09	112TRNN	1028	248	7.3	17.0	72	29	18	6.5
	79-08-16	112TRNN	84240	610	6.7	16.0	150	0	35	15
412	49-12-06	112TRNN	1028	244	6.3	14.0	81	7	23	5.7
	50-01-06	112TRNN	1028	242	6.7	14.0	80	6	--	--
	50-02-07	112TRNN	1028	315	6.5	16.0	90	0	--	--
	50-03-08	112TRNN	1028	398	6.6	17.0	94	0	--	--
	50-04-06	112TRNN	1028	341	6.5	17.0	86	0	--	--
	50-05-08	112TRNN	1028	322	6.6	18.0	78	0	--	--
	50-06-08	112TRNN	1028	227	7.0	18.0	72	0	--	--
	50-07-03	112TRNN	1028	321	6.2	17.0	74	0	--	--
	50-08-08	112TRNN	1028	291	6.6	17.0	64	0	--	--
	50-09-07	112TRNN	1028	247	6.6	15.0	64	0	--	--
	50-10-11	112TRNN	1028	293	6.2	17.0	66	16	--	--
	50-11-03	112TRNN	1028	303	6.6	15.0	76	0	--	--
	50-12-08	112TRNN	1028	287	6.4	18.0	74	2	--	--
	51-01-08	112TRNN	1028	313	6.5	18.0	70	0	--	--
	51-02-02	112TRNN	1028	246	6.7	14.0	74	0	--	--
	51-03-07	112TRNN	1028	337	6.8	17.0	106	0	--	--
	51-04-06	112TRNN	1028	474	6.7	17.0	130	0	--	--
	51-04-12	112TRNN	1028	421	6.7	16.0	112	0	--	--
	51-04-30	112TRNN	1028	372	6.7	16.0	92	0	--	--
	51-05-31	112TRNN	1028	332	6.8	15.0	110	0	--	--
	51-08-06	112TRNN	1028	415	6.5	--	110	0	--	--
	51-09-12	112TRNN	1028	266	6.3	--	76	0	--	--
	51-10-09	112TRNN	1028	297	6.5	--	144	16	--	--
	52-01-09	112TRNN	1028	326	6.6	18.0	74	0	--	--
	52-02-07	112TRNN	1028	365	6.8	18.0	86	0	--	--
	52-03-06	112TRNN	1028	326	6.6	18.0	80	0	--	--
	52-06-09	112TRNN	1028	319	6.6	17.0	76	0	--	--
	52-09-16	112TRNN	1028	307	--	14.0	90	--	--	--
	52-09-16	112TRNN	1028	240	--	12.0	78	--	--	--
	52-11-09	112TRNN	1028	329	6.6	17.0	76	0	--	--
	52-12-22	112TRNN	1028	260	--	14.0	66	--	--	--
	53-01-29	112TRNN	1028	289	--	16.0	82	--	--	--
	53-09-04	112TRNN	1028	243	6.1	16.0	80	32	--	--
	53-12-28	112TRNN	1028	370	8.1	19.0	112	61	--	--
	54-02-08	112TRNN	1028	338	6.8	19.0	82	22	19	8.5
	54-09-29	112TRNN	1028	238	6.3	14.0	75	32	--	--
415	80-11-05	211MRPAU	80010	600	6.6	15.0	150	0	34	16
417	80-11-05	211MRPAL	80010	768	6.4	15.0	270	30	48	36
430	54-06-02	211MRPAL	1028	676	6.8	15.0	170	31	--	--
	56-02-09	211MRPAL	1028	567	8.2	--	160	0	29	20
	79-08-21	211MRPAL	84240	575	6.5	16.5	220	71	38	30
434	30-03-19	211MRPAL	1028	--	--	--	270	120	52	35
436	45-11-15	211MRPAL	1028	908	6.1	14.0	352	130	--	--
	46-04-16	211MRPAL	1028	960	6.2	15.0	370	130	61	53
	47-04-10	211MRPAL	1028	917	6.1	14.0	350	150	60	49
442	54-05-26	300WSCKO	1028	447	5.7	16.0	160	150	--	--
	56-01-18	300WSCKO	1028	323	8.3	--	14	0	5.7	.0
443	54-05-26	211MRPAL	1028	340	5.9	13.0	100	79	--	--

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
50	7.8	158	131	66	.4	9.9	479	.00	64000	1310	407
--	--	--	--	--	--	--	--	--	40000	2200	
47	6.5	188	150	57	--	13	468	--	17000	450	
64	7.6	202	200	63	.1	14	716	.01	5800	210	408
--	--	76	28	12	--	10	--	.11	5700	--	411
--	--	52	4.5	15	.2	14	182	13.3	9000	0	
26	6.9	304	2.0	28	.2	18	306	.01	22000	960	
12	4.3	90	19	12	.0	7.5	135	.45	3100	0	412
--	--	90	20	12	--	--	--	.50	5400	--	
--	--	143	--	23	--	--	--	.07	--	--	
--	--	178	.8	30	--	--	--	.45	--	--	
--	--	130	10	30	--	--	--	.10	--	--	
--	--	119	14	26	--	--	--	.23	--	--	
--	--	101	.4	18	--	--	--	.59	--	--	
--	--	140	9.9	20	--	--	--	.14	--	--	
--	--	122	12	14	--	--	--	.27	--	--	
--	--	113	4.9	14	--	--	--	.23	--	--	
--	--	61	2.0	14	--	--	--	4.52	--	--	
--	--	125	8.6	16	--	--	--	4.52	--	--	
--	--	88	15	20	--	--	--	3.61	--	--	
--	--	96	21	18	--	--	--	4.10	--	--	
--	--	104	19	12	--	--	--	.23	--	--	
--	--	178	.8	13	--	--	--	.43	32000	--	
--	--	280	3.7	12	--	--	--	.68	55000	--	
--	--	238	2.9	13	--	--	--	.27	42000	--	
--	--	208	5.4	12	--	--	--	.27	36000	--	
--	--	180	2.5	12	--	--	--	.05	28000	--	
--	--	208	2.1	14	--	--	--	.05	--	--	
--	--	108	9.1	14	--	--	--	.10	--	--	
--	--	156	7.0	16	--	--	--	.10	--	--	
--	--	134	8.6	18	--	--	--	.14	--	--	
--	--	140	11	21	--	--	--	.11	--	--	
--	--	140	6.6	14	--	--	--	.07	5000	--	
--	--	142	7.8	12	--	--	--	.16	8100	--	
--	--	--	--	11	--	--	--	--	--	--	
--	--	--	--	11	--	--	--	--	--	--	
--	--	132	11	21	--	--	--	.16	--	--	
--	--	--	--	10	--	--	--	--	--	--	
--	--	--	--	13	--	--	--	--	--	--	
--	--	58	19	16	--	11	--	12.2	--	--	
--	--	62	19	50	--	--	--	2.71	4000	--	
22	4.5	74	20	36	.1	7.8	169	.29	4700	--	
--	--	53	11	23	--	--	--	1.90	6300	--	
25	5.5	361	13	35	--	21	323	--	21000	650	415
53	7.1	293	140	60	--	16	534	--	22000	820	417
--	--	170	52	68	--	--	--	1.40	3300	--	430
--	--	208	41	48	.5	12	337	1.24	3400	0	
57	18	185	98	64	.2	15	462	5.10	3800	3200	
55	4.5	187	78	83	--	17	489	12.0	60	--	434
--	--	273	116	82	--	--	--	4.30	--	--	436
51	8.9	298	123	76	.2	16	558	1.51	--	0	
--	--	252	133	68	--	--	--	9.94	120	--	
--	--	16	97	30	--	30	--	8.81	360	--	442
--	--	125	30	18	.1	32	212	.10	3100	0	
--	--	25	49	32	--	14	--	8.40	2900	--	443

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
443	56-01-18	211MRPAL	1028	339	6.8	--	99	73	15	15
444	54-05-26	300WSCKO	1028	354	6.0	14.0	105	83	--	--
	56-01-18	300WSCKO	1028	478	6.6	--	120	91	23	15
454	79-08-20	112TRNN	84240	1075	6.5	18.0	370	130	62	52
466	80-06-05	211MRPAL	84240	850	6.4	15.5	460	320	86	59
	80-11-20	211MRPAL	80010	720	6.7	16.0	230	81	43	30
469	50-01-12	211MRPAM	1028	202	6.5	13.0	58	0	13	6.2
	56-02-09	211MRPAM	1028	189	7.1	--	57	32	15	4.7
	67-07-31	211MRPAM	1028	298	6.1	11.0	63	42	14	6.8
473	68-12-19	211MRPAL	1028	770	--	15.5	--	--	--	--
486	54-06-09	300WSCKO	1028	598	5.9	17.0	180	150	--	--
	80-06-05	300WSCKO	84240	600	5.7	16.5	240	200	39	35
499	54-10-11	300WSCKO	--	310	6.3	14.0	112	31	--	--
525	54-11-18	300WSCKO	--	627	8.0	15.0	174	99	--	--
528	54-11-24	300WSCKO	--	753	8.1	13.0	304	240	--	--
531	54-11-18	000GBBR	--	183	5.7	14.0	55	45	--	--
538	54-11-24	300WSCKO	--	198	7.5	12.0	57	39	--	--
	65-07-29	300WSCKO	--	345	6.1	14.5	100	63	24	10
	80-06-16	300WSCKO	84240	320	5.8	13.0	81	63	16	10
540	65-07-29	300WSCKO	--	163	6.6	19.5	49	28	12	4.6
	80-09-22	300WSCKO	84240	240	6.2	14.0	43	0	10	4.4
542	54-11-24	300WSCKO	--	668	8.2	15.0	280	130	--	--
	80-08-20	300WSCKO	84240	800	6.0	16.5	240	130	61	22
543	54-11-24	300WSCKO	--	647	7.0	15.0	276	96	--	--
	80-10-03	300WSCKO	84240	600	7.3	17.0	280	130	90	14
545	54-12-01	300WSCKO	--	508	7.9	13.0	196	140	--	--
548	54-12-03	377CCKS	--	252	8.1	14.0	102	36	--	--
549	80-09-22	300WSCKO	84240	390	6.0	14.0	92	30	25	7.1
550	54-12-03	300WSCKO	--	152	7.7	12.0	39	5	--	--
	80-06-16	300WSCKO	84240	160	5.6	12.5	43	27	8.1	5.5
552	54-11-26	300WSCKO	--	406	7.9	15.0	138	100	--	--
	80-09-18	300WSCKO	84240	340	5.6	14.5	80	62	16	9.6
564	54-11-26	300WSCKO	--	462	7.5	16.0	186	140	--	--
567	54-11-29	300WSCKO	--	586	6.2	17.0	214	170	--	--
	80-07-07	300WSCKO	84240	650	6.0	16.0	240	190	55	24
570	54-11-29	300WSCKO	--	1120	8.0	14.0	290	220	--	--
584	65-07-29	300WSCKO	--	371	6.1	14.5	138	85	34	13
585	54-12-01	300WSCKO	--	730	7.9	14.0	290	210	--	--
592	80-07-10	300WSCKO	84240	1100	6.0	19.0	530	440	140	44
600	54-12-02	300WSCKO	--	530	7.9	14.0	62	11	--	--
612	80-06-12	300WSCKO	84240	1100	6.2	6.0	330	180	62	41
650	55-01-10	300WSCKO	--	333	6.2	17.0	100	78	--	--
660	46-01-08	300WSCKO	--	3460	6.1	16.0	645	580	--	--
	55-01-10	300WSCKO	--	1320	6.5	18.0	350	240	--	--
661	79-08-30	300WSCKO	84240	950	6.4	20.5	190	23	50	15
666	80-07-09	300WSCKO	84240	540	6.8	16.5	190	120	51	14
668	80-07-11	300WSCKO	80010	850	6.6	18.5	280	200	67	27
	80-10-07	300WSCKO	42010	--	--	--	--	--	--	--
674	55-01-10	300WSCKO	--	565	6.4	16.0	214	130	--	--
690	80-07-18	300WSCKO	84240	725	6.3	16.5	210	100	62	14
702	80-07-17	300WSCKO	84240	650	5.5	16.0	180	150	41	19
709	54-11-29	300WSCKO	--	421	7.9	13.0	158	110	--	--
	79-09-05	300WSCKO	84240	600	6.3	20.5	230	170	56	21
715	54-12-23	300WSCKO	--	474	7.8	12.0	182	140	--	--
724	80-07-01	300WSCKO	84240	340	5.5	13.5	95	67	22	9.6

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER
--	--	32	54	28	.1	18	206	8.40	670	--	443
--	--	27	42	34	--	16	--	9.30	500	--	444
--	--	34	57	60	.1	18	281	10.2	320	0	
58	12	289	120	120	.2	12	684	.02	37000	2700	454
100	37	166	47	75	.2	15	600	7.10	21000	1600	466
45	15	182	110	73	--	15	504	--	18000	2200	
9.8	2.4	75	20	13	.2	19	118	.16	41000	1100	469
--	--	30	35	12	.1	6.2	114	2.30	1000	0	
25	3.4	25	31	42	.3	15	204	4.30	18000	1100	
--	--	--	95	--	--	--	--	--	--	--	473
--	--	36	122	49	--	--	--	9.94	2500	--	486
71	7.6	49	90	61	.1	9.1	500	6.30	50	1300	
--	--	99	32	13	--	--	--	1.83	2300	--	499
--	--	92	172	82	--	--	--	.18	5900	--	525
--	--	80	285	47	--	--	--	.59	6000	--	528
--	--	12	30	10	--	--	--	6.33	1200	--	531
--	--	22	38	14	--	--	--	3.84	40	--	538
22	3.0	46	52	28	.0	21	219	5.90	190	50	
14	2.5	22	37	32	.1	19	240	5.70	120	9	
8.2	1.8	25	37	7.6	.0	16	105	1.10	330	80	540
5.4	1.8	100	36	13	.1	21	190	.41	20	20	
--	--	184	115	41	--	--	--	3.40	80	--	542
36	5.9	129	80	92	.1	16	720	6.90	20	20	
--	--	219	102	26	--	--	--	.59	1500	--	543
37	4.3	188	100	53	.4	11	400	.41	270	820	
--	--	72	132	56	--	--	--	.11	200	--	545
--	--	81	22	12	--	--	--	2.50	30	--	548
9.0	2.2	76	43	9.0	.1	22	250	5.90	0	10	549
--	--	41	12	12	--	--	--	6.55	5500	--	550
9.6	3.7	20	16	8.0	.0	13	90	2.20	1300	60	
--	--	42	80	25	--	--	--	7.50	1400	--	552
9.9	4.9	22	78	10	.1	17	350	3.90	0	620	
--	--	59	115	22	--	--	--	5.42	30	--	564
--	--	54	144	38	--	--	--	8.13	20	--	567
40	5.0	62	120	71	.1	20	500	7.40	20	5	
--	--	88	--	185	--	--	--	--	290	--	570
13	2.7	65	64	30	.1	21	232	2.20	480	100	584
--	--	98	155	61	--	--	--	6.80	60	--	585
41	16	118	410	110	.1	33	820	1.50	290	1000	592
--	--	62	78	55	--	--	--	6.55	40	--	600
140	12	185	190	130	.1	23	940	.00	27000	1900	612
--	--	27	85	23	--	--	--	.11	5400	--	650
--	--	74	282	940	--	--	--	.54	61000	--	660
--	--	132	252	202	--	--	--	.10	5900	--	
280	12	195	220	94	.2	20	594	.33	6600	2000	661
39	7.7	87	170	49	.1	23	410	.05	1100	340	666
49	4.6	102	130	130	.1	28	618	5.30	50	25	668
--	--	--	--	--	--	--	--	--	--	--	
--	--	102	110	49	--	--	--	.41	4300	--	674
32	5.0	133	140	--	.1	20	580	.31	1700	380	690
33	6.4	44	100	--	.1	25	500	3.60	680	240	702
--	--	56	89	26	--	--	--	4.52	190	--	709
42	7.4	68	84	84	.4	15	496	.87	700	1300	
--	--	48	144	25	--	--	--	1.11	5600	--	715
13	3.0	34	43	15	.1	25	210	9.00	30	10	724

TABLE 3. -- CHEMICAL ANALYSES OF COMMON IONS INCLUDING NITRATE IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER OR IDENTIFIER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
736	29-07-24	211MRPAL	--	--	--	--	360	150	66	47
738	80-07-03	300WSCKO	84240	500	5.8	14.5	130	67	42	5.8
740	68-12-11	211MRPAL	--	721	--	15.0	--	--	--	--
741	68-12-11	211MRPAL	--	721	--	15.0	--	--	--	--
745	79-10-02	300WSCKO	84240	1850	5.7	16.5	320	290	66	36
748	80-06-09	300WSCKO	84240	300	6.8	15.0	120	0	36	5.9
749	79-08-22	300WSCKO	84240	650	6.4	16.5	220	130	60	18
750	80-09-17	211MRPAL	84240	850	6.4	15.5	360	140	70	44
752	80-08-21	211MRPAU	84240	3500	5.3	15.5	1200	1100	230	150
763	79-09-05	112TRNN	84240	1150	7.0	22.5	390	50	110	27
770	79-09-05	112TRNN	84240	2950	6.6	24.0	1900	1500	740	7.0
771	80-07-01	300WSCKO	84240	340	6.2	14.5	100	32	39	.8
774	80-07-14	300WSCKO	84240	4000	6.0	15.0	940	820	230	87
780	80-06-06	211MRPAL	80010	950	6.2	16.0	270	160	49	35
783	80-07-03	300WSCKO	84240	1180	6.2	15.5	640	310	190	39
790	80-06-18	112TRNN	84240	1000	6.6	13.5	200	0	55	16
793	80-08-19	300WSCKO	84240	700	6.0	18.0	230	77	53	24
794	80-10-20	211MRPAL	84240	1550	6.1	16.5	280	200	70	25
796	80-10-10	112TRNN	84240	650	6.1	18.0	210	140	56	17
797	80-10-15	112TRNN	84240	450	6.1	19.0	120	2	28	11
798	80-10-16	300WSCKO	84240	1200	6.2	18.0	380	170	93	36
799	80-10-17	300WSCKO	84240	675	6.6	25.0	350	180	86	32
800	80-11-05	300WSCKO	84240	600	6.4	13.5	260	140	63	25
804	80-11-06	377CCKS	84240	170	6.5	11.0	49	17	11	5.2
805	80-11-18	211MRPAL	84240	600	5.8	18.0	210	180	44	24
807	80-11-17	300WSCKO	84240	425	6.6	11.5	180	110	51	12
SHUNK ST STATION SUMP	79-09-12	112TRNN	84240	850	7.6	20.0	390	280	71	52
TASKER-MORRIS STS SUMP	79-10-02	112TRNN	84240	580	6.5	19.0	750	600	140	98
	79-12-05	112TRNN	84240	700	6.4	16.5	--	--	--	--
	80-08-01	112TRNN	84240	900	6.5	18.0	270	140	42	41
VETERANS STADIUM SUMP	79-09-11	112TRNN	84240	1120	6.9	18.0	800	200	140	110
	79-12-05	112TRNN	84240	1600	7.1	16.0	--	--	--	--
	80-08-01	112TRNN	84240	1750	7.0	17.0	620	28	100	90

SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	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)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	LOCAL NUMBER OR IDENTIFIER
89	9.6	249	102	140	--	16	692	18.0	140	--	736
21	5.1	76	120	38	.1	14	490	5.30	370	40	738
--	--	--	162	--	--	--	--	--	--	--	740
--	--	--	162	--	--	--	--	--	--	--	741
54	16	29	340	300	.1	33	1430	.02	72000	4200	745
52	8.9	154	15	22	.1	24	200	.06	1600	140	748
36	8.6	116	120	70	.1	28	454	.03	19000	800	749
43	7.9	266	120	64	.2	17	1060	3.50	17000	830	750
53	34	166	1720	29	.6	25	4480	.11	220000	31000	752
160	14	412	33	150	.3	18	710	.80	12000	1400	763
420	17	541	2200	34	.5	83	3350	.28	9000	120	770
15	5.2	83	40	31	.1	24	230	.09	1400	770	771
330	14	141	120	910	.1	23	3350	3.20	60	20	774
55	14	134	180	76	.2	15	572	15.0	32	220	780
48	8.0	404	180	89	.2	27	950	.04	2300	780	783
95	4.4	561	41	110	.1	14	690	.00	370	40	790
37	7.1	187	110	56	.2	30	670	1.00	720	310	793
280	1.2	96	460	230	.1	20	4090	.03	100000	6600	794
48	18	84	210	17	.2	18	500	4.90	20	2900	796
9.6	5.5	144	90	34	.2	42	450	.02	28000	1300	797
46	4.7	254	100	200	.2	24	3390	.24	12000	1800	798
14	5.7	212	110	39	.8	3.2	430	.04	10	210	799
12	5.1	146	66	48	.1	27	480	1.10	0	0	800
4.0	2.5	39	33	4.0	.1	13	100	.57	20	2	804
36	4.7	34	130	83	.1	12	380	4.90	70	190	805
11	4.4	80	34	49	.1	17	240	3.50	0	1	807
92	12	138	130	140	.2	17	766	.41	570	40	SSS
160	36	182	200	79	.2	16	740	6.50	80	580	TMS
--	--	176	200	--	.2	--	600	8.20	100	120	
54	5.7	168	66	77	.2	16	550	7.10	20	110	
140	27	739	26	140	.2	17	1120	11.0	11000	3600	VSS
--	--	610	110	--	.3	--	1030	.06	14000	40000	
91	18	722	98	33	.2	16	1000	.10	6100	3300	

TABLE 4. -- CHEMICAL ANALYSES OF NUTRIENTS EXCEPT NITRATE IN WATER FROM SELECTED WELLS AND SUMPS

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS ORTHO DIS-SOLVED (MG/L AS P)
1	43-07-19	211MRPAL	704	.030	.230	--	--	--
2	73-06-06	211MRPAL	1028	.008	8.00	--	.044	<.010
3	67-08-04	211MRPAL	1028	--	--	--	--	.000
4	67-08-04	211MRPAL	1028	--	--	--	--	.030
	71-05-17	211MRPAL	1028	--	--	--	--	.010
6	79-08-13	211MRPAL	84240	.010	.730	1.1	.034	.060
	80-11-04	211MRPAL	80010	--	--	--	--	.000
	82-11-23	211MRPAL	80010	<.010	.830	.47	--	.030
8	67-08-04	211MRPAL	1028	--	--	--	--	.000
12	79-08-14	211MRPAM	84240	<.010	21.0	.20	.157	.260
	80-11-18	211MRPAM	80010	--	--	--	--	.000
	82-11-24	211MRPAM	80010	.020	14.0	8.0	--	.050
14	79-08-15	112TRNN	84240	.010	16.0	.90	.444	1.10
15	80-06-04	211MRPAU	84240	.000	7.10	2.7	.690	.890
19	79-08-15	211MRPAL	84240	.010	4.40	1.6	.057	.050
	80-11-18	211MRPAL	80010	--	--	--	--	.000
	82-11-24	211MRPAL	80010	<.010	5.00	.00	--	.020
20	79-08-14	211MRPAL	84240	<.010	1.80	.50	.090	.130
	80-11-18	211MRPAL	80010	--	--	--	--	.000
	82-11-24	211MRPAL	80010	.010	3.40	.00	--	.040
25	67-08-04	211MRPAL	1028	--	--	--	--	.000
	71-12-08	211MRPAL	1028	--	--	--	--	.000
	73-06-06	211MRPAL	1028	.003	--	--	.086	<.010
27	67-08-04	211MRPAL	1028	--	--	--	--	.000
	71-06-02	211MRPAL	1028	--	--	--	.000	.000
	73-06-06	211MRPAL	1028	2.80	--	--	.097	<.010
32	79-08-16	300WSCKO	84240	.010	1.30	.90	.509	.470
44	67-07-31	211MRPAL	1028	--	--	--	--	.000
	71-05-13	211MRPAL	1028	--	--	--	--	.000
	79-08-16	211MRPAL	84240	.010	1.30	.90	.262	.390
	80-06-11	211MRPAL	84240	--	1.80	1.1	--	--
	80-11-06	211MRPAL	80010	--	--	--	--	.000
64	79-08-23	112TRNN	84240	.020	.720	.30	.406	.390
	79-12-05	112TRNN	84240	.020	.840	2.1	--	.320
	80-07-31	112TRNN	84240	.010	.980	.14	.500	.550
	80-11-19	112TRNN	80010	--	--	--	--	.000
	82-08-05	112TRNN	80010	<.010	.880	.22	--	.310
83	79-08-20	211MRPAL	84240	<.010	3.30	.10	.052	.040
86	80-12-03	211MRPAL	84240	--	<.070	1.3	.110	.000
	82-11-19	211MRPAL	80010	<.010	1.20	.70	--	.010
87	80-07-22	300WSCKO	84240	.010	.140	.63	.020	.010
98	79-08-23	112TRNN	84240	.120	.060	.20	.002	.010
100	79-08-21	112TRNN	84240	<.010	1.20	.10	.021	.020
124	71-06-08	211MRPAL	1028	--	--	--	--	.010
	79-08-28	211MRPAL	84240	.010	.960	.40	.047	.060
128	67-07-30	211MRPAL	1028	--	--	--	--	.000
164	67-07-30	211MRPAL	1028	--	--	--	--	.000
185	66-08-29	211MRPAL	1028	--	--	--	--	.000
	67-07-30	211MRPAL	1028	--	--	--	--	.000
195	79-08-29	300WSCKO	84240	<.010	.070	<.10	.085	.040
205	79-08-22	211MRPAL	84240	.010	.010	.20	.023	.030
	80-11-06	211MRPAL	80010	--	--	--	--	.050
232	79-08-21	112TRNN	84240	.020	.060	.20	.041	.100
242	80-06-06	211MRPAL	84240	.020	5.30	2.2	.000	.020
250	67-07-31	211MRPAL	1028	--	--	--	--	.000
283	80-06-09	300WSCKO	84240	.000	2.40	2.7	.020	.040
287	79-09-04	112TRNN	84240	.040	.010	.10	.147	.240
288	80-06-19	112TRNN	84240	.050	2.00	.50	.030	.060
300	80-06-11	300WSCKO	84240	.010	1.30	1.1	.660	.680
307	79-08-30	112TRNN	84240	.010	3.90	.60	.070	.060
310	79-09-10	300WSCKO	84240	<.010	.240	<.10	.081	.540
344	80-07-01	300WSCKO	84240	.010	.070	.56	.000	.030
373	67-08-21	211MRPAL	1028	--	--	--	--	.030
395	80-06-19	300WSCKO	84240	.020	.980	.35	.010	.060
397	79-09-04	112TRNN	84240	.020	.040	<.10	.008	.520

TABLE 4. -- CHEMICAL ANALYSES OF NUTRIENTS EXCEPT NITRATE
IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER OR IDENTIFIER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
400	79-09-10	300WSCKO	80010	<.010	.110	.07	.124	.280
	80-09-19	300WSCKO	84240	.010	.070	.21	.030	.150
407	67-07-31	211MRPAL	1028	--	--	--	--	.000
	71-05-28	211MRPAL	1028	--	--	--	--	.000
	80-11-05	211MRPAL	80010	--	--	--	--	.000
408	79-08-16	211MRPAL	84240	<.010	.660	.80	.005	.080
411	79-08-16	112TRNN	84240	<.010	18.0	3.0	.459	1.30
415	80-11-05	211MRPAU	80010	--	--	--	--	.030
417	80-11-05	211MRPAL	80010	--	--	--	--	.000
430	79-08-21	211MRPAL	84240	.010	7.50	.20	.015	.020
454	79-08-20	112TRNN	84240	.010	.050	.30	.409	.400
466	80-06-05	211MRPAL	84240	.010	3.20	2.4	.070	.380
469	67-07-31	211MRPAM	1028	--	--	--	--	.070
486	80-06-05	300WSCKO	84240	.010	.350	2.2	.030	.400
538	80-06-16	300WSCKO	84240	.000	2.90	1.7	.010	.040
540	80-09-22	300WSCKO	84240	.000	.490	1.2	.010	.020
542	80-08-20	300WSCKO	84240	.000	.490	.07	.040	.070
543	80-10-03	300WSCKO	84240	.010	.560	3.6	.010	.050
549	80-09-22	300WSCKO	84240	.000	.140	.91	.040	.020
550	80-06-16	300WSCKO	84240	.010	1.40	1.1	.020	.030
552	80-09-18	300WSCKO	84240	.000	.630	.77	.040	.020
567	80-07-07	300WSCKO	84240	.000	.070	1.6	.010	.020
592	80-07-10	300WSCKO	84240	.020	.210	.99	.050	.060
612	80-06-12	300WSCKO	84240	.040	1.40	1.3	.140	.160
661	79-08-30	300WSCKO	84240	.010	.210	.20	.187	.150
666	80-07-09	300WSCKO	84240	.010	.140	.96	.010	.080
668	80-07-11	300WSCKO	80010	.000	.020	.02	.030	.020
690	80-07-18	300WSCKO	84240	.020	.280	1.5	.000	.000
702	80-07-17	300WSCKO	84240	.020	.490	2.0	.020	.000
709	79-09-05	300WSCKO	84240	.010	.020	<.10	.511	--
724	80-07-01	300WSCKO	84240	.000	.900	.20	.030	.010
738	80-07-03	300WSCKO	84240	.000	.070	.77	.210	.650
745	79-10-02	300WSCKO	84240	.050	.100	<.40	.031	.020
748	80-06-09	300WSCKO	84240	.000	2.90	1.4	.030	.080
749	79-08-22	300WSCKO	84240	<.010	.050	.10	.038	.050
750	80-09-17	211MRPAL	84240	.060	.490	1.5	.010	.030
752	80-08-21	211MRPAU	84240	.070	49.0	.91	.020	.080
763	79-09-05	112TRNN	84240	.020	<.010	3.9	1.20	.760
770	79-09-05	112TRNN	84240	.030	1.60	1.9	.574	.030
771	80-07-01	300WSCKO	84240	.010	.070	.77	.010	.000
774	80-07-14	300WSCKO	84240	.010	.630	2.4	.030	.020
780	80-06-06	211MRPAL	80010	.000	8.30	4.7	.010	.000
783	80-07-03	300WSCKO	84240	.000	.070	.63	.000	.010
790	80-06-18	112TRNN	84240	.050	15.0	1.6	.460	4.40
793	80-08-19	300WSCKO	84240	.020	.350	.07	.000	.040
794	80-10-20	211MRPAL	84240	.020	5.40	2.8	.060	.040
796	80-10-10	112TRNN	84240	.000	3.10	14	.020	.070
797	80-10-15	112TRNN	84240	.020	2.50	2.1	.170	.230
798	80-10-16	300WSCKO	84240	.060	3.50	2.0	.260	.100
799	80-10-17	300WSCKO	84240	.000	2.70	2.8	.000	.030
800	80-11-05	300WSCKO	84240	.000	2.70	1.6	.030	.050
804	80-11-06	377CCKS	84240	.000	1.30	3.4	.030	.020
805	80-11-18	211MRPAL	84240	.000	.280	8.5	.010	.000
807	80-11-17	300WSCKO	84240	.000	.420	22	.020	.030
SHUNK ST. STATION SUMP	79-09-12	112TRNN	84240	.010	.460	<.10	.004	.020
TASKER-MORRIS STS SUMP	79-10-02	112TRNN	84240	.010	.510	.50	.008	.010
	79-12-05	112TRNN	84240	.020	.980	1.8	--	.020
	80-08-01	112TRNN	84240	.010	9.90	1.6	.010	.020
VETERANS STADIUM SUMP	79-09-11	112TRNN	84240	.010	10.0	1.9	.351	.620
	79-12-05	112TRNN	84240	.010	11.0	1.0	--	.590
	80-08-01	112TRNN	84240	.010	.210	1.1	.460	.550

TABLE 5.-- CHEMICAL ANALYSES OF TRACE ELEMENTS AND GROSS ORGANIC MEASURES IN WATER FROM SELECTED WELLS AND SUMPS

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND BIO-CHEM-ICAL, 5 DAY (MG/L)	BROMIDE DIS-SOLVED (MG/L AS BR)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
PH-4	71-05-17	211MRPAL	1028	--	--	--	8	--	42
6	79-08-13	211MRPAL	84240	.0	2.9	.30	<1000	18	300
	80-11-04	211MRPAL	80010	--	--	--	--	--	40
12	79-08-14	211MRPAM	84240	.0	2.5	.20	<1000	12	400
	80-11-18	211MRPAM	80010	--	--	--	--	--	60
14	79-08-15	112TRNN	84240	.0	5.5	.30	2000	<2	650
15	80-06-04	211MRPAU	84240	.0	--	.30	300	<50	300
19	79-08-15	211MRPAL	84240	.0	5.7	.50	<1000	9	500
	80-11-18	211MRPAL	80010	--	--	--	--	--	150
20	79-08-14	211MRPAL	84240	.0	2.1	.20	1500	<2	400
	80-11-18	211MRPAL	80010	--	--	--	--	--	60
27	71-06-02	211MRPAL	1028	--	--	--	20	--	87
	71-06-02	211MRPAL	1028	--	--	--	20	--	87
32	79-08-16	300WSCKO	84240	.0	7.4	.20	<1000	9	1000
44	71-05-13	211MRPAL	1028	--	--	--	2	--	140
	79-08-16	211MRPAL	84240	.0	3.9	.20	<1000	<2	300
	80-11-06	211MRPAL	80010	--	--	--	--	--	130
64	79-08-23	112TRNN	84240	.0	4.5	.20	<1000	11	<100
	79-12-05	112TRNN	84240	.6	2.4	--	<1000	15	100
	80-07-31	112TRNN	84240	.0	--	.40	500	<50	<200
	80-11-19	112TRNN	80010	--	--	--	--	--	80
83	79-08-20	211MRPAL	84240	.0	2.2	.30	<1000	<2	600
86	80-12-03	211MRPAL	84240	--	--	.30	3400	<50	70
87	80-07-22	300WSCKO	84240	1.8	--	.30	<200	<50	<200
98	79-08-23	112TRNN	84240	.4	2.8	.40	<1000	4	200
100	79-08-21	112TRNN	84240	1.7	1.2	.30	<1000	<2	200
124	71-06-08	211MRPAL	1028	--	--	--	8	--	54
	79-08-28	211MRPAL	84240	.0	4.3	.30	<1000	1	<100
195	79-08-29	300WSCKO	84240	2.2	.5	.20	<1000	<2	<50
205	79-08-22	211MRPAL	84240	1.0	2.5	.30	<1000	<2	<100
	80-11-06	211MRPAL	80010	--	--	--	--	--	50
232	79-08-21	112TRNN	84240	1.5	2.6	.30	<1000	12	300
242	80-06-06	211MRPAL	84240	1.6	--	.30	<200	<50	<200
283	80-06-09	300WSCKO	84240	.0	--	.20	<200	<50	<200
287	79-09-04	112TRNN	84240	.0	--	.70	<1000	11	400
288	80-06-19	112TRNN	84240	1.1	--	.20	<200	<50	<200
300	80-06-11	300WSCKO	84240	1.8	--	.40	400	<50	<200
307	79-08-30	112TRNN	84240	.0	4.5	.70	<1000	7	400
310	79-09-10	300WSCKO	84240	.0	2.8	.30	<1000	<2	<50
344	80-07-01	300WSCKO	84240	.8	--	1.2	<200	<50	<200
395	80-06-19	300WSCKO	84240	.0	--	1.1	<200	<50	1000
397	79-09-04	112TRNN	84240	6.5	--	.20	<1000	4	<50
400	79-09-10	300WSCKO	80010	.0	4.2	.20	50	<1	90
	80-09-19	300WSCKO	84240	.3	--	.00	<200	<50	<200
407	71-05-28	211MRPAL	1028	--	--	--	--	--	--
	71-05-28	211MRPAL	1028	--	--	--	17	--	170
	80-11-05	211MRPAL	80010	--	--	--	--	--	150
408	79-08-16	211MRPAL	84240	6.3	2.5	.20	<1000	<2	300
411	79-08-16	112TRNN	84240	2.6	6.0	.20	<1000	5	400
415	80-11-05	211MRPAU	80010	--	--	--	--	--	160

BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	LOCAL NUMBER
<1	<20	<21	<5	8	9	<3	6	--	PH-4
--	120	<20	<20	40	<20	<10	6	1.5	6
<1	--	9	--	56	<10	26	6	--	
--	70	<20	<20	40	20	<10	4	<.1	12
<1	--	8	--	140	<10	<10	<4	--	
--	70	<20	<20	20	<20	<10	5	<.1	14
--	90	<10	<10	40	50	0	2	.0	15
--	60	<20	<20	60	20	--	20	<.1	19
<1	--	10	--	200	<10	10	15	--	
--	40	<20	<20	20	20	<10	9	<2.0	20
<1	--	6	--	120	<10	<10	10	--	
<1	44	<.1	6	7	6	2	13	--	27
<1	44	<43	<10	12	14	<5	13	--	
--	30	20	<20	20	<20	<10	<10	<.1	32
<1	45	<34	<8	13	15	<4	3	--	44
--	70	<20	<20	30	20	<10	3	<.1	
<1	--	6	--	10	<10	<10	5	--	
--	<20	<20	--	10	70	--	5	<.1	64
--	--	<10	<10	--	60	<10	--	.5	
--	30	<10	<10	<20	420	5	5	1.5	
<1	--	6	--	<3	<10	<10	5	--	
--	290	<20	<20	40	<20	<10	5	<.1	83
2	70	2	60	<3	<10	<10	3	--	86
--	110	<10	<10	<20	<10	0	3	--	87
--	100	<20	<20	20	<20	--	4	<.1	98
--	100	<20	<20	30	<20	--	7	<.1	100
<2	150	<60	<13	<6	7	<6	8	--	124
--	40	<.1	<20	20	<2	0	--	<.5	
--	30	<20	<20	<10	30	--	6	<.1	195
--	100	<20	<20	10	260	--	4	1.0	205
<1	--	<1	--	<3	480	<10	4	--	
--	120	<20	<20	30	<20	--	5	<.1	232
--	40	<10	<10	<20	90	0	10	.5	242
--	70	<10	<10	<20	10	0	10	.5	283
--	500	<20	<20	--	<20	--	9	55	287
--	110	<10	<10	<20	<10	11	10	.0	288
--	90	<10	<10	<20	80	0	8	.5	300
--	30	<20	<20	60	<20	--	<10	<.1	307
--	40	<20	<20	<10	<20	--	<10	12	310
--	190	<10	<10	<20	20	2	10	.5	344
--	90	<10	<10	<20	<10	5	20	.0	395
--	140	<20	<20	<10	<20	--	<10	<.1	397
--	140	<.1	<20	15	<2	0	3	<.5	400
--	40	<10	<10	<20	20	1	0	.5	
--	--	<.1	2	<5	5	0	--	--	407
<1	82	<48	11	<5	9	<5	9	--	
<1	--	4	--	25	<10	25	17	--	
--	40	<20	20	30	<20	<10	20	<.1	408
--	90	<20	<20	10	<20	<10	4	<.1	411
<1	--	7	--	36	<10	19	5	--	415

TABLE 5.-- CHEMICAL ANALYSES OF TRACE ELEMENTS AND GROSS ORGANIC MEASURES IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER	DATE OF SAMPLE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE DIS-SOLVED (MG/L AS CN)	PHENOLS (UG/L)
PH-4	71-05-17	14	--	830	<210	--	--	--
6	79-08-13	10	<1	430	70	4.1	.24	0
	80-11-04	--	--	390	7	4.3	--	--
12	79-08-14	20	<1	310	60	4.0	<.10	0
	80-11-18	--	--	290	<4	4.2	--	--
14	79-08-15	<10	<1	290	30	6.6	<.10	0
15	80-06-04	<20	<200	420	130	8.4	.00	0
19	79-08-15	50	<1	1700	110	5.9	<.10	0
	80-11-18	--	--	1500	<4	13	--	--
20	79-08-14	10	<1	1300	850	3.3	<.10	0
	80-11-18	--	--	1200	<4	5.7	--	--
27	71-06-02	4	--	1700	0	--	--	--
	71-06-02	30	--	1700	<440	--	--	--
32	79-08-16	<10	<1	1400	3500	2.3	.30	210
44	71-05-13	17	--	270	<340	--	--	--
	79-08-16	<10	<1	240	40	3.0	.40	9
	80-11-06	--	--	240	<4	4.9	--	--
64	79-08-23	--	<1	380	40	9.3	.16	0
	79-12-05	40	<1	--	90	--	<.01	--
	80-07-31	<20	<200	350	150	9.5	.00	0
	80-11-19	--	--	360	6	7.0	--	--
83	79-08-20	<10	<1	1100	20	10	<.10	0
86	80-12-03	40	<200	310	<4	7.8	.00	7
87	80-07-22	<20	<200	350	80	2.5	.01	3
98	79-08-23	<50	<1	230	100	1.4	<.10	0
100	79-08-21	<50	<1	280	100	1.4	<.10	0
124	71-06-08	18	--	420	<600	--	--	--
	79-08-28	<50	<1	380	40	2.4	.00	24
195	79-08-29	<50	<1	310	1200	--	<.10	1
205	79-08-22	<50	<1	260	200	2.6	.16	0
	80-11-06	--	--	290	410	5.8	--	--
232	79-08-21	<20	<1	360	50	6.0	<.10	0
242	80-06-06	<20	<200	350	260	2.0	.01	2
283	80-06-09	<20	<200	910	20	1.5	.00	0
287	79-09-04	<50	<1	640	350	13	.24	3
288	80-06-19	<20	<200	730	20	4.2	.01	1
300	80-06-11	20	<200	820	40	1.5	.01	0
307	79-08-30	<50	<1	150	100	5.0	<.10	8
310	79-09-10	<50	<1	710	450	.2	.20	0
344	80-07-01	30	<200	1200	40	1.1	.00	1
395	80-06-19	20	<200	2900	20	.3	.01	0
397	79-09-04	<50	<1	90	20	1.2	<.10	3
400	79-09-10	ND	<1	120	<20	.5	.00	2
	80-09-19	<20	<200	140	40	--	.00	1
407	71-05-28	ND	--	--	2	--	--	--
	71-05-28	15	--	2300	<480	--	--	--
	80-11-05	--	--	2100	13	3.5	--	--
408	79-08-16	<10	<1	1600	30	1.1	<.15	0
411	79-08-16	<10	<1	270	<20	3.5	<.10	0
415	80-11-05	--	--	340	<4	8.4	--	--

ND: THE DETECTION LIMIT OF THE TECHNIQUE IS UNKNOWN AND THE CONSTITUENT WAS NOT DETECTED

TABLE 5.-- CHEMICAL ANALYSES OF TRACE ELEMENTS AND GROSS ORGANIC MEASURES IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER OR IDENTIFIER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	BROMIDE DIS-SOLVED (MG/L AS BR)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
417	80-11-05	211MRPAL	80010	--	--	--	--	--	100
430	79-08-21	211MRPAL	84240	2.4	1.8	.20	<1000	<2	<100
454	79-08-20	112TRNN	84240	.0	3.9	.30	<1000	<2	300
466	80-06-05	211MRPAL	84240	.0	--	.30	<200	<50	<200
	80-11-20	211MRPAL	80010	--	--	--	--	--	150
486	80-06-05	300WSCKO	84240	4.9	--	.20	<200	<50	<200
538	80-06-16	300WSCKO	84240	6.3	--	.20	<200	<50	<200
540	80-09-22	300WSCKO	84240	9.3	--	.00	<200	<50	<200
542	80-08-20	300WSCKO	84240	3.8	--	.60	200	<50	<200
543	80-10-03	300WSCKO	84240	1.7	--	.10	<200	<50	<200
549	80-09-22	300WSCKO	84240	8.4	--	.00	<200	<50	<200
550	80-06-16	300WSCKO	84240	7.9	--	.10	<200	<50	<200
552	80-09-18	300WSCKO	84240	2.8	--	.00	300	<50	<200
567	80-07-07	300WSCKO	84240	4.0	--	.30	<200	<50	<200
592	80-07-10	300WSCKO	84240	2.4	--	.50	400	<50	380
612	80-06-12	300WSCKO	84240	.0	--	.40	<200	<50	<200
661	79-08-30	300WSCKO	84240	.0	1.1	.40	<1000	11	200
666	80-07-09	300WSCKO	84240	1.5	--	.20	<200	<50	<200
668	80-07-11	300WSCKO	80010	5.3	--	3.2	0	<1	60
690	80-07-18	300WSCKO	84240	2.2	--	.30	<200	<50	<200
702	80-07-17	300WSCKO	84240	1.4	--	1.0	300	<50	390
709	79-09-05	300WSCKO	84240	1.0	--	.50	<1000	4	<50
724	80-07-01	300WSCKO	84240	6.8	--	.20	<200	<50	<200
738	80-07-03	300WSCKO	84240	5.2	--	.30	220	<50	<200
745	79-10-02	300WSCKO	84240	.0	1.4	.80	<1000	19	300
748	80-06-09	300WSCKO	84240	.7	--	.00	600	<50	<200
749	79-08-22	300WSCKO	84240	3.4	3.9	.30	<1000	<2	<100
750	80-09-17	211MRPAL	84240	.0	--	.10	<200	<50	<200
752	80-08-21	211MRPAU	84240	.0	--	1.2	1200	<50	290
763	79-09-05	112TRNN	84240	.0	--	.50	<1000	10	<100
770	79-09-05	112TRNN	84240	.0	--	.40	<1000	4	2100
771	80-07-01	300WSCKO	84240	7.0	--	1.1	300	<50	<200
774	80-07-14	300WSCKO	84240	.7	--	2.1	200	<50	<200
780	80-06-06	211MRPAL	80010	3.8	--	.30	100	1	70
783	80-07-03	300WSCKO	84240	.2	--	1.0	<200	<50	<200
790	80-06-18	112TRNN	84240	.0	--	1.5	<200	<50	1300
793	80-08-19	300WSCKO	84240	1.6	--	.50	200	<50	<200
794	80-10-20	211MRPAL	84240	.0	--	.60	<200	<50	<200
796	80-10-10	112TRNN	84240	3.8	--	.30	300	50	<200
797	80-10-15	112TRNN	84240	3.7	--	.40	200	<50	<200
798	80-10-16	300WSCKO	84240	.6	--	.70	800	<50	<200
799	80-10-17	300WSCKO	84240	1.6	--	.30	<200	<50	<200
800	80-11-05	300WSCKO	84240	6.2	--	.20	3000	<50	<200
804	80-11-06	377CCKS	84240	7.7	--	.20	<200	<50	<200
805	80-11-18	211MRPAL	84240	4.1	--	.20	<200	<50	<200
807	80-11-17	300WSCKO	84240	9.4	--	.10	<200	<50	<200
SHUNK ST STATION SUMP	79-09-12	112TRNN	84240	4.8	1.0	.50	<1000	<2	<50
TASKER-MORRIS STS SUMP	79-10-02	112TRNN	84240	3.2	1.8	.90	<1000	10	--
	79-12-05	112TRNN	84240	3.6	.5	--	<1000	<2	200
	80-08-01	112TRNN	84240	4.6	--	.30	400	<50	<200
VETERANS STADIUM SUMP	79-09-11	112TRNN	84240	3.3	2.6	.70	<1000	4	500
	79-12-05	112TRNN	84240	5.8	2.0	--	<1000	6	600
	80-08-01	112TRNN	84240	5.0	--	.40	400	<50	220

TABLE 5.-- CHEMICAL ANALYSES OF TRACE ELEMENTS AND GROSS ORGANIC MEASURES IN WATER FROM SELECTED WELLS AND SUMPS -- CONTINUED

LOCAL NUMBER OR IDENTIFIER	DATE OF SAMPLE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE DIS-SOLVED (MG/L AS CN)	PHENOLS (UG/L)
417	80-11-05	--	--	820	<4	3.3	--	--
430	79-08-21	<50	<1	270	50	2.4	<.10	0
454	79-08-20	<50	<1	270	50	2.9	<.10	0
466	80-06-05	<20	<200	300	60	1.3	.00	6
	80-11-20	--	--	320	<4	.8	--	--
486	80-06-05	<20	<200	250	20	2.8	.00	1
538	80-06-16	20	<200	140	40	2.1	.00	1
540	80-09-22	<20	<200	120	20	7.9	.00	0
542	80-08-20	20	<200	340	520	.9	.00	0
543	80-10-03	<20	<200	670	40	1.0	--	4
549	80-09-22	<20	<200	360	20	10	.31	0
550	80-06-16	20	<200	80	90	3.2	.00	0
552	80-09-18	<20	<200	160	40	1.9	.01	0
567	80-07-07	<20	<200	510	20	.4	.00	0
592	80-07-10	<20	<200	490	100	.6	.01	2
612	80-06-12	30	<200	910	60	6.3	.01	0
661	79-08-30	<50	<1	150	50	--	<.10	2
666	80-07-09	<20	<200	780	240	1.2	.00	0
668	80-07-11	0	5	470	10	.5	.01	0
690	80-07-18	<20	<200	510	30	.6	.00	3
702	80-07-17	70	<200	390	100	14	.01	3
709	79-09-05	<50	<1	220	50	.7	<.10	1
724	80-07-01	<20	<200	180	50	3.6	.00	0
738	80-07-03	<20	<200	160	150	.7	.00	0
745	79-10-02	--	<1	1400	60	1.8	<.10	0
748	80-06-09	<20	<200	1000	670	.6	.00	2
749	79-08-22	<50	<1	380	50	1.5	.10	0
750	80-09-17	<20	<200	640	40	7.8	.00	2
752	80-08-21	<20	<200	1000	50	3.6	.00	0
763	79-09-05	<50	<1	420	20	13	<.10	3
770	79-09-05	<200	24	23000	30	220	<.10	4
771	80-07-01	<20	<200	170	30	0.0	.00	0
774	80-07-14	20	<200	2700	70	1.6	.00	0
780	80-06-06	6	<1	370	86	7.1	.00	0
783	80-07-03	<20	<200	740	20	2.8	.00	2
790	80-06-18	20	<200	160	10	12	.01	24
793	80-08-19	<20	<200	1400	70	2.1	.00	0
794	80-10-20	20	<200	1300	90	2.0	.00	3
796	80-10-10	20	<200	310	70	3.9	.00	1
797	80-10-15	20	<200	1200	4600	.9	.00	14
798	80-10-16	50	<200	160	50	4.3	.00	170
799	80-10-17	<20	<200	260	40	1.9	.00	1
800	80-11-05	<20	<200	670	40	2.4	.00	4
804	80-11-06	<20	<200	80	60	3.2	.00	3
805	80-11-18	60	<200	220	20	1.4	.02	8
807	80-11-17	30	<200	150	110	2.3	.00	2
SHUNK ST STATION SUMP	79-09-12	20	<1	390	20	7.2	<.10	0
TASKER-MORRIS STS SUMP	79-10-02	50	<1	330	40	3.6	<.10	0
	79-12-05	70	<1	--	270	--	<.01	--
	80-08-01	<20	<200	280	50	2.0	.01	0
VETERANS STADIUM SUMP	79-09-11	20	<1	760	20	8.2	<.10	0
	79-12-05	100	<1	--	120	--	<.01	--
	80-08-01	<20	200	700	20	7.3	.02	0

BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	LOCAL NUMBER OR IDENTIFIER	
<1	--	6	--	40	<10	25	13	--	417	
--	50	<20	<20	20	<20	--	4	<.1	430	
--	90	<20	<20	<100	<20	--	7	2.0	454	
--	70	<10	<10	<20	60	5	7	.5	466	
<1	--	3	--	30	<10	<10	6	--		
--	60	<10	<10	<20	20	0	4	.5	486	
--	20	<10	<10	<20	20	1	0	.0	538	
--	50	<10	<10	<20	20	0	0	.5	540	
--	120	<10	<10	<20	10	0	10	2.0	542	
--	80	<10	20	<20	20	0	10	--	543	
--	20	<10	<10	<20	20	0	0	.5	549	
--	0	<10	<10	<20	40	7	1	.0	550	
--	50	<10	<10	<20	20	0	10	.0	552	
--	70	<10	<10	<20	10	0	7	.5	567	
--	20	<10	3700	<20	20	0	20	.5	592	
--	50	<10	10	<20	20	1	8	.0	612	
--	<20	<20	<20	40	<20	--	6	<.1	661	
--	80	<10	<10	<20	10	0	20	.5	666	
<1	100	<1	10	<3	<10	<10	8	.0	668	
--	40	<10	<10	<20	<10	0	20	--	690	
--	810	<10	<10	<20	30	3	20	--	702	
--	270	<20	<20	20	140	--	<10	7.5	709	
--	0	<10	<10	<20	20	1	4	.5	724	
--	0	<10	<10	<20	890	0	3	.0	738	
--	50	<20	<20	50	<20	--	20	1.5	745	
--	70	<10	<10	<20	<10	0	10	.5	748	
--	70	<20	40	20	<20	--	<10	<.1	749	
--	110	<10	<10	<20	10	10	10	.0	750	
--	190	<10	30	50	10	0	30	9.5	752	
--	810	<20	<20	20	<20	--	7	<.1	763	
--	90	<20	20	60	30	--	--	5.0	770	
--	10	<10	<10	<20	30	0	9	.5	771	
--	80	<10	10	<20	20	0	10	.0	774	
<1	70	4	<10	4	<10	<10	8	.0	780	
--	40	<10	<1^	<20	10	0	40	.0	783	
--	70	<10	<10	<20	<10	3	3	.0	790	
--	30	<10	<10	<20	10	0	20	.5	793	
--	50	<10	<10	20	350	6	20	3.5	794	
--	120	<10	40	<20	20	5	20	5.5	796	
--	50	<10	<10	20	30	11	10	5.0	797	
--	80	<10	<10	30	50	37	8	7.5	798	
--	80	<10	30	<20	10	2	2	3.0	799	
--	50	<10	<10	<20	20	0	20	--	800	
--	20	<10	<10	<20	20	0	4	--	804	
--	90	<10	30	<20	30	5	3	--	805	
--	6	<10	10	<20	30	5	10	--	807	
--	130	<20	<20	20	20	<10	5	<.1	SHUNK ST STATION SUMP	
--	100	<20	<20	30	<20	--	4	.0	TASKER-MORRIS STS SUMP	
--	--	<10	10	--	260	<10	--	.0		
--	110	<10	<10	<20	10	0	3	3.5		
--	370	<20	<20	30	<20	<10	30	5.5	VETERANS STADIUM SUMP	
--	--	<10	10	--	50	<10	--	.0		
--	360	<10	<10	30	20	3	40	2.5		

TABLE 6.-- CHEMICAL ANALYSES OF VOLATILE ORGANIC COMPOUNDS IN WATER FROM SELECTED WELLS AND ONE SUMP

LOCAL NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	BENZENE TOTAL (UG/L)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L)	BROM-OFORM TOTAL (UG/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)
PH-6	‡80-11-04	211MRPAL	80010	<1.0	--	--	4.3	<1.0	--	<1.0
12	79-08-14	211MRPAM	84240	--	--	<.10	4.0	<.10	.10	<.10
	‡80-11-18	211MRPAM	80010	<1.0	--	--	4.2	<1.0	--	<1.0
14	79-08-15	112TRNN	84240	--	--	<.10	6.6	.40	.10	1.1
15	80-06-04	211MRPAU	84240	--	<.10	<.10	8.4	<.10	3.5	<.10
19	79-08-15	211MRPAL	84240	--	--	.30	5.9	<.10	<.10	<.10
	‡80-11-18	211MRPAL	80010	<1.0	--	--	13	<1.0	--	<1.0
20	‡80-11-18	211MRPAL	80010	<1.0	--	--	5.7	<1.0	--	<1.0
44	79-08-16	211MRPAL	84240	--	--	.10	3.0	<.10	<.10	<.10
	‡80-11-06	211MRPAL	80010	<1.0	--	--	4.9	<1.0	--	<1.0
64	79-08-23	112TRNN	84240	--	--	<.10	9.3	<.10	<.10	<.10
	‡80-11-06	112TRNN	80010	<1.0	--	--	--	--	--	--
	80-11-19	112TRNN	80010	<1.0	--	--	7.0	<1.0	--	<1.0
86	‡80-12-03	211MRPAL	84240	18	<.10	<.10	7.8	<1.0	<.10	<1.0
87	80-07-22	300WSCKO	84240	--	<.10	<.10	2.5	<.10	<.10	<.10
205	‡80-11-06	211MRPAL	80010	<1.0	--	--	5.8	<1.0	--	<1.0
242	80-06-06	211MRPAL	84240	--	<.10	<.10	2.0	<.10	<.10	<.10
283	80-06-09	300WSCKO	84240	--	<.10	<.10	1.5	<.10	<.10	<.10
288	80-06-19	112TRNN	84240	--	<.10	<.10	4.2	<.10	1.1	2.1
300	80-06-11	300WSCKO	84240	--	<.10	<.10	1.5	<.10	<.10	<.10
344	80-07-01	300WSCKO	84240	--	<.10	<.10	1.1	<.10	2.4	1.4
395	80-06-19	300WSCKO	84240	--	<.10	<.10	.3	<.10	2.1	<.10
	80-09-22	300WSCKO	42010	--	<.10	<.10	--	<.10	<.10	.10
397	79-09-04	112TRNN	84240	--	--	<.10	1.2	<.10	<.10	<.10
400	79-09-10	300WSCKO	84240	--	--	<.10	.5	<.10	<.10	<.10
	80-09-19	300WSCKO	84240	--	<.10	<.10	--	<.10	<.10	<.10
407	‡80-11-05	211MRPAL	80010	<1.0	--	--	3.5	<1.0	--	<1.0
415	‡80-11-05	211MRPAU	80010	<1.0	--	--	8.4	<1.0	--	<1.0
417	‡80-11-05	211MRPAL	80010	7.0	--	--	3.3	<1.0	--	<1.0
466	80-06-05	211MRPAL	84240	--	<.10	<.10	1.3	<.10	<.10	<.10
486	80-06-05	300WSCKO	84240	--	<.10	<.10	2.8	<.10	<.10	<.10
538	80-06-16	300WSCKO	84240	--	<.10	<.10	2.1	<.10	<.10	<.10
540	80-09-22	300WSCKO	84240	--	<.10	<.10	7.9	<.10	<.10	<.10
542	80-08-20	300WSCKO	84240	--	<.10	.10	.9	<.10	<.10	<.10
543	80-10-03	300WSCKO	84240	--	<.10	<.10	1.0	<.10	<.10	<.10
549	80-09-22	300WSCKO	84240	--	<.10	<.10	10	<.10	<.10	<.10
550	80-06-16	300WSCKO	84240	--	<.10	<.10	3.2	<.10	<.10	<.10
552	80-09-18	300WSCKO	84240	--	<.10	<.10	1.9	.30	<.10	<.10
567	80-07-07	300WSCKO	84240	--	<.10	<.10	.4	.30	<.10	<.10
592	80-07-10	300WSCKO	84240	--	<.10	<.10	.6	<.10	<.10	<.10

‡ CONCENTRATIONS OF 1,1-DICHLOROETHYLENE, 1,2-(TRANS)-DICHLOROETHYLENE, 1,1,2-TRICHLOROETHANE, AND TOLUENE WERE DETERMINED TO BE BELOW THE DETECTABLE LIMIT OF 1 UG/L, EXCEPT THAT THE SAMPLE OBTAINED FROM PH-12 ON 80-11-18 CONTAINED 2.0 UG/L TOLUENE.

CHLORO-OFORM TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	PHENOLS (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	LOCAL NUMBER
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	PH-6
.20	<.10	.30	<.10	--	0	<.10	--	<.10	12
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	
2.3	.60	.50	.10	--	0	.20	--	30	14
.40	<.10	.30	.10	<.10	0	<.10	1.0	<.10	15
5.6	.10	5.3	<.10	--	0	.10	--	.80	19
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	20
1.3	.10	.10	<.10	--	9	<.10	--	.10	44
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	
<.10	<.10	<.10	<.10	--	0	<.10	--	<.10	64
<1.0	--	--	--	<1.0	--	<1.0	--	<1.0	
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	
<1.0	<1.0	<1.0	.30	<1.0	7	<1.0	<1.0	<1.0	86
15	<.10	<.10	.20	<.10	3	.50	.60	<.10	87
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	205
.30	<.10	4.3	.10	.10	2	7.1	.10	5.3	242
.20	<.10	.10	<.10	<.10	0	1.2	.40	.40	283
15	<.10	4.6	8.2	.10	1	11	570	3.6	288
.30	<.10	4.0	.60	<.10	0	.50	.70	16	300
11	2.7	11	1.1	.10	1	230	17	32	344
3.5	.10	.60	.10	<.10	0	360	14	230	395
.10	<.10	.30	.10	.10	--	20	--	11	
1.2	.50	.10	<.10	--	3	2.0	--	.10	397
4.1	<.10	.60	<.10	--	2	.10	--	<.10	400
1.9	.10	.30	.10	.10	1	.30	1.5	3.5	
<1.0	<1.0	<1.0	--	<1.0	--	6.0	<1.0	47	407
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	<1.0	415
<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	5.0	417
1.4	<.10	2.7	.10	.10	6	21	1.7	22	466
11	.20	.70	<.10	.50	1	.70	.90	2.9	486
4.7	.10	.40	<.10	<.10	1	21	<.10	4.6	538
<.10	<.10	.20	<.10	.10	0	12	.40	.10	540
9.0	.30	.40	<.10	<.10	0	23	6.5	3.2	542
1.5	.20	.50	.20	.10	4	15	50	11	543
.10	<.10	<.10	<.10	.10	0	.20	<.10	<.10	549
1.2	.10	<.10	<.10	<.10	0	.30	.80	<.10	550
1.7	.20	<.10	<.10	.10	0	.10	<.10	.10	552
32	<.10	<.10	<.10	.10	0	1.5	1.1	.90	567
3.9	.40	44	.20	.70	2	3.4	5.0	52	592

TABLE 6.-- CHEMICAL ANALYSES OF VOLATILE ORGANIC COMPOUNDS
IN WATER FROM SELECTED WELLS AND ONE SUMP -- CONTINUED

LOCAL NUMBER OR IDENTIFIER	DATE OF SAMPLE	GEO-LOGIC UNIT	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	BENZENE TOTAL (UG/L)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L)	BROM-OFORM TOTAL (UG/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)
612	80-06-12	300WSCKO	84240	--	<.10	<.10	6.3	<.10	<.10	<.10
666	80-07-09	300WSCKO	84240	--	<.10	<.10	1.2	<.10	1.4	<.10
668	80-07-11	300WSCKO	84240	--	<.10	<.10	.5	26	<.10	<.10
	80-10-07	300WSCKO	42010	--	<.10	<.10	--	35	<.10	<.10
690	80-07-18	300WSCKO	84240	--	<.10	<.10	.6	<.10	<.10	<.10
702	80-07-17	300WSCKO	84240	--	<.10	<.10	14	<.10	<.10	<.10
724	80-07-01	300WSCKO	84240	--	<.10	<.10	3.6	<.10	<.10	<.10
738	80-07-03	300WSCKO	84240	--	<.10	<.10	.7	<.10	<.10	<.10
748	80-06-09	300WSCKO	84240	--	<.10	<.10	.6	<.10	<.10	<.10
749	79-08-22	300WSCKO	84240	--	--	<.10	1.5	<.10	<.10	<.10
750	80-09-17	211MRPAL	84240	--	<.10	<.10	7.8	<.10	<.10	<.10
752	80-08-21	211MRPAU	84240	--	<.10	<.10	3.6	<.10	<.10	<.10
771	80-07-01	300WSCKO	84240	--	<.10	<.10	.0	<.10	.20	<.10
774	80-07-14	300WSCKO	84240	--	<.10	<.10	1.6	<.10	.20	<.10
780	80-06-06	211MRPAL	84240	--	<.10	<.10	7.1	<.10	.10	<.10
783	80-07-03	300WSCKO	84240	--	<.10	<.10	2.8	<.10	2.7	<.10
790	80-06-18	112TRNN	84240	--	<.10	<.10	12	<.10	320	.40
793	80-08-19	300WSCKO	84240	--	<.10	<.10	2.1	<.10	<.10	<.10
794	80-10-20	211MRPAL	84240	--	2.1	<.10	2.0	<.10	4.3	<.10
796	80-10-10	112TRNN	84240	--	<.10	<.10	3.9	<.10	.20	<.10
797	80-10-15	112TRNN	84240	--	<.10	<.10	.9	<.10	.80	<.10
798	80-10-16	300WSCKO	84240	--	<.10	.20	4.3	<.10	1.2	<.10
799	80-10-17	300WSCKO	84240	--	<.10	<.10	1.9	<.10	.20	.10
800	80-11-05	300WSCKO	84240	--	<.10	<.10	2.4	.10	<.10	<.10
804	80-11-06	377CCKS	84240	--	<.10	<.10	3.2	<.10	<.10	<.10
805	80-11-18	211MRPAL	84240	--	<.10	<.10	1.4	24	<.10	<.10
807	80-11-17	300WSCKO	84240	--	<.10	<.10	2.3	<.10	<.10	<.10
TASKER-MORRIS STS SUMP	79-10-02	112TRNN	84240	--	--	<.10	3.6	<.10	<.10	<.10

CHLORO-OFORM TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	PHENOLS (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	LOCAL NUMBER OR IDENTIFIER
.80	<.10	.70	.10	<.10	0	5.3	.80	9.4	612
.20	<.10	.30	1.1	<.10	0	22	.30	30	666
26	.90	1.0	1.0	2.5	0	210	8.1	2800	668
<.10	<.10	<.10	30	<.10	--	650	3.2	3700	
.30	<.10	<.10	<.10	<.10	3	1.4	.20	3.1	690
5.6	.10	.10	.10	<.10	3	1.5	1.1	1.1	702
1.6	.20	<.10	<.10	2.7	0	1.1	5.4	<.10	724
.60	<.10	<.10	.20	<.10	0	<.10	.20	<.10	738
.20	<.10	<.10	<.10	<.10	2	<.10	.20	<.10	748
2.2	.10	3.2	.10	--	0	38	--	70	749
.90	.10	1.0	<.10	<.10	2	15	.10	38	750
<.10	<.10	<.10	<.10	<.10	0	<.10	<.10	<.10	752
1.9	.20	.20	<.10	.10	0	15	12	80	771
3.8	.30	.80	<.10	.10	0	3.3	19	45	774
1.1	<.10	3.4	.10	.30	0	20	.70	31	780
<.10	<.10	8.7	<.10	.10	2	30	.90	95	783
1.2	.10	.20	.20	.20	24	.10	1.1	.30	790
.30	<.10	.50	<.10	<.10	0	<.10	.40	<.10	793
.60	<.10	50	.20	.10	3	1.9	1.1	2.3	794
.70	.10	.80	.40	<.10	1	<.10	.40	.10	796
<.10	.40	.90	.50	<.10	14	.40	.20	3.7	797
.40	<.10	3.3	.30	.70	170	.10	.10	<.10	798
3.2	.40	.80	1.9	.10	1	.20	.30	.10	799
.70	<.10	<.10	<.10	.10	4	1.4	1.8	<.10	800
<.10	<.10	<.10	<.10	<.10	3	<.10	.40	.10	804
36	.40	.30	1.7	<.10	8	.30	8.2	40	805
.20	<.10	<.10	<.10	<.10	2	<.10	.10	<.10	807
4.9	<.10	<.10	<.10	--	0	11	--	6.4	TASKER-MORRIS STS SUMP

TABLE 7.-- INDEX OF GEOPHYSICAL LOGS

LOCAL NUMBER	GEOLOGIC UNIT	LOGGED DEPTH (FEET)	GAMMA-RAY LOG	NEUTRON LOG	CALIPER LOG	FLUID CONDUCTIVITY LOG	FLUID VELOCITY LOG	SINGLE-POINT-RESISTANCE LOG	SPONTANEOUS POTENTIAL LOG	TEMPERATURE LOG	LOCAL NUMBER
PH- 6	211MRPAL	167	X	X						X	PH- 6
12	211MRPAM	97	X							X	12
14	112TRNN	52	X							X	14
15	211MRPAU	66	X							X	15
19	211MRPAL	248	X	X						X	19
20	211MRPAL	240	X	X						X	20
32	300WSCKO	344	X	X	X	X	X	X		X	32
64	112TRNN	80	X	X						X	64
83	211MRPAL	64	X	X						X	83
86	211MRPAL	108	X	X						X	86
87	300WSCKO	510								X	87
124	211MRPAL	97	X	X						X	124
135	300WSCKO	185								X	135
196	300WSCKO	312								X	196
242	211MRPAL	141	X	X						X	242
339	000HBLD	903						X	X		339
400	300WSCKO	129	X	X						X	400
409	211MRPAL	78	X							X	409
411	112TRNN	80	X	X						X	411
452	211MRPAL	87								X	452
453	211MRPAL	20								X	453
455	211MRPAL	114	X	X						X	455
466	211MRPAL	101	X	X						X	466
480	300WSCKO	130								X	480
524	300WSCKO	426	X			X		X	X	X	524
538	300WSCKO	235								X	538
567	300WSCKO	273	X	X	X			X	X	X	567
584	300WSCKO	524						X	X		584
612	300WSCKO	340	X	X	X	X	X	X	X	X	612
658	300WSCKO	280								X	658
666	300WSCKO	448	X	X	X	X	X	X	X	X	666
667	300WSCKO	400								X	667
672	300WSCKO	530	X	X	X	X	X	X	X	X	672
686	300WSCKO	372	X			X				X	686
705	300WSCKO	580								X	705
706	300WSCKO	480								X	706
745	300WSCKO	157	X	X	X	X	X	X	X	X	745
747	211MRPAL	82	X	X						X	747
750	211MRPAL	167	X	X				X	X	X	750
751	211MRPAU	100	X					X	X		751
752	211MRPAU	86	X					X	X		752
753	211MRPAU	84						X	X		753
754	211MRPAL	186	X	X				X	X	X	754
755	211MRPAU	94						X	X		755
756	211MRPAL	202	X	X				X	X	X	756
783	300WSCKO	320	X		X	X		X		X	783
809	211MRPAU	80	X	X						X	809
812	211MRPAU	110	X	X						X	812
814	211MRPAM	130	X	X						X	814
822	211MRPAL	168	X					X			822
824	211MRPAL	165	X	X				X			824

EXPLANATION: AN "X" UNDER A LOG TYPE INDICATES THE AVAILABITY OF THAT LOG IN THE FILES OF THE U.S. GEOLOGICAL SURVEY, HARRISBURG, PENNSYLVANIA

GLOSSARY

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Depth of Well:

Depth drilled or total depth of hole is the total depth in feet below land-surface datum to which the hole was drilled, regardless of the finished depth of the well.

Depth of well is the maximum depth in feet below land-surface datum at which the well was originally finished.

Dissolved as used in this report refers to that material in a representative water sample that passes through a 0.45 micrometer membrane filter.

Geophysical Logs:

Caliper log is a record of the diameter of a borehole, versus depth. Caliper logs are used for locating fractures and solution openings in consolidated rocks and for correcting other logs for hole-diameter effects.

Electric Logs:

Single-point resistance log is a record of the electrical resistance ofthe earth materials lying between an inhole electrode and a surface electrode, versus depth. The single-point resistance log is used for geologic correlation and identifying fractures in consolidated rocks.

Spontaneous potential log is a record of the natural electrical potentials developed between the borehole fluid and the surrounding earth materials, versus depth. The spontaneous potential log is used chiefly for geologic correlation and determination of bed thickness.

Fluid conductivity log is a record of the electrical conductivity of the fluid in a borehole, versus depth. Fluid conductivity logs can provide in-formation on the source, movement, and chemical quality of the borehole fluid.

Fluid velocity log is a record of the vertical-flow velocity of fluid in a borehole, versus depth. Vertical-flow velocity can be correlated with hydraulic head differences and with the hydraulic conductivity of the water-bearing units open to the borehole.

Gamma ray log is a record of the amount of natural gamma radiation that is emitted by the earth materials surrounding the borehole, versus depth. The chief use of natural gamma ray logs is for the identification of lithology and stratigraphic correlation.

Neutron log is a record of the amount of radiation (neutrons or gamma rays) produced when the earth material surrounding a borehole are bombarded by neutrons from a logging tool, versus depth. Neutron logs are used chiefly for the measurement of moisture content in the unsaturated zone and of total porosity in the saturated zone.

Temperature log is a record of the temperature of the environment immediately surrounding a sensor in a borehole, versus depth. Temperature logs can provide information on the source and movement of water and the thermal conductivity of earth material.

Land-surface datum is a datum plane that is approximately at the land surface at a site.

Micrograms per liter (UG/L) is a unit for expressing the concentration of chemical constituents in a solution as weight (micrograms) of solute per unit volume (liter) of water.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in a solution as weight (milligrams) of solute per unit volume (liter) of water.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific coasts, it does not necessarily represent local mean sea level at any particular place.

Specific capacity of a well is the rate of discharge (gal/min) of water from the well divided by the drawdown (foot) of water level in the well. Specific capacity usually decreases slowly as the duration of pumping increases.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is measured in micromhos per centimeter at 25°C. Because specific conductance is related to the specific chemical types of ions in solution and their concentrations, it can be used for approximating the dissolved-solids content of a water sample.

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