

## Records of Selected Wells in Atlantic County, New Jersey



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Cover illustration: Offfshore drilling platform at observation well 2 site, 5.3 miles off Atlantic City. This well was drilled to investigate offshore conditions which might contribute to salt water movement towards wells supplying the Atlantic City area. The log for this well is on page 24.

## **Conversion Factors**

Multiply	by	to obtain
inch (in.)	25.40	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
square mile (mi <sup>2</sup> )	2.590	square kilometer (km <sup>2</sup> )
feet per mile (ft/mi)	0.189	meters per kilometer (m/km)
gallons per minute (gal/min)	0.06308	liters per second (L/s)
acre	0.4047	hectare

### Sea Level

In this report sea level refers to the National Geodetic Vertical Datum of 1929 (NGVD 1929)

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## New Jersey Geological Survey Geological Survey Report GSR 22

## Records of Selected Wells in Atlantic County, New Jersey

by Lloyd G. Mullikin

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Division of Water Resources
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CN-029
Trenton, NJ 08625

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# RECORDS AND LOGS OF SELECTED WELLS IN ATLANTICCOUNTY, NEW JERSEY

#### ABSTRACT

This report contains records of 129 wells in Atlantic County. Included are 126 lithologic logs and 39 borehole geophysical logs. Information on hydrogeologic conditions at the time of well construction is included. New Jersey Department of Environmental Protection well permit numbers and U.S. Geological Survey Ground Water Site Inventory (GWSI) reference numbers are given. These logs, collected from 1891 to 1988, include the most detailed well information available for the county's 23 municipalities. Wells are shown on a 1:100,000-scale map.

#### INTRODUCTION

#### Purpose and Scope

This collection of hydrogeologic information, derived from well records and borehole geophysical logs, was assembled to support the Atlantic City regional water bond study. This study was undertaken to aid in the protection and management of the ground water resources in the southern part of the State. The 2,500-square-mile study area (fig. 1) includes all of Atlantic, Cape May and Cumberland Counties and parts of Burlington, Camden, Gloucester, Ocean and Salem Counties.

#### **Acknowledgments**

Conrad Jacoby of the Department of Environmental Protection, Management Services

Element, and Jeffrey Kearns, formerly of the NJ. Geological Survey, helped with computer digitization of the borehole geophysical logs; Jeffrey Clark and others of the New Jersey district office of the U.S. Geological Survey provided information and assistance; Donna Moore and Joyce Rosetty of the N.J. Geological Survey typed the well logs. Thanks are also due to the drillers and property owners in Atlantic County, who provided valuable information and assistance.

The Water-Supply Bond Issue of 1981, approved by the voters of New Jersey, included funding for water-supply investigations. This bond issue is the funding source for this report and study.

#### SOURCE OF RECORDS

This report contains records of 129 wells. The wells were drilled for public and private water supply, irrigation, exploration, groundwater monitoring, and other purposes. Well locations are shown on plate 1. Sources for previously published records are referenced in the "Remarks" column of table 3. Most of the records include lithologic logs, and many have borehole geophysical logs.

Many of the records are from the files of the Bureau of Water Allocation, Division of Water Resources, N.J. Department of Environmental Protection. The Bureau of Water Allocation is responsible for issuing diversion permits and

collecting and maintaining well records. These files consist predominantly of records required by New Jersey law since 1948, but also include those collected by Lewis Woolman between 1890 and 1903 (Woolman, 1903, p. 10), and M.W. Twitchell (Kummel, 1921) and others before 1948. In all, more than 150,000 well records are in these files. Of these more than 9,000 are from Atlantic County.

Other sources of well data were publications of the N.J. Geological Survey and U.S. Geological Survey and drillers and land owners in Atlantic County.

#### WELL-NUMBERING SYSTEMS

Several numbering systems are used in the well records and logs in this report. The geographic code is a four-digit number derived

from the Federal Information Processing Standard (FIPS) System (GEOCODES, 1986, p. i). The first two digits (01) are a county code for

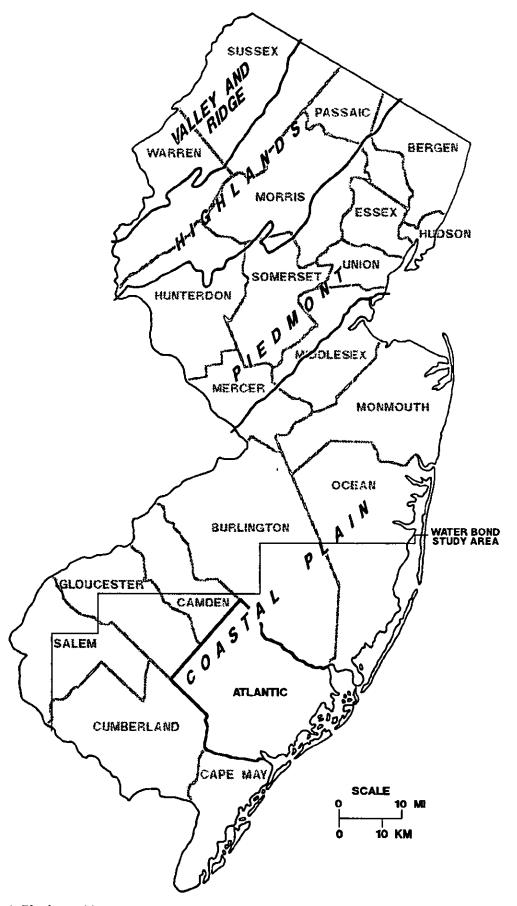


Figure 1. Physiographic provinces of New Jersey, the Atlantic City regional water bond study area, and Atlantic County.

Atlantic County. The next two digits indicate the municipality. Municipality codes for Atlantic County are listed in table 1.

The well number is a unique three-digit site-location number assigned to each well listed in this report.

A well permit number is assigned by the Bureau of Water Allocation prior to drilling. Upon completion, the driller is required to submit a well record. Permit numbers are assigned sequentially within areas covered by a particular New Jersey Atlas Sheet. A permit number such as 32-10935, for example, indicates the 10,935th

permit issued within the area covered by Atlas Sheet 32.

The U.S. Geological Survey Ground Water Site Inventory (GWSI) provides access to over two hundred types of information on selected wells. The database includes public water supply wells, high capacity wells, and wells used in N.J. Geological Survey and U.S. Geological Survey aquifer studies. The first two digits of a GWSI number are the FIPS county code. The remaining digits are a unique number for each well. Information on construction, well use, water quality, water levels, aquifer, lithology and other hydrogeologic characteristics is included.

Table 1. Well data included in report

Mu	nicipality	Well	L	ogs	Mur	icipality	Well	L	ogs
Code	Name	records	Lithologic	Geophysical	Code*	Name	records	Lithologic	Geophysical
0101	Absecon City	8	8	0	0113	Hammonton Town	6	6	1
0102	Atlantic City	21	20	8	0114	Linwood City	1	1	0
0103	Brigantine City	5	5	1	0115	Longport Borough	4	3	2
0104	Buena Borough	4	4	1	0116	Margate City	6	6	2
0105	Buena Vista Townsh	ip 7	7	1		Mullica Township	5	5	1
0106	Corbin City	0	0	0	0118	Northfield City	1	1	0
0107	Egg Harbor City	3	3	1	0119	Pleasantville City	7	6	1
0108	Egg Harbor Townshi	ip 12	12	6	0120	Port Republic City	0	0	0
0109	Estell Manor City	1	1	1	0121	Somers Point City	2	2	1
0110	Folsom Borough	1	1	0	0122	Ventnor City	3	3	0
0111	Galloway Township	16	16	6	0123	Weymouth Townshi	ip 1	1	0
0112	Hamilton Township	15	15	6		•	•		

<sup>\*</sup>Modified from Geocodes, 1986, p.1

#### LATITUDE AND LONGITUDE LOCATION SYSTEM

Latitude and longitude locations in this report consist of 6-digit numbers corresponding to degrees, minutes and seconds. For location N392513 W742926, the "N" indicates north latitude, and the following 6 digits show degrees,

minutes, and seconds of latitude. The "W" indicates west longitude, and the following 6 digits show degrees, minutes, and seconds of longitude. Each second of latitude and longitude defines an area of approximately 100 x 75 feet.

#### **NEW JERSEY ATLAS SHEET COORDINATE SYSTEM**

The New Jersey Atlas Sheet Coordinate System (ASCS), developed by the N.J. Geological Survey (Kummel, 1912, p. 13), is the primary method for reporting well locations in New Jersey. The ASCS method was designed to be easier

to use and understand than the latitude and longitude system. All well records are filed by the Bureau of Water Allocation utilizing ASCS numbers.

#### HYDROLOGIC DATA

Hydrologic data in table 3 are from records filed after completion of drilling and show conditions at the time of well construction. More recent data may be available through the U.S. Geological Survey Ground Water Site Inventory (GWSI), in the files of the Bureau of Water Allocation, and elsewhere.

In some instances, "pumping level" may mean depth of the pump setting during the test, rather than water level during pumping.

#### GEOLOGIC SETTING

The 610 square miles which make up Atlantic County are about 7.5 percent of New Jersey's total area. Atlantic County lies within the Outer Coastal Plain and is underlain by interbedded sand, gravel, silt and clay of Cretaceous, Tertiary and Quaternary age (table 2). The sediments of New Jersey's Coastal Plain dip and thicken to the southeast. Near the town of Dorothy, in the western part of Atlantic County, these sediments are about 3,700 feet thick. Along the coast, the thickness increases gradually from 3,798 feet at

Island Beach State Park, in Ocean County to the north (Gill and others, 1963), to over 6,000 feet in Cape May County to the south (Gill, 1962b, p. 7).

The Kirkwood-Cohansey aquifer system and the Atlantic City 800-foot sand of the Kirkwood Formation are the hydrogeologic units (table 2) most frequently developed for water supply in Atlantic County.

#### LITHOLOGIC LOGS

The lithologic logs in this report have been revised slightly for readability and consistency. The most complete logs contain information on the type of material drilled, grain size, color, depth, thickness, and water-bearing characteristics.

#### Sediment Color

Most of the colors mentioned are easily understood descriptive terms. Several of the logs use the Munsell method for color identification (Munsel, 1975). This is a precise method for identifying colors of rocks and sediments based on standard charts. Notations for hue, value, and chroma, are combined to form a color designation such as 5YR 5/6 (hue 5YR, value 5, and chroma 6; light brown with a yellowish-red hue).

#### Grain Size

The grain-size classification shown below is widely accepted for clastic sedimentary rock.

#### Grain-Size Classification\*

	Sediment	Grain Size (mm)
	Boulder	Greater than 256
Gravel	Cobble	64 - 256
	Pebble	4 - 64
	Granule	2 - 4
	Very coarse sand	1 • 2
	Coarse sand	1/2 - 1
Sand	Medium sand	1/4 - 1/2
	Fine sand	1/8 - 1/4
	Very fine sand	1/16 - 1/8
Mud	Silt	1/256 - 1/16
fytud	Clay	Less than 1/256

<sup>\*</sup>Modified from Wentworth, 1922, p. 277

Table 2. Geologic and hydrologic units of the New Jersey Coastal Plain (modified from Zapecza, 1989, table 2).

YSTEM	SERIES	GEOLOGIC U	NIT	LITHOLOGY	HYDROGEO	LOGIC UNIT	HYDROGEOLOGIC CHARACTERISTICS
2		Alluvial deposi		Sand; silt; black mud.			
RNA	Holocene	Beach sand and gravel	1 	Sand, medium to coarse, light colored, quartz, pebbly.			Surficial material, commonly hydrau lically connected to underlying aqui
QUATERNARY	Pleistocene	Cape May Formation		6-41	Undifferentiate	:d	fers. Locally some units may act a confining beds. Thicker sands ar capable of yielding large quantities of
		Pensauken Formation		Sand, heterogeneous, light-colored, quartz, clayey, pebbly			water.
		Bridgeton Formation					Ground-water occurs generally under water-table conditions. Interconnection
		Beacon Hill Gr	avel	Gravel, light-colored, quartz, sandy.	Kirkwood-Coh	ansey aquifer	with Cohansey Sand occurs whe upper and lower confining units of the
		Cohansey Sand		Sand, medium to coarse, light-colored, quartz, pebbly; local clay beds.	system		Kirkwood are not present. In Caj May County, the Cohansey Sand under artesian conditions.
	Miocene					upper confining unit Rio Grande	Thick diatomaceous clay unit occu
				Cond S todi	Diatomaceous clay unit	water-bearing	along coast and for a short distan- inland. A thin water-bearing sar
		Kirkwood Formation		Sand, very fine to medium, gray and tan, quartz, micaceous; dark-colored		zone lower	occurs within the middle of this unit.
_				diatomaceous clay.		confining unit	
148					Atlantic City	unit	
TERTIARY					800-foot sand	Atlantic City confining unit	A major aquifer along the coast.
-		•				lower sand unit	
						basal clay	Poorty permeable sediments.
	Oligocene <sup>1</sup>	ACGS beta unit <sup>1</sup>	.5"g	Sand, fine to coarse, quartz; glauconite.			
•	O II good LE	Mays Landing unit <sup>1</sup>	Piney Point Formation	cane, the to coate, quarter practime.		Piney Point aquifer <sup>2</sup>	Yields moderate quantities of water locally.
		Shark River	5 5				
	Eocene	Formation Manasquan	<u> </u>	Clay, green, gray and brown, silty and sandy, glauconitic; fine quartz sand.			
		Formation		Sand Gard to assess and assess	ig i		Poorly permeable sediments
	Paleocene	Vincentown Formation		Sand, fine to coarse, gray and green, quartz, glauconitic; brown, clayey, very fossiliferous glauconite and quartz calcarenite.	Composite confining unit	Vincentown aquifer	Yields small to moderate quantities of water in and near its outcrop area.
		Homerstown Formation Tinton Sand		Sand, fine to coarse, dark green, clayey, glauconitic.	3		Poorly permeable sediments
		Red Bank Sand	1	Sand, fine to coarse, brown and gray, quartz, glauconitic, clayey, micaceous.		Red Bank sand	Yields small quantities of water in and near its outcrop area.
	į	Navesink Formation		Sand, medium to coase, green and black, clayey, silty, glauconitic.			Poorty permeable sediments.
		Mount Laurel	Sand	Sand, fine to coarse, brown and gray, quartz, slightly glauconitic	Wenonah-Mou	nt Laurel	A major aquifer.
		Wenonah Formation		Sand, very fine to fine, gray and brown, silty, slightly glauconitic	Marshalltown-	Weaponsh	
<b>7</b>	Upper Cretaceous	Marshalltown Formation		Clay, dark greenish gray, silty; glauconitic quartz sand.	confining unit	W CHOIME	A leaky confining unit.
SOO	Cictaccous	Englishtown		Sand, fine to medium, tan and gray,	Englishtown ac	uifer system	A major aquifer. Two sand units in
Z.		Formation Woodbury Cla	y	quartz; local clay beds.  Clay, gray and black; micaceous silt.			Monmouth and Ocean Counties.
CRETACEOUS		Merchantville Formation		Clay, gray and black, glauconitic, micaceous; locally very fine quartz and glauconitic sand.	Merchantville- confining unit	Woodbury	A major confining unit. Locally t Merchantville Formation may conta a thin water-bearing sand.
		Magothy Formation		Sand, fine to coarse, light-gray quartz; local beds of dark-gray, lignitic clay.	) Ag	upper aquifer	A major aquifer system. In t
		Raritan Forma	ition	Sand, fine to coarse, light-gray, quartz, pebbly, arkosic; red, white, and variegated clay	ritan-Magar r system	confining unit middle aquifer	northern coastal plain, the upp aquifer is equivalent to the Old Brid aquifer and the middle aquifer is t equivalent of the Parrington aquifer.
Į.	Lower Cretaceous	Potomac Group		Alternating clay, silt, sand and gravel.	Potomae-Raritan-Magothy aquifer system	confining unit	the Delaware River valley, the aquifers are recognized. In the deep subsurface, units below the upp aquifer are undifferentiated.
Pre-Cretaceous Bedrock				Precambrian and lower Paleozoic crystalline rocks, schist and gneiss; locally Triassic sandstone and shale, Jurassic diabase.	Bedrock confu	ning unit	No wells known to obtain water for these consolidated rocks, except ale Fall Line.

<sup>1</sup>from Poore and Bybell, 1988, p. 8 <sup>2</sup>from Olsson and others, 1980, p. 549

#### **BOREHOLE GEOPHYSICAL LOGS**

Borehole geophysical logging includes all techniques of lowering sensing devices into a borehole and recording physical properties useful for interpreting characteristics of sediments, rocks, ambient fluids, and well construction. Borehole geophysical logs can help determine the lithology, geometry, resistivity, formation factor, bulk density, porosity, permeability, moisture content, and specific yield of waterbearing sediments and rocks and define the

source, movement, and chemical and physical characteristics of ground water (Keys and Mac-Cary, 1971, p.1).

Of the 129 wells presented in this report, 39 have borehole geophysical logs. Some of these wells have multiple logs, permitting comparison of the different borehole geophysical techniques. The logs have been adjusted to a uniform vertical scale of one inch equals 100 feet.

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#### **GLOSSARY**

Anhedral - Showing no rational faces or crystal outline.

Artesian aquifer - An aquifer containing water under sufficient pressure to cause the water level in a well to rise above the top of the aquifer. Also called confined aquifer.

Argillite - A compact rock derived from mudstone or shale, more highly indurated than either of those rocks. It lacks the fissility of shale or the cleavage of slate. It is a product of weak metamorphism.

Bioclastic rock - A sedimentary rock consisting of fragmental or broken remains of organisms, such as a sandstone composed of shell fragments.

**Bioturbation** - The churning and stirring of a sediment by organisms.

Bog iron - A general term for a soft, porous deposit of impure hydrous iron oxides formed in bogs, swamps, and shallow lakes by precipitation

from iron-bearing waters and by the oxidizing action of algae, iron bacteria, or the atmosphere. Composed principally of limonite impregnated with plant debris, clay, and clastic material. It is an iron ore of poor quality.

**Bulk density** - The weight of an object or material divided by its volume, including the volume of its pore spaces.

Carbonaceous - Rich in carbon or containing organic matter.

Concretion - A hard, compact aggregate of mineral matter, sub-spherical to irregular in shape, formed by precipitation from water solution around a nucleus, such as wood or a shell, in a sedimentary rock.

Concretionary - Characterized by, consisting of, or producing concretions.

**Diatom** - A microscopic single-celled aquatic plant related to the algae. It grows in both fresh and salt water. Diatoms secrete siliceous frus-

tules in a great variety of forms, which may accumulate in sediments in enormous numbers.

Euhedral - A mineral grain that is completely bounded by its own rational faces, and whose growth has not been restrained or interfered with by adjacent grains.

Formation factor - The ratio of the conductivity of an electrolyte to the conductivity of a rock saturated with that electrolyte.

Glauconite - A green mineral closely related to the micas and essentially a hydrous potassium iron silicate. It is abundant in greensand, and is an indicator of very slow sedimentation.

Gumbo - A term used for a clay soil that becomes sticky, impervious, and plastic when wet.

Lignite - A brownish-black coal that is intermediate in grade between peat and sub-bituminus coal.

Lamination - The thinnest recognizable layer in a sediment or sedimentary rock, differing from other layers (laminae) in color, composition, or particle size. Also called a streak.

Micaceous - Consisting of, containing, or pertaining to mica.

Microbreccia - A poorly sorted sandstone containing relatively large and sharply angular sand grains set in a very fine silty or clayer matrix.

National Geodetic Vertical Datum of 1929 (NGVD 1929) - A geodetic datum based on the first order level nets of the United States and

Canada, formerly called mean sea level. It is also referred to as sea level in this report.

**Ped** - A naturally formed unit of soil structure, such as an aggregate.

Porosity - The ratio of the aggregate volume of interstices in a rock or soil to its total volume. It is usually stated as a percentage.

Permeability - The capacity of a porous rock, sediment, or soil to transmit a fluid; it is a measure of the relative ease of fluid flow under unequal pressure.

Pyrite - A common mineral, FeS<sub>2</sub>. The most widespread and abundant of the sulfide minerals, which occurs in all kinds of rocks.

Rational face - A crystal face naturally suggested by and peculiar to the internal molecular stucture of the mineral species to which the crystal belongs.

Specific yield - The ratio of the volume of water that a given mass of a saturated rock or soil will yield by gravity to the volume of that mass. This ratio is stated as a percentage.

Streak - See lamination.

Subhedral - Bounded partly by its own rational faces and partly by surfaces formed against preexisting grains as a result of either crystallization or recrystallization.

Trace - A concentration or amount of material that is too small for accurate quantitative determination.

Table 3, Records of wells in Atlantic County

Geographic code	Wali number	Permit number	U.S.G.S. GWSI number	Latitude/ longitude	Atlas sheet coordinates	Owner or name	Driller	Completion date	Elevation (ft)	Depth drilled (ft)	Depth to screened interval (ft)	Static water level (ft)	Pumping level (ft)	Pumping rate (gpm)	Test duration (hours)	Formation screened	Type o	f Remarks
ABSECO	N CITY																	
0101	042	56-66	-	N392513 W742926	36.13.343	Sara White Property	R.W. Sundstrom Engineering	07/1934	10	205	178-205	-	-	-	-	Tch	L	
0101	113	36-453		N392542 W743136	36.13.215	Atlantic City Water Dept.	Layne-N.Y.	07/28/1975	10	692	598-641	52	97	457	8	Tkw	L	
0101	115	56-29	010574	N392510 W743031	36.13.261	Atlantic City Water Dept.	Layne-N.Y.	12/31/1930	7	211	160-195	10	55	981	32	Tch	L	C,A,
0101	116	56-37A	010006	N392455 W743028	36.13.264	Atlantic City Water Dept.	Layne-N.Y.	12/31/1930	8	240	180-210	7	67	811	32	Tch	L	
0101	117	56-32	010011	N392534 W743108	36.13.224	Atlantic City Water Dept.	Layne-N.Y.	12/31/1930	7	201	160-190	9	64	1320	32	Tch	L	
0101	118	56-30	010005	N392511 W743052	36.13.253	Atlantic City Water Dept.	Layne-N.Y.	12/31/1930	8	220	160-195	12	61	831	32	Tch	L	C.A.
0101	121	36-299	-	N392602 W743003	36.03.899	Atlantic County Water Co.	A.C, Schultes	06/28/1960	35	261	178-204	13	44	708	8	Tch	L	From Clark and others, 1968, p.31, 37; log by F.J. Markewicz, N.J. Geol. Survey.
0101	214	56-33	010575	N392548 W743122	36.13.224	Atlantic City Water Dept.	Johnson Well Screen Co.	08/15/1928	6	205	145-195	+14	11	668	1	Tch	L	C.A.
ATLANTI	CCITY																	
0102	216	56-67	010026	N392131 W742522	36.14.819	Haddon Hall	Uriah White	1896	10	840	790-840			-		Tkw	L	C.A.; from Woolman, 1897, p.170.
0102	217	56-68	010030	N392132 W742522	36,14,819	Haddon Hali	Layne-N.Y.	02/16/1925	10	841		55				-	L	C,A.
0102	218	56-69	-	N392108 W742648	36,14,756	Chelsea House	Thomas B. Harper	1900	10	840	790-840	-			-	Tkw	L	From Woolman, 1901, p.116.
0102	219	56-70	-	N392108 W742600	36,14,766	Youngs Ocean Pier	Uriah White	1901	20	2,306	-	+10	-	-			L	From Woolman, 1902, p.110.
0102	220	56-71	010037	N392152 W742459	36,14,822	Galen Hall	Thomas B. Harper	01/07/1905	7	840	-		-	250	_	-	L,G	C.A.; U.S. Geol. Survey observation well.
0102	221	56-72	010675	N392138 W742501	36,14.825	St. Charles Hotel	Thomas B. Harper	11/30/1910	10	835	-	21	28	314	-	-	L	
0102	222	56-73	010669	N392146 W742620	36.14.734	Atlantic City Gas Works	Layne-N.Y.	10/24/1925	10	840	769-829	58	94	594		Tkw	Ĺ	C.A.
0102	223	56-74	010670	N392136 W742614	36,14,738	American los Co.	Layn <del>s-</del> N.Y.	03/01/1927	10	845	775-835	75	110	551	-	Tkw	L	
0102	226	56-75	010038	N392158 W742640	36.14.723	Atlantic City Electric Co.	Layne-N.Y.	1924	10	833	745-805	-	-	400	-	Tkw	L	C.A.; from Clark and others, 1968, p.33, 37.
0102	227	36-220	010015	N392058 W742711	36.14.754	President Hotel	A.C. Schultes	03/28/1955	10	865	780-832	61	110	554	4	Tkw	L,G	C.A.; from Clark and others, 1968, p.39; log by F.J. Markewicz, N.J. Geol. Survey.
0102	239	36-1084	010648	N392124 W742604	36,14.811	Bally's Park Place, Inc.	Layne-N.Y.	12/07/1979	7	884	775-835	78	141	1016	24	Tkw	L,G	C.A.
0102	280	36-964	010682	N392133 W742522	36.14.819	Resorts International	Layne-N.Y.	08/26/1979	8	887	779-840	80	148	855	8	Tkw	L	C.A.
0102	309	56-84	-	N392207 W742513	36,14.587	Citizen's los and Cold Storage Co.	Thomas B. Harper	1894	7	805	790-805	+7	-	125	-	Tkw	L	

Notes:

Geographic code: see text for explanation of well numbering system

Wall number; see text for explanation of well numbering system

U.S.G.S. GWSI number: see text for explanation of GWSI numbering system

Atlas sheet coordinates; see text for explanation

Elevation: feet above or below sea level estimated from U.S.G.S. 7.5-minute topographic quadrangle map (contour interval 10 ft.)

Depth drilled; feet below land surface Depth to screened interval; feet below land surface Static water level: feet below land surface at time well was drilled Pumping level; depth in feet below land surface.

Formation screened:

Tch: Cohansey sand Tkw: Kirkwood Formation

Tkw/Tch: Kirkwood-Cohansey aquifer system sub-Tkw; aquifer stratigraphically below Kirkwood Fm. Type of Log:

L - lithologic
G - Borehole geophysical
All logs shown in table 4

Remarks: C.A. - chemical analysis shown in Barton and others, in press

Table 3 (cont.)

Geographic code	Well number		U.S.G.S GWSI number	Latitude/ longitude	Atlas sheet coordinates		Oriller	Completion date	Elevation (ft)	Depth drilled (ft)	Depth to screened interval (ft)	Static water level (ft)	Pumping level (ft)	Pumping rate (gpm)			Type o	4 Remarks
ATLANTIC	CCITY	(cont.)	ı				<u>-</u>	_									-	<del></del> -
0102	311	56-85	-	N392127 W742607	36.14.739	Dennis Hotel	Uriah White	1896	10	835	-	-	-	-	-	-	L	From Woolman, 1897, p.168.
0102	313	56-88	-	N392153 W742553	38.14.811	Atlantic City Cooling Co.	Uriah White	1895	7	813	763-813	-	••	400	-	Tkw	L	From Woolman, 1896, p.81.
0102	314	56-87	-	N392127 W742607	36.14.739	Brighton Hall	Uriah White	1895	10	843	-	-	-	-		-	L	From Woolman, 1896, p.79.
0102	337	36-5615	010711	N391955 W742507	38.24.266	U.S. Geol. Survey	Warren George	07/29/1985	-32	931	849-879	-	-	40	144	Tkw	L,G	C.A.; marine observation well-inshore.
0102	338	36-5972	010710	N391726 W742221	36.24.655	U.S. Geol. Survey	Warren George	09/04/1985	-43	1,025	935-965	-	-	50	144	Tkw	L,G	C.A.; marine observation well-offshore.
0102	344	56-65	010649	N392247 W742713	36.14.481	U.S. Dept. of Energy	Gruy Federal	4/1978	5	1,004	-	-	-	-	••	-	L,G	U.S. Geol. Survey observation well.
0102	350	56-88	010022	N392124 W742548	36.14.817	Traymore Hotel	Uriah White	1899	8	830	-	0	11	225	-	<b>-</b>	G	C.A.; from Woolman, 1900, p.106.
0102	351	56-89	010021	N392123 W742600	36.14,817	Marlborough- Blenheim Hotel	-	1922	7	823	-	-	-	-	-	-	L,G	C.A.
BRIGANTI	INE CI	TY																
0103	074		010683	N392411 W742226	36,15,149	City of Brigantine	Layne-N.Y.	06/1980	5	830	725-775	58	153	1060	8	Tkw	L	C,A.
0103	305	56-90	-	N392427 W742147	36.15.174	Brigantine	Uriah White	Summer/1895	10	798	73 <del>8</del> -788	0+	-	100	-	Tkw	L	From Woolman, 1896, p.77; flowed 100 gpm at surface; static level unknown.
0103	306	56-12	010039	N392330 W742348	36.14.617	Brigantine Borough	Layne-N.Y.	09/13/1966	5	840	728-788	75	182	1023	-	Tkw	L,G	C.A.
0103	348	56-11	010040	N392342 W742348	36,14.614	Brigantine Water Dept.	Layne-N.Y.	10/07/1952	5	785	706-766	55	120	717	-	Tkw	L	C.A.; from Clark and others, 1968, p.33, 39.
0103	349	56-9	010041	N392432 W742153	36.15,171	Brigantine Borough	Layne-N.Y.	12/12/1925	10	840	735-827	23	79		-	Tkw	Ļ	C.A.
BUENA BO	OROU	GH				•												
0104	099	35-4559	010701	N393148 W745617	35.03.233	Buena Borough M.U.A.	Layn <del>e</del> -N.Y.	02/23/1985	118	474	405-455	100	210	606	48	sub-Tkw	L,G	C.A.
0104	103	35-1490	010647	N393030 W745808	35.03.193	Frank Marolda	Vance Skinner	05/1976	105	197	90-178	18	45	460	1	Tkw/Tch	L	
0104	104	31-19096	-	N393302 W745638	31,43.565	Monfardini Brothers	Vance Skinner	05/17/1982	110	160	116-158	6	9	50	1	Tkw/Tch	L	
0104	105	35-2418	-	N393113 W745620	35.03.262	Dom Visconti	Vance Skinner	03/26/1982	108	160	110-150	-	-	-	-	Tkw/Tch	L	
BUENA VI	STA T	OWNSH	1IP															
0105	101	31-5832	010114	N393208 W745503	31.43.685	Buena Reg. Sch. Dist.	A.C. Schultes	02/1972	110	196	157-177	21	77	351	8	Tkw/Tch	L,G	
0105	106	35-1725	-	N393033 W745447	35.03.383	Buena Vista Twp.	Vance Skinner	08/17/1978	90	136	122-132	8		-	-	Tkw/Tch	L	
0105	136	35-963	010075	N392741 W745229	35.04.763	Eric Hensel	Delmarva Drilling	04/23/1968	93	165	100-160	9	12	60	2	Tch	L	
0105	137	35-3292	-	N392713 W745220	35.04.762	Eric Hensel	D'Agostino Well Drilling	06/11/1982	90	250	-	9	-	-	-	-	L	
0105	142	35-1121	010085	N392837 W745240	35,04,491	John Kollmer	Vance Skinner	03/30/1971	91	155	95-138	8	12	70	1	Tkw/Tch	L	
0105	143	35-1481	010646	N392917 W745443	35.03.694	Badaracco Farms	Vance Skinner	02/03/1977	100	270	176-236	20	90	500	4	Tkw/Tch	L	
0105	144	35-152	010089	N392843 W745449	35.03.658	C.C. Bylone	Milton Shepard	03/28/1953	110	195	179-195	14	21	100	1	Tkw/Tch	L	

Table 3 (cont.)

Geographic code	Well number	Permit number	U.S.G.S. GWSI number	Latitude/ longitude	Atlas sheet coordinates	Owner or name	Driller	Completion date	Elevation (ft)	Depth drilled (ft)	Depth to screened interval (ft)	Static water level (It)	Pumping level (ft)	Pumping rate (gpm)	Test duration (hours)	Formation screened	Type o	f Remarks
CORBIN																		
No wells inclu EGG HAR			ary															
0107	011		010118	N393215 W743826	32.42.494	Egg Harbor City	Artesian Well Drilling	04/1957	40	410	365-405	18	80	415		Tkw	L	C.A.
0107	012	32-477	010117	N393207 W743836	32.42.494	Egg Harbor City	A.C. Schultes	11/11/1964	40	507	350-432	22	57	768	12	Tkw	L,G	C,A,
0107	324	52-20	-	N393220 W743833	32.42.494	Egg Harbor City	Kisner and Bennett	1897	40	371	•	0	-	100	-	-	L	From Woolman, 1898, p.222; 1899, p.73.; flowed only at high tide.
EGG HAR	BOR 1	OWNS	HIP															
0108	112	36-454	-	N392622 W743212	36.03.796	Atlantic City Water Dept.	Layne-N.Y.	08/11/1975	20	691	564-619	48	74	465	8	Tkw	L,G	
0108	119	36-428	-	N392527 W743300	36.13.128	N.J. Water Co.	. C.W. Lauman	11/23/1971	35	233	172-208	13	41	1016	24	Tch	ĻG	
0108	120	36-1828	-	N392327 W743526		N.J. Water Co.		02/15/1980	20	235	166-201	4	21	201	24	Tch	L'G	
0108	126	36-367	010160	N392652 W743512	36.02,957	U.S. Air Force	Ridpath and Potter	02/04/1965	55	166	130-165	20	40	670	16	Tch	· L	Located on National Aviation Facility Experimental Center (NAFEC) property.
0108	128	36-401	010154	N392516 W743825	36.12.161	South Jersey Gas Co.	Layne-N.Y.	01/30/1968	58	249	127-157	8	51	503	6	Tch	Ł	
0108	172	36-9	-	N391842 W743247	36,23,183	Emma Kuntz	Artesian Well Drilling	06/1949	6	700	658-668	8	22	25	4	Tkw	L	
0108	286	36-271	010121	N391853 W743208	36.23.169	Seaview Harbor Water Co.	Layne-N.Y.	05/07/1958	5	830	740-780	75	97	300	8	Tkw	L	C.A.; from Clark and others, 1968, p.30, 41; log by D.G. Parillo, N.J. Geol. Survey.
0108	293	36-5091	010704	N392344 W743749	36.12.435	Egg Harbor Twp. High School	A.C. Schultes	03/28/1985	50	678	596-606	-	-	-	-	Tkw	Ł,G	
0108	294	36-5092	010703	N392639 W743232	36.03.794	U.S. Geol. Survey	A.C. Schultes	03/23/1985	25	608	560-570	80	96	60	12	Tkw	L,G	C.A.; Observation well; located on National Aviation Facility Experimental Center (NAFEC) property.
0108	315	56-83	-	N391847 W743207	36.23.169	Mr, Filield		1891	5	397	-	-	-	-	-	-	L	From Woolman, 1893, p.281.
0108	341	36-5517	-	N392344 W743749	36.12.435	Egg Harbor Twp. High School	N.J. Geol, Survey	06/14/1985	50	377	361-371	-			-	Tkw	L	U.S. Geol. Survey observation well,
0108	347	36-5339	-	N392257 W743008	36,13,555	Comfort Inn	A.C. Schultes	05/17/1985	5	661	606-626	70	75	35	6	Tkw	L,G	
ESTELL N	<b>IANOF</b>	CITY																
0109	178	35-4903	010715	N391946 W745125	35,24,213	Peaslee Wildlife Mgt. Area	N.J. Geol. Survey	07/13/1985	40	600	-	-	-	-	-	-	L,G	Joint exploratory borehole of N.J. Geol. Survey and U.S. Geol. Survey,
FOLSOM	BORO	UGH																
0110	098	31-5381	010629	N393614 W745017	31,34,892	Southern Counties Land Co.	A.C. Schultes	08/01/1969	73	166	87-102	13	26	200	4	Tkw/Tch	L	
GALLOW	AYTO	NNSHI	P		~													
0111	033		010180	N392753 W742701	36.04.487	U.S. Geol Survey	C.W. Lauman	08/29/1959	27	1,002	558-574	-	-	-	-	Tkw	L,G	C.A.; observation well; from Clark and others, 1968,, p.30, 42; log by H.R.
0111	041	36-426	010172	N392650 W742752	38.04.747	Seaview Country Club	A.C. Schultes	02/02/1972	10	270	161-201	+3	145	1000	4	Tch	L	Anderson, U.S. Geol. Survey.

Table 3 (cont.)

Geographic code	Well number	Permit number	U.S.G.S. GWSI number	Latitude/ longitude	Atlas sheet coordinates	Owner or name	Driller	Completion date	Elevation (ft)	Depth drilled (ft)	Depth to screened interval (ft)	Static water level (ft)	Pumping level (ft)	Pumping rate (gpm)	Test duration (hours)	Formation screened	Type o	f Remarks
GALLOW	AY TO	WNSHI	P (cont	L)														
0111	044	36-2432	010688	N392944 W742818	36.03.635	Town of Smithville	Layne-N.Y.	07/19/1981	30	186	130-180	-	-	-	_	Tch	L	C.A.
0111	045	36-2433	010689	N392944 W742812	36.03.635	Smithville Water Co.	Layno-N.Y.	07/18/1981	32	202	130-180	21	47	904	8	Tch	L	
0111	048	36-3042	-	N392953 W742740	36.04.412	Smithville Development Co.	Absecon Elec. Motor Works	10/12/1982	30	182	-	16	•	100	-	-	L	
0111	047	36-408	010175	N392701 W742825	36.03.964	Seaview Country Club	Artesian Well Drilling	07/07/1969	50	250	192-244	32	67	610	8	Tch	L	
0111	053	36-2620	-	N393008 W742728	36.04.118	Smithville Development Co.	Absecon Elec. Motor Works	10/08/1982	14	182	-	6	-	100	-	-	L	
0111	054	36-1078	-	N393007 W742807	36.03.399	Town of Smithville	Layne-N.Y.	10/31/1979	20	199	115-165	3	21	525	24	Tch	L	
0111	110	52-18	-	N39322 7W743300	32.43.485	Fred Schroer	Fred Schroer	03/28/1956	65	429	-	48	••	••	**	-	L	Log by Fred Schroer, and M.E. Johnson, N.J. Geol. Survey.
0111	123	36-418	010189	N392923 W743557	36.02.618	Biocraft Labs Inc.	Layne-N.Y.	11/06/1970	60	208	122-163	-	-	-		Tch	L,G	Observation well.
0111	124	36-422	010191	N392901 W743521	36.02.646	Biocraft Labs	Layne-N.Y.	11/11/1970	65	208	133-159	7	66	403	24	Tch	L,G	Test borehole.
0111	125	36-398	-	N392820 W743526	36.02.676	Agries Explor. Corp.	Joseph Strauber	06/11/1967	70	700	•	-		-	-	-	L	Exploratory well.
0111	127	36-3110	010686	N392908 W743213	36.03.457	Atlantic City Medical Center	A.C. Schultes	12/07/1982	74	175	149-169	23	41	305	8	Tch	L,G	
0111	215	56-81	010177	N392658 W742830	36.03.964	Sea View Golf Club	Artesian Well Drilling	03/26/1931	45	278	203-253	46	72	600	-	Tch	Ł	
0111	289	36-4982	010706	N392933 W743130	36.03.456	Stockton State College	-	01/11/1985	40	680	520-530	-	-	5	6	Tkw	L,G	C.A.; U.S. Geol. Survey observation well.
0111	340	36-6551	010717	N392933 W743130	36.03.456	_	N.J. Geol, Survey	06/27/1985	40	336	320-330	223		75		Tkw	L,G	C.A.; U.S. Geol, Survey observation well,
IAMILTO	N TOW	NSHIP	+			_												
0112	009	32-320	010377	N393332 W744427	32,41,435	Scholler Brothers, Inc.	A.C. Schultes	02/05/1958	90	178	155-176	32	38	305		Tch	L	C.A.; from Clark and others, 1968, p.28, 44; log by D.G. Parillo, N.J. Geol, Survey,
0112	010	32-474	-	N393302 W744408	32.41.465	Atlantic City Expressway	A.C. Schultes	08/17/1964	85	186	142-157	25	37	210	12	Tch	L,G	
0112	014	35-4274	010700	N392933 W744604	35.05.436	Atlantic County Girl Scout Camp	U.S. Geol. Survey	08/07/1984	40	945	479-539	-	-	-	-	sub-Tkw	L,G	From Owens and others, 1988; exploratory corehole.
0112	040	36-1865	-	N393157 W744251	36.01.222	Atlantic City Expressway	A.C. Schultes	09/08/1980	65	172	134-154	23	35	360	8	Tah	L,G	
0112	130	36-391	010227	N392709 W744439	36.01,762	Hamilton Twp. M.U.A.	A.C. Schultes	11/1966	20	371	317-347	+6	98	754	8	Tkw	L,G	C.A.
0112	131	36-15	010229	N392709 W744322	36.01.843	Hamilton Twp. M.U.A.	Artesian Well Drilling	12/1949	12	240	299-331	3	49	360	3	Tkw	L	
0112	132	31-23070	010716	N393429 W744649	31.34.994	Arawak Paving Co.	N.J. Geol. Survey	06/01/1985	70	550	-	-	-	-	-	-	L,G	Joint exploratory borehole of N.J. Geol, Survey and U.S. Geol, Survey.
0112	133	35-4370	010699	N392933 W744604	36.05.436		N.J. Geol. Survey	10/10/1984	40	171	132-162	-	-	-	-	Tch	L	C.A.; U.S. Geal, Survey observation well.
0112	134	36-396	010222	N392641 W744123	36.01.957	Wheaton Plasti-Cote Corp.	Vance Skinner	06/14/1967	50	194	67-87	25	43	305	8	Tch	L	
0112	135	56-82	-	N392713 W744400	36,01.841	•	J.W. Wells Drilling	1892	В	176	-	0+	-	-	25	-	L	From Woolman, 1893, p.286; flowed 25 gpm at land surface; static level unknown.

Table 3 (cont.)

Geographic code	Well number	Permit number	U.S.G.S. GWSI number	(_atitude/ longitude	Atlas sheet coordinates	Owner or name	Driller	Completion date	Elevation (ft)	Depth drilled (ft)	Depth to screened interval (ft)	Static water level (ft)	Pumping level (ft)	Pumping rate (gpm)		Formation screened	Type o	f Remarks
HAMILTO			(cont	•														
0112	138	35-297	-	N392740 W744726	35.05.716	Savo Balic	Vance Skinner	03/1974	85	195	118-148	40	90	45	1	Tch	L	•
0112	291	35-4656	010713	N392902 W745051	35.04.568	U.S. Geol. Survey	N.J. Geol. Survey	03/29/1985	92	577	525-535	101	-	5	-	sub-Tkw	L,G	C.A.; observation well on N.J. Dept, of Transportation property.
0112	292		010712	N392902 W745051	35.04.587	Survey	N.J. Geol. Survey	05/16/1985	92	396	377-387	33	-	60	-	Tkw	Ł	C.A.; observation well on N.J. Dept, of Transportation property,
0112	322	51-137	-	N393233 W744700	31,45.482	Atlantic Co. Cranberry Bogs	_	1892	40	45	-	10	-	-	-	••	Ļ	From Woolman, 1893, p.295.
0112	323	51-138	-	N393407 W744700	31,45,188	Homer's Bog	-	1892	50	106	-	2	-	-	-	-	L	From Woolman, 1893, p.295.
HAMMON	ITON T	OWN																
0113	087		010328	N393941 W744426	32,31,432	P.E. Wolfe	DelmarvaDrilling	05/23/1967	75	218	146-210	6	-	-		Tkw/Tch	L	
0113	095	31-12437		N393828 W744932	31.34.676	Board of Water Commissioners	Layne-N.Y.	01/18/1978	115	298	185-215	27	66	-	8	Tkw/Tch	L	
0113	096	31-5022	010292	N393842 W744641	31.35.483	Board of Water Commissioners	Layne-N,Y,	07/14/1967	90	245	201-241	26	36	1000	8	Tkw/Tch	L	
0113	097	31-4701	-	N393700 W744926	31.34.946	Atlantic City Expressway	A.C. Schultes	05/04/1964	85	256	220-230	9	81	61	12	Tkw/Tch	L	
0113	326	51-139	-	N393759 W744824	31.34.698	Hammonton	Kisner and Bennett	1902	110	316	250-310	30	-	-	-	Tkw/Tch	L	From Woolman, 1903, p.74.
0113	400	51-140	-	N393759 W744824	31,34.698	Hammonton Water Dept.	-	1920	110	304	-	-	-		-	-	L,G	Log by Peter Sugarman, N.J. Geol, Survey.
DOOWNL	CITY																	
0114	174	36-284	-	N392047 W743500	36.12.958	Prudential Insurance	Layne-N.Y.	06/30/1983	10	289	238-258	2	71	904	8	Tch	L	
ONGPO	RT BO	ROUGI	1															
0115	209	56-38	010367	N391859 W743124	36.23.246	Longport	Layne-N.Y.	08/22/1947	5	818	750-800	74	102	726	-	Tkw	L	C.A.
0115	210	36-402	010369	N391905 W743129	36,23,246	Longport	C.J. McKee Drilling	11/29/1968	5	840	760-810	80	156	1007	8	Tkw	L,G	C.A.
0115	307	56-79	-	N391847 W743126	36.23.249	M.S. McCuilough	Uriah White	1895	10	803	753-803	+14	-	180	-	Tkw	L	From Woolman, 1896, p.83.
0115	376	56-80	010366	N391821 W743208	36.23,196	Longport Water Dept.	-	06/26/1961	6	803	-	-	-	-	-	-	G	
MARGAT	E CITY																	
0116	018	36-05032	010702	N392032 W743008	36.13,898	U.S. Geol. Survey	A.C. Schultes	01/30/1985	5	840	740-750	80	114	63	6	Ticw	L,G	C.A.; observation well.
0116	170	36-197	010375	N392003 W743013	36.13.899	Margate City	Layne-N.Y.	06/28/1955	8	810	745-795	71	109	700	8	Tkw	L	C.A.; from Clark and others, 1968, p.34, 48.
Q116	171	36-278	010376	N392008 W743017	36.13.898	Margate City	Layne-N.Y.	06/24/1958	5	800	741-791	73	120	700	8	Tkw	L	C.A.
0116	207	36-326	010372	N391932 W743100	36.23.229	Margate City	Layne-N.Y.	06/13/1963	5	804	750-800	68	131	800	8	Tkw	L	CA
0116	208	36-318	010370	N391928 W743056	36.23.225	Margate City	Layne-N.Y.	06/29/1962	5	804	748-798	74	119	1000	8	Tkw	L	C.A.
0116	437	36-10548	010834	N392017 W743002	36.13.899	U.S. Geol. Survey	Grassroots Production	05/20/1988	5	1,055	970-990	54	58	70	6	sub-Tkw	L,G	Observation well.
AULLICA	TOWN	ISHIP																
0117	007	32-10935	010705	N393507 W744040	32.41.355	Mullica Twp. Landfill	A.C. Schultes	02/02/1985	95	540	-	-	-	-	-	-	L,G	
0117	800	52-19	010384	N393553 W744118	32.31.987	Atlantic Loading Co.	-	09/1918	69	950	-	-	-	-	-	-	L	

Table 3 (cont.)

Geographic code		Permit number	U.S.G.S, GWSI number	Latitude/ longitude	Atlas sheet coordinates		Driller	Completion date	Elevation (ft)	Depth drilled (ft)	Depth to screened interval (ft)	Static water level (ft)	Pumping level (ft)	Pumping rate (gpm)		Formation screened	Type o	f Remarks
MULLICA	TOW	NSHIP (	cont.)							<u>.</u> .								
0117	088	32-518	010304	N393852 W744257	32.31.556	L. Wolfe	Delmarva Drilling	06/25/1966	60	165	-	5	<u>.</u>	-	-	-	Ł	
0117	111	32-529	010378	N393359 W744055	32.41.623	R. Franceschin	i Delmarva Drilling	02/02/1967	80	184	-176	4	29	868	5	Tch	L	C.A.
0117	242	32-4810	-	N393900 W744047	32.31.658	Discovery House	A.C. Schultee	09/1978	20	229	193-203	3		10		Tkw/Tch	L	
NORTHFI	ELD C	ITY				,,,,,,,,,												
0118	310	56-76	-	N392233 W743220	36.13.492	Atlantic County Asylum	Uriah White	1899	30	715	663-704	17	23	100		Tkw	Ł	From Woolman, 1900, p.104.
PLEASAN	ITVILL	ECITY																
0119	043	56-77	-	N392433 W742953	36,13,371	California Ave.	R.W. Sundstrom Engineering	07/30/1934	10	194		-	••	-		-	Ļ	
0119	114	36-14	010565	N392438 W743047	36.13.283	Atlantic City Water Dept.	Layne-N.Y.	10/26/1950	8	680	610-660	47	133	1056	8	Tkw	L	
0119	122	36-2466	•••	N392447 W743113	36.13.257	Atlantic City M.U.A.	H.P. Drilling	07/16/1981	30	301	240-260	33	58	20	3	Tch	ι	
0119	211	36-18	010565	N392437 W743049	36.13.283	Atlantic City Water Dept.	Layne-N.Y.	10/26/1950	10	680	610-660	47	133	1056	8	Tkw	L	
0119	212	56-34A	010570	N392447 W743050	36.13.283	Atlantic City Water Dept.	Layne-N.Y,	08/27/1925	10	689	606-666	10	44	1005	8	Tkw	L	C.A.
0119	213	56-28	-	N392437 W743036	36.13.291	Atlantic City Water Dept.	Layne-N.Y.	12/31/1930	10	252	178-208	7	59	721	32	Tch	L	
0119	375	56-91	010566	N392434 W743032	36,13.291	Atlantic City Water Dept.	-	01/01/1925	12	565	-	-	-	-	-	-	G	
PORT REI	PUBLIC	CITY																
No wells inclu			гу															
SOMERS																		
0121	019	36-295	010578	N391826 W743709	36,22,193	Jobs Point	C.W. Lauman	09/23/1959	10	1,002	671-686	39	-	210		Tkw	L,G	C.A.; observation well; from Clark and others, 1968, p.33, 51; log by H.R. Anderson, U.S. Geol, Survey
0121	401	36-323	010576	N391823 W743709	36.22.282	N.J. Highway Authority	A.C. Schultes	03/1963	5	197	165-181	6	-	100		Tch	L	C.A.
VENTNOR	CITY					_												
0122	224	36-371	010593	N392018 W742945	36.13.975	City of Ventnor	Layne-N.Y.	05/03/1965	9	835	740-800	80	152	818	8	Tkw	L	C.A.
0122	225	36-372	010598	N392030 W742852	36.13.985	City of Ventnor	Łayne-N.Y.	06/30/1965	8	835	740-790	95	155	1022	8	Tkw	L	C,A.
0122	312	56-78	-	N392007 W742900	36.13.988	Ventnor Land Co.	Uriah White	1998	10	813	763-813	-	-	-	-	Tkw	L	
WEYMOU'	TH TO	WNSHI	P															
0123	139	35-1519	-	N392518 W744706	35.15.128	Albert Bailey	Vance Skinner	05/03/1977	60	163	133-154	9	-	-	-	Tch	L	

### Table 4. Lithologic and geophysical well logs

Based on well records; reorganized and slightly condensed for readability. Interpretations by the author of this report are in parentheses. The stratigraphic nomenclature in this table is that of the original author of the log; it may be outdated.

## **Absecon City**

			_		
Well 042		Geographic code: 01.01	35	60-95	Sand, coarse; gravel
Owner or a	name: Sara	White Property	8	95-103	Clay and sand
Location: 1	N392513	W742926	48	103-151	Clay, blue, tough at 119-125 ft and 140-151 ft;
Driller: R.	W. Sundst:	rom Engineering			sandy at 125-140 ft
Quad.: Oc	canvillc	Comp. date: 07/1934	48	151-199	Sand, coarse, brown
Atlas Shee	t no. 36.13	.343 Elevation: 10 ft	12	199-211	Sand, muddy (silty)
Permit no.	56-66	Depth drilled: 205 ft			
Thickness	Depth	Lithology	Well 116		Geographic code: 0101
(ft)	(ft)		Owner or	name: Atla	antic City Water Department
19	0-19	Sand, medium to fine, light-yellow	Location:		W743028
1	19-20	Sand, coarse, white; clay streaks	Driller: L	ayne-N.Y.	
1	20-21	Sand, yellow; clay	Quad.: Pl	easantville	Comp. date: 12/31/1930
9	21-30	Sand, white; yellow clay streaks at 25-30 ft	Atlas She	et no. 36.13	2.264 Elevation: 8 ft
8	30-38	Clay, yellow	Permit no	. 56-37A	Depth drilled: 240 ft
5	38-43	Sand, fine to medium, white	Thickness	Depth	Lithology
67	43-110	Sand, medium to coarse, white at 43-83 ft,	(ft)	(ft)	
		dark-yellow at 83-110 ft	14	0-14	Sand, yellow, fill
1	110-111	Clay, yellow, streaks	14	14-28	Clay, dark-blue
4	111-115	Sand, fine, clayey	30	28-58	Sand, fine to coarse, yellow
3	115-118	Clay, white, tough	15	58-73	Sand, white, red and yellow
9	118-127	Sand, medium, brown	2	73-75	Hardpan
39	127-166	Clay, gray, sandy	10	75-85	Sand, white, red and yellow
4	166-170	Sand, fine to medium, dark	17	85-102	Clay, brown, tough
10	170-180	No sample	21	102-123	Clay, sandy, soft
25	180-205	Sand, fine to medium, brown	15	123-138	Clay, gray, tough
		<del></del>	30	138-168	Clay, sandy, tough
Well 113		Geographic code: 0101	55	168-223	Sand, coarse, brown
Owner or	name: Atla	antic City Water Department	17	223-240	Clay, brown, soft
Location:		W743136			••
Driller: La		***************************************	Well 117		Geographic code: 0101
Quad.: Ple	-	Comp. date: 07/28/1975	1	name: Atl	antic City Water Department
-	et no. 36.13	-	Location		W743108
			I	ayne-N.Y.	***************************************
Permit no		Depth drilled: 692 ft		easantville	Comp. date: 12/31/1930
Thickness	-	Lithology	_	et no. 36.13	_ =
(ft)	(ft)	Class and the same to be a second	Permit no		Depth drilled: 201 ft
8	0-8	Clay, yellow and white, sandy; large gravel	1		Lithology
65	8-73	Sand, fine to coarse; gravel; soft clay streaks		s Depth	Littlology
57	73-130	Clay, tough; sandy clay streaks	(ft)	(ft)	Cond and amount
55	130-185	Sand, fine to coarse, gray; gravel; lignite;	3	0-3	Sand and gravel
		clay streaks	2	3-5	Fill
53	185-238	Clay, gray, hard, dry, sandy	13	5-18	Sand, gravel, and clay
42	238-280	Clay, gray, tough	21	18-39	Clay, yellow; gravel
13	280-293	Sand, fine to medium, gray; gravel	42	39-81	Clay, soft; fine sand
57	293-350	Clay, gray, tough	1	81-82	Hardpan
47	350-397	Clay, gray, sandy; sand streaks	75	82-157	Clay, blue, tough, soft at 82-101 ft; fine sand
83	397-480	Clay, brown, tough			streaks at 101-122 ft
1	480-481	Shells; hard streaks	39	157-196	Sand, coarse, brown
119	481-600	Clay, sandy; shells; sand streaks	5	196-201	Sand, black, muddy (silty)
48	600-648	Sand, fine to medium; fine gravel; clay streaks			
10	648-658	Clay, sandy	Well 118		Geographic code: 0101
34	658-692	Clay, brown, tough	Ownero	r name: Atl	antic City Water Department
51		0. <b>_</b> ), 0.20, 0.00 <b>g</b>	1	: N392511	W743052
Well 115		Geographic code: 0101	Driller: I	ayne-N.Y.	
	name: Atl	antic City Water Department		lcasantville	
	N392510	W743031		cet no. 36.1	•
	ayne-N.Y.		Permit n		Depth drilled: 220 ft
				s Depth	Lithology
_	casantville	•		•	Littlology
-	et no. 36.1		(ft)	(ft)	Sand vallow
Permit no		Depth drilled: 211 ft	5	0-5 5-20	Sand, yellow
	s Depth	Lithology	15	5-20 20-28	Clay, blue Mud (site)
(ft)	(ft)	0 1 11 11 11 11 11	8	20-28	Mud (silt)
20	0-20	Sand, yellow; gravel	11	28-39	Clay, blue; gravel
3	20-23	Clay	19	39-58	Clay, blue, sandy, soft
17	23-40	Sand and clay	19	58-77	Sand, yellow, gravel streaks
20	40-60	Clay, sandy, soft	15	77-92	Sand, coarse; gravei

## **Absecon City**

quartz

Well 118	(cont.)		5	185-190	Sand, fine, very-pale-pinkish-gray, clean,
Thickness		Lithology		100 170	quartz; scattered very coarse grains
(ft)	(ft)	~	5	195-200	Sand, fine, light-gray, clean, quartz; scattered
2	92-94	Hardpan			pea-size grains
4	94-98	Gravel, coarse, red	7	200-207	Sand, fine to very coarse, very-pale-red,
58	98-156	Clay, blue, soft at 98-127 ft, tough at 127-			clean quartz; few pea-size grains
		138 ft, sandy and soft at 138-156 ft	15	207-222	Sand, very coarse, gray, clean, quartz;
43	156-199	Sand, coarse, brown; gravel			scattered pea-size grains
21	199-220	Sand, muddy (silty); clay	Kirkwood	Formatio:	n:
			5	232-237	Sand, fine, gray, uniform, clean, quartz;
Well 121		Geographic code: 0101			about 2.0-2.5 percent heavy minerals
		antic County Water Company	12	237-249	Sand, fine, gray, light-brown mottling, fairly
Location:		W743003			clean quartz; 1.5 percent heavy minerals
	C. Schulte		12	249-261	Sand, very fine, gray, fairly clean, uniform,
-	easantville	Comp. date: 06/28/1960			quartz, trace mica
	et no. 36.03				
Permit no		Depth drilled: 261 ft	Well 214		Geographic code: 0101
From Cla	rk and othe	ers, 1968, p. 31, 37; log by F.J. Markewicz, N.J.			antic City Water Department
Geologica		2 1/ w	Location:	_	W743122
		ansey Sand (undifferentiated)			Il Screen Co.
Thickness	-	Lithology	Quad.: Ple		Comp. date: 08/15/1928
(ft)	(ft)	A		t no. 36.13	
7	3-10	Overburden	Permit no.		Depth drilled: 205 ft
9 8	20-29	Sand, very coarse, light-gray, quartz, clean	Thickness		Lithology
25	29-37 37-62	Sand, very coarse, yellow, oxidized, clean	(ft)	(ft)	
28	62-90	Clay, light-gray, silty, tough	5	0-5	Sand and loam, surficial
20	02-90	Sand, fine to medium, grayish-yellow, clean,	13	5-18	Sand, fine to medium, yellowish-gray
5	90-95	fairly uniform, quartz Sand, fine to very coarse, grayish-yellow,	12	18-30	Sand, fine, grayish-white; very little clay; few
3	70-73	somewhat oxidized, clean, quartz; scat-	10	20.40	coarse grains
		tered pea-size grains	10	30-40	Sand, fine to medium, yellow, fairly clean;
3	95-98	Sand, very coarse, light-brown, clean,		40.41	few small quartz pebbles at 30-35 ft
-	75-70	quartz, oxidized	1	40-41	Sandstone, brown, soft, iron-cemented
3	98-101	Ironstone (bog iron), weathered whitish	4	41-45	Sand, very fine, brownish-cream, with
_	70 101	chert fragments	25 .	45 70	enough clay to make it lumpy when dry
21	101-122	Silt, gray, slightly clayey, tough; very fine sand	ے ا	45-70	Sand, fine, yellow-brown, sticks in ball
10	122-132	Sand, fine to very coarse, gray, clean, poorly			shape, dries slowly, darker-brown and
	100 100	sorted, quartz, 1-3 percent heavy	14	70-84	slightly coarser at 50-70 ft
		minerals; trace mica	2	84-86	Clay, blue to gray, very tough
27	132-162	Sand, fine, light-gray, fairly clean, uniform	-	U-10U	Clay and sand, streaked; sand is fine and gray; few coarse grains
1	162-163	Sand, fine, dark, quartz, pyrite-cemented	44	86-130	Sand, fine, blackish-brown or peat-colored
12	163-175	Sand, fine, gray, clean, fairly uniform	65	130-195	Sand, medium, dark-gray, water-bearing,
5	175-180	Sand, fine, light-brown, uniform, clean		-00 175	probably coarser at 142-195 ft
5	180-185	Sand, fine to very coarse, light-purple, clean,	10	195-205	Clay, soft; sand
		quartz			

Well 216		Atlan	tic City		
Owner or name: Haddon Hall   Clearly   Comp. date: 1896.   Clearly show the clear   Cl	Well 216	Geographic code: 0102	Thickness	Denth	Lithology
Dearlier: Urshi White   Guad: Atlantic City   Comp. date: 186		0 0 0 g. up 20 20. 0 20 2	_ I	1	Littlology
Driller   Urah White   Comp. date: 1896.   Allas Sheet no. 36.14.519   Elevation: 10 ft   15   55.70   Clay, sandy		W742522	1 ' '	. ,	Floor of nier to mean tide level
Quadic Atlantic City   Comp. date: 1896.   Allas Sheet no. 36/4 879   Elevation: 10 ft from Woolman, 1897, p. 170.	Driller: Uriah White		1		
Allas Sheet no. 36.14.819	Quad.: Atlantic City	Comp. date: 1896,			_
From Woolman, 1897, p. 170.	Atlas Sheet no. 36.14.819		1.5	55-70	Clay, sandy
Thickness Depth ((ii) (i) (i) Orecord  410		Depth drilled: 840 ft	6	70-76	Sand
(ft)			14	76-90	Clay, dark, stiff
410   0-410   No record   10-80   126-172   Sand and gravel, light-yellow, bright-orange and gravel made gravel, light-yellow, bright-orange and gravel made gravel in gravel		ology	36	90-126	Gravel, heavy; some thin seams yellow clay
18			Cohanse	y Sand:	
Bearing horizons at 340, 700, and 750 ft; molluskan fossils at 700 ft semilar form form to molluskan fossils at 700 ft semilar form form form form form form form for			126	126-272	Sand and gravel, light-yellow, bright-orange
molluskan fossils at 700 ft  20 790-810 Sand, brownish 30 810-840 Sand, gray  Well 217 Ceographic code: 0102 Owner or name: Haddon Hall Location: N392132 Driller: Layne.N.Y. Quad: Atlantic City Cuph drilled: 841 ft Clift (1) (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	• • • • • • • • • • • • • • • • • • • •				
Well 217   Geographic code: 0102   Sand, Gray   Sand, Clay, mainly bluish and brownish; a bed of coarse sand at about 500 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand at about 500 ft coarse. Sand at about 500 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand at about 500 ft coarse. Sand at about 500 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-730 ft coarse. Sand, clayey at 690-720 tand 730-740 ft; gravel at 72-750 ft 67-730			118	272-390	- · · · · · · · · · · · · · · · · · · ·
Well 217	11.0 07.0 07.7		771.1	15 4	
Well 217   Geographic code: 0102   Some or name: Haddon Hall	30 810-840 Sand, gray	у			
Sociation   Continue   Comp. date   1921   Sociation   Comp. date   1921   Comp.	Well 217	Community and a 0102	300	390-690	
Decision: N392132		Geographic code: 0102	50	600 740	
Driller: Layne-N-Y		W742522	] 30	070-740	
Quad. Atlantic City		** 142322	20	740.760	0
Atlas Sheet no. 36.14.819   Elevation: 10 ft   Depth drilled: 841 ft   Depth drilled: 841 ft   Depth drilled: 841 ft   Depth drilled: 841 ft   Sheet no. 36.14.819   Lithology   40   820.860   Sand, light-brown, clean, some light-colored layers, abundantly water-bearing   40   820.860   Sand, light-brown, clean, some light-colored layers, abundantly water-bearing   Sand, light-brown, clean, bundantly water-bearing   Sand, light-brown, clean, some light-colored layers, abundantly water-bearing   Sand, light-brown, clean, some layers   Sand, light-brown, clean, some layers, abundantly water-bearing   Sand, water-bearing   Sand, water-bearing   Sand, water-bearing   Sand, water-bearing   Sand, water	,	Comp. date: 02/16/1925	1		
Permit no. 56-68	•	-	1		• • • • • • • • • • • • • • • • • • • •
Thickness Depth   Lithology   40   820-860   Sand, light-brown, clean, abundantly water-bearing   Clay, brown, tough, hard   Pre-Kirkwood:   10   931-941   Clay and sand; shells; sand is largely glauconite "greensand"   Sand, gray   2   950-952   Sand and gravel   2   950-952   Sand and clay   Sand, gray   3   16   974-990   Sand, g				700 020	
(i)			40	820-860	
80.3   0.0-80.3   Sand, gray   Sand, with abundant greensand"   Sand, with abundant greensand, slightly water-bearing   Sand, and gray   Sand, with abundant greensand, slightly water-bearing   Sand, with abundant greensand, slightly water-bearing   Sand, and gray   Sand, water-bearing   Sand, and and lay   Sand, and lay   Sand, an		&			
2.0		d, gray	71	860-931	
3.0 127.3-130.3 Clay 130.5 130.3-260.8 Sand, gray 22 260.8-292.8 Sand and gravel 121.7 30.5.6 427.3 Gravel 22 950-952 131.0 427.3-538.3 Clay, blue 22 952.974 131.0 427.3-538.3 Clay, blue 23 950-952 143.0 599.2-644.2 Clay and shells 124.1 644.2-768.3 Clay, blue 131.3-841.3 Sand, brown 140.0 \$592.599.2 Clay, sandy 150.0 \$831.3-841.3 Sand, brown 150.0 \$801.3-841.3 Sand, br			Pre-Kirk	wood:	<b>7,</b>
3.0   127.3-130.3   Clay			10	931-941	Clay and sand: shells: sand is largely
32.0   260.8-292.8   Sand, and grave    2   941-950   Sand, with abundant greensand, slightly water-bearing   Sand and grave    2   950-952   Sand, with abundant greensand, slightly water-bearing   Sand and clay   Sand and marl, clove, reensand marl, clive   Sand and marl, clive   Sand and marl, clive   Sand and marl, clive; sand is moderately fine   Sand and marl, slive; sand is moderately fine   Sand and marl, decidedly-dark-green   Sand and marl, decidedly-da					
12.8   292.8   205.6   Clay, blue   121.7   305.6   427.3   Gravel   2   950.952   Sand and clay   111.0   427.3-538.3   Clay, blue   22   952.974   Clay, brown, hard, tough; comminuted shell   20.9   538.3-559.2   Hardpan   16   974.990   Greensand mart, clive   12.9   From   10.0   20.9   20.0   20			9	941-950	
121.7   305.6-427.3   Grave    2   950-952   Sand and clay					
20.9 538.3-559.2 Hardpan 40.0 559.2-599.2 Clay, sandy 45.0 559.2-599.2 Clay, sandy 45.0 559.2-644.2 Clay and shells 12 990-1012 Clay, brown 45.0 559.2-644.2 Clay and shells 63 1012-1075 Sand and marl, olive; sand is moderately fine, 1012-1054 ft, much coarser, 1054-1075 ft 10.0 831.3-841.3 Clay, blue 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, decidedly-dark-green 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, decidedly-dark-green 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, decidedly-dark-green 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, decidedly-dark-green 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, decidedly-dark-green 25 120-120 Sand and marl, olive; sand is moderately fine, 1012-1054 ft, much coarser, 1054-1075 ft 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, olive; sand is moderately fine, 1012-1054 ft, much coarser, 1054-1075 ft 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, olive; sand is moderately fine, 1012-1054 ft, much coarser, 1054-1075 ft 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, olive; sand is moderately fine, 1012-1054 ft, much coarser, 1054-1075 ft 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, olive; sand is moderately fine, 1012-1054 ft, much coarser, 1054-1075 ft 21 1075-1096 Marl, olive; very clayey 24 1096-1120 Sand and marl, olive; very clayey 25 and and marl, olive; very clayey 26 1134-1160 Clay, ingth or ash; much marl and sand 26 129, marly, dark 27 120-1215 Clay, marly, dark 28 1215-1240 Clay, ingth or ash; much marl and sand 28 1200-1200 Sand, dull yellow, "A little water rose to the surface from about this depth, probably from this stratum" 29 1200-1215 Clay 200 1240-1400 Clay, light and dark-brown, very hard, tough 21 1075-1096 Marl, olive; very clayey 22 1			2	950-952	Sand and clay
20.9   \$383.3559.2   Hardpan   16   \$974.990   Greensand marl, olive   12   990.1012   Clay, brown   12   990.1012   Clay, brown   12   990.1012   Clay, brown   12   990.1012   Clay, brown   12   1012-1054   ft, much coarser, 1054-1075   ft   1012-1054   f			22	952-974	Clay, brown, hard, tough; comminuted shell
45.0 599.2-644.2 Clay and shells 124.1 644.2-768.3 Clay, blue 63.0 768.3-831.3 Sand, brown 10.0 831.3-841.3 Clay, blue  Well 218 Geographic code: 0102 Owner or name: Chelsea House Location: N392108 W742648 Driller: Thomas B. Harper Quad: Atlantic City Comp. date: 1900 Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft From Woolman, 1901, p. 116. Thickness Depth Lithology (ft) (ft) 411 0-411 No record 10 670-680 No record 11 680-681 Rock stratum 12 62 780-840 Sand, water-bearing  Well 219 Geographic code: 0102  Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Downer or name: Youngs Ocean Pier Location		dpan	16		
124.1 644.2-768.3 Clay, blue 31.3 643.2 Sand, brown 10.0 831.3-841.3 Clay, blue  Well 218 Geographic code: 0102  Owner or name: Chelsea House Location: N392108 W742648  Driller: Thomas B. Harper Quad: Atlantic City Comp. date: 1900  Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft  From Woolman, 1901, p. 116.  Thickness Depth Lithology (ft) (ft) 411 0-411 No record 10 670-680 No record 11 680-681 Rock stratum 10 Clay, diatomaceous 10 670-680 No record 11 680-681 Rock stratum 12 Geographic code: 0102  Owner or name: Youngs Ocean Pier Location: N392108 W742600  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Driller: Uriah White Location: N392108 W742600  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Driller: Uriah White Location: N392108 W742600  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Driller: Uriah White Location: N392108 Clay, diatoric code: 1901  Location: N392108 Clay, diatoric code: 1902  Location: N392108 Clay, diatoric code					
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10.0 831.3-841.3 Clay, blue  Well 218 Geographic code: 0102  Owner or name: Chelsea House Location: N392108 W742648 Driller: Thomas B. Harper Quad: Atlantic City Comp. date: 1900 Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft From Woolman, 1901, p. 116. Thickness Depth Lithology (ft) (ft) 411 0-411 No record 259 411-670 Clay, diatomaceous 10 670-680 No record 10 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102 Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Owned: Atlantic City Comp. date: 1901  Driller: Uriah White Owned: Atlantic City Comp. date: 1901  10 171-1909 Marl; clay; half glauconite at 1913-1923 ft Clay, marly, dark 1120-1130 Clay, night or ash; much marl and sand 1160-1200 Clay, light or ash; much marl and sand 1160-1200 Clay, ight or ash; much marl and sand 1160-1200 Clay, prown, micaceous 10 1200-1215 Sand, dull yellow, "A little water rose to the surface from about this depth, probably from this stratum"  10 1205-1215 Clay  age uncertain: 25 1215-1240 Greensand marl or marly clay 26 1134-1160 Clay, light or ash; much marl and sand 1160-1200 Clay, brown, micaceous 10 1200-1215 Clay  10 1205-1215 Clay  age uncertain: 25 1215-1240 Greensand marl or marly clay 26 1134-1160 Clay, light or ash; much marl and sand 10 1205-1215 Clay 10 1205-1215 Clay 11 120-1130 Greensand marl or marly clay 27 1240-1440 Clay, light and dark-brown, very hard, tough 11 4 10 -411 No record 10 140-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay; half glauconite at 1913-1923 ft 10 1900-1940 Marl; clay; half glauconite at 1913-1923 ft 10 1900-1940 Marl; clay; half glauconite at 1913-1923 ft 10 1940-2010 Clay, indurated, ash-colored, hard almost					
Well 218 Geographic code: 0102  Owner or name: Chelsea House Location: N392108 W742648  Driller: Thomas B. Harper Quad: Atlantic City Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft  Thickness Depth Lithology (ft) (ft) 10 670-680 No record 1 680-681 Rock stratum 99 681-780 No record 1 680-681 Rock stratum 99 681-780 No record 1 680-681 Rock stratum 90 681-780 No record 1 1680-681 Rock stratum 90 681-780 N		•			
Owner or name: Chelsea House Location: N392108 W742648  Driller: Thomas B. Harper Quad:: Atlantic City Comp. date: 1900 Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft From Woolman, 1901, p. 116.  Thickness Depth (ft) (ft) 411 0-411 No record 259 411-670 Clay, diatomaceous 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102 Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Owner Atlantic City Comp. date: 1901  26 1134-1160 Clay, light or ash; much marl and sand Clay, brown, micaceous Sand, dull yellow, "A little water rose to the surface from about this depth, probably from this stratum"  10 1205-1215 Clay  10 1205-1215 Clay  10 1205-1215 Clay  10 1205-1215 Clay, ight and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1205-1215 Clay  Greensand marl or marly clay Clay, light and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft Clay, little greensand; thin pebble layer at 1020 ft Clay, little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost		•			
Location: N392108 W742648  Driller: Thomas B. Harper Quad.: Atlantic City Comp. date: 1900 Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft From Woolman, 1901, p. 116.  Thickness Depth Lithology (ft) (ft) 411 0-411 No record 259 411-670 Clay, diatomaceous 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102 Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Ound: Atlantic City Comp. date: 1901  40 1160-1200 Clay, brown, micaceous Sand, dull yellow, "A little water rose to the surface from about this depth, probably from this stratum"  10 1205-1215 Clay 10 1205-1215 Clay 11 1205-1215 Clay 12 1215-1240 Greensand marl or marly clay 200 1240-1440 Clay, light and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft 1020 ft Clay, little greensand; thin pebble layer at 1020 ft Clay, little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost	Well 218	Geographic code: 0102			
Driller: Thomas B. Harper Quad: Atlantic City	Owner or name: Chelsea House		Į.		
Quad.: Atlantic City Comp. date: 1900 Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft  From Woolman, 1901, p. 116.  Thickness Depth Lithology  (ft) (ft) 411 0-411 No record 259 411-670 Clay, diatomaceous 10 670-680 No record 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102  Owner or name: Youngs Ocean Pier Location: N392108 W742600  Driller: Uriah White Ouad: Atlantic City Comp. date: 1901  Surface from about this depth, probably from this stratum  10 1205-1215 Clay  Greensand marl or marly clay 25 1215-1240 Greensand marl or marly clay 260 1240-1440 Clay, light and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay; half glauconite at 1913-1923 ft Clay, little greensand; thin pebble layer at 1020 ft  To 1940-2010 Clay, little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost		W742648	1		
Atlas Sheet no. 36.14.756 Elevation: 10 ft Permit no. 56-69 Depth drilled: 840 ft From Woolman, 1901, p. 116.  Thickness Depth Lithology (ft) (ft) 411 0-411 No record 259 411-670 Clay, diatomaceous 10 670-680 No record 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102 Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Ouad: Atlantic City  Atlastic City  Greensand marl or marly clay 200 1240-1440 Clay, light and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft 70 1940-2010 Clay, little greensand; thin pebble layer at 1020 ft Clay  Tom this stratum"  10 1205-1215 Clay  Greensand marl or marly clay 200 1240-1440 Clay, light and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft Clay, little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost				1200-1203	surface from about this death, probably
Permit no. 56-69 Depth drilled: 840 ft From Woolman, 1901, p. 116.  Thickness Depth Lithology (ft) (ft) 411 0-411 No record 259 411-670 Clay, diatomaceous 10 670-680 No record 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219  Owner or name: Youngs Ocean Pier Location: N392108 Driller: Uriah White Ouad: Atlantic City  Depth drilled: 840 ft  10 1205-1215 Clay  age uncertain: 25 1215-1240 Greensand marl or marly clay Clay, light and dark-brown, very hard, tough Vincentown Formation: 460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft Clay; little greensand; thin pebble layer at 1020 ft  Driller: Uriah White Ouad: Atlantic City  Comp. date: 1901		-			from this stratum"
From Woolman, 1901, p. 116.  Thickness Depth (ft) (ft)  411 0-411 No record  259 411-670 Clay, diatomaceous  10 670-680 No record  1 680-681 Rock stratum  99 681-780 No record  60 780-840 Sand, water-bearing  Well 219  Owner or name: Youngs Ocean Pier  Location: N392108  Driller: Uriah White  Owner of Atlantic City  Owner or date: 1901  Depth diffied: 840 ft  25 1215-1240 Greensand marl or marly clay  200 1240-1440 Clay, light and dark-brown, very hard, tough  Vincentown Formation:  460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown:  40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft Clay, little greensand; thin pebble layer at 1020 ft  Clay, indurated, ash-colored, hard almost			10	1205-1215	
Thickness Depth (ft) (ft)  (ft) (ft)  411 0-411 No record  259 411-670 Clay, diatomaceous  10 670-680 No record  1 680-681 Rock stratum  99 681-780 No record  60 780-840 Sand, water-bearing  Well 219  Owner or name: Youngs Ocean Pier  Location: N392108  Driller: Uriah White  Owner of Atlantic City  Owner of Atlantic City  Owner of Atlantic City  Comp date: 1901  25 1215-1240 Greensand marl or marly clay  200 1240-1440 Clay, light and dark-brown, very hard, tough  Vincentown Formation:  460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown:  40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft Clay, little greensand; thin pebble layer at 1020 ft  Clay, indurated, ash-colored, hard almost		Depth aniled: 840 ft	age unce		•
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259 411-670 Clay, diatomaceous  10 670-680 No record 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102 Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Ouad: Atlantic City  Comp. date: 1901  460 1440-1900 Rock, calcareous, yellowish, moderately soft to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay, half glauconite at 1913-1923 ft Clay, little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost	, ,	d	Vincento		
10 670-680 No record 1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219  Owner or name: Youngs Ocean Pier Location: N392108  Driller: Uriah White Owner of Atlantic City  Comp. date: 1901  to hard; sand consists 2/3 of greensand and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay; half glauconite at 1913-1923 ft Clay; little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost			ì		
1 680-681 Rock stratum 99 681-780 No record 60 780-840 Sand, water-bearing  Well 219 Geographic code: 0102 Owner or name: Youngs Ocean Pier Location: N392108 W742600 Driller: Uriah White Ound: Atlantic City  Comp. date: 1901  and white quartz grains, and 1/3 of "carbonate of lime," which is the cementing material  Pre-Vincentown: 40 1900-1940 Marl; clay; half glauconite at 1913-1923 ft 70 1940-2010 Clay; little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost			ł		
Well 219  Geographic code: 0102  Owner or name: Youngs Ocean Pier Location: N392108  Driller: Uriah White  Ouad: Atlantic City  Comp. date: 1901  Well 219  Geographic code: 0102  40 1900-1940  Marl; clay; half glauconite at 1913-1923 ft 70 1940-2010  Clay; little greensand; thin pebble layer at 1020 ft  Clay, indurated, ash-colored, hard almost					
Well 219  Geographic code: 0102  Owner or name: Youngs Ocean Pier  Location: N392108  Driller: Uriah White  Ouad: Atlantic City  Comp. date: 1901  Pre-Vincentown:  40 1900-1940  Marl; clay; half glauconite at 1913-1923 ft  70 1940-2010  Clay; little greensand; thin pebble layer at 1020 ft  Clay, indurated, ash-colored, hard almost					bonate of lime," which is the cementing
Owner or name: Youngs Ocean Pier Location: N392108  Driller: Uriah White Ouad: Atlantic City  Comp. date: 1901  Geographic code: 0102  40 1900-1940 Marl; clay; half glauconite at 1913-1923 ft Clay; little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost	60 /80-840 Sand, wat	ter-bearing			material
Owner or name: Youngs Ocean Pier Location: N392108  W742600  Driller: Uriah White  Ouad: Atlantic City.  Comp. date: 1901  40 1900-1940 Mari; clay; nair glauconite at 1913-1923 it 1940-2010 Clay; little greensand; thin pebble layer at 1020 ft Clay, indurated, ash-colored, hard almost	Wall 219	Geographic code: 0102	Pre-Vine	centown:	
Location: N392108 W742600 Total Part of the Comp. date: 1901		<b>5</b> .	<b>I</b>	1900-1940	Marl; clay; half glauconite at 1913-1923 ft
Driller: Uriah White  Ouad: Atlantic City  Comp. date: 1901  60 2010-2070 Clay, indurated, ash-colored, hard almost	<del>-</del>		70	1940-2010	
Ouad: Atlantic City Comp. date: 1901 00 2010-2070 Clay, indurated, asn-colored, nard almost					
	Quad.: Atlantic City	Comp. date: 1901	60	2010-2070	• • • • • • • • • • • • • • • • • • • •
Atlas Sheet no. 36 14 766 Flexation: 20 ft	•	•		2070 2462	as rock
Permit no 56-70 Depth drilled: 2 306 ft 80 20/0-2130 Mari; clay; similar to interval at 1900-1940 It;			80	20/0-2150	* ***
From Woolman, 1902, p. 110			156	2150 2204	
156 2150-2306 Clay, sandy, black or dark, micaceous	-		130	£130-2300	Ciay, sandy, black of dalk, illicateous

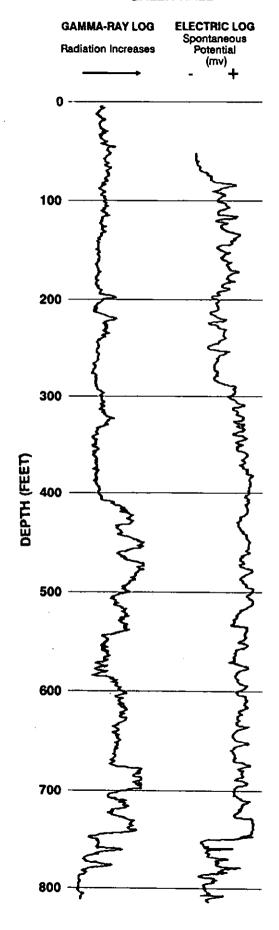
103

375-478

Sand, black, hard

#### Well 220 Geographic code: 0102 Owner or name: Galen Hall Location: N392152 W742459 Driller: Thomas B. Harper Quad.: Atlantic City Comp. date: 01/07/1905 Atlas Sheet no. 36.14.822 Elevation: 7 ft Permit no. 56-71 Depth drilled: 840 ft U.S. Geological Survey observation well. Thickness Depth Lithology (ft) (ft) 70 0-70 Sand, gray; gravel at 50-70 ft Sand, white at 70-80 ft, very coarse and gray 60 70-130 at 80-110 ft, light-gray at 110-121 ft, yellowish at 121-130 ft 26 130-156 Sand, coarse, yellow and white 156-180 24 Sand, yellowish; wood (lignite) Sand, fine, gray 180-187 15 187-212 Wood (lignite) 212-219 Sand, white 282 219-501 Sand, gray, coarse at 219-255 ft, fine at 255-263 ft, and 320-399 ft, coarse and fine at 263-287 ft; micaceous at 287-310 ft Clay, and shell fragments 189 501-690 150 690-840 Sand, gray, fine at 810-840 ft Well 221 Geographic code: 0102 Owner or name: St. Charles Hotel Location: N392138 W742501 Driller: Thomas B. Harper Quad.: Atlantic City Comp. date: 11/30/1910 Atlas Sheet no. 36.14.825 Elevation: 10 ft Permit no. 56-72 Depth drilled: 835 ft Thickness Depth Lithology (ft) (ft) 200 Ò-220 No record 55 220-275 Sand, white, quartz 115 275-390 Sand, fine, gray, quartz; slightly micaceous; small broken clay fragments, hard and brittle, possibly clay lenses in the sand 12 390-402 Sand, fine, dark-brown 23 402-425 No record 275 425-700 Clay; sandy clay 30 700-730 Sand, fine, white, quartz; shell fragments 45 730-775 No record Gravel, coarse, clayey, shell fragments; very 775 hard clay pellets 5 775-780 No record 55 780-835 Sand, coarse, brown to gray, water-bearing Well 222 Geographic code: 0102 Owner or name: Atlantic City Gas Works Location: N392146 W742620 Driller: Layne-N.Y. Quad.: Atlantic City Comp. date: 10/24/1925 Atlas Sheet no. 36.14.734 Elevation: 10 ft Permit no. 56-73 Depth drilled: 840 ft Located at Michigan and Mediterranean Avenues Thickness Depth Lithology (ft) (ft) 10 0-10 Cinders and sand 5 10-15 Sod grass and roots 15 15-30 Beach sand, fine 30-35 Clay, sandy 175 35-210 Sand, coarse, white at 35-200 ft; boulders (gravel) at 200-210 ft 165 210-375 Clay, sandy

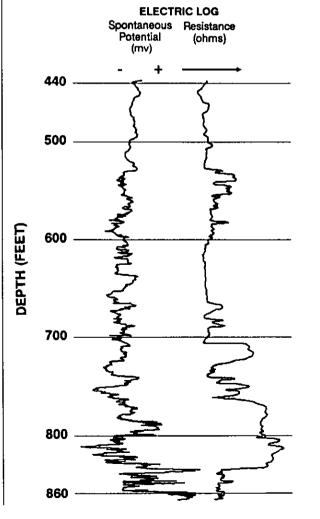
#### WELL 220 GALEN HALL



101	478-579	Clay, soft	
21	579-600	Clay, sandy, h	ard
57	600-657	Clay, blue, to	ugh
3	657-660	Hardpan	
17	660-677	Clay, blue	
3	677-680	Haropan	_
16	680-696	Clay, black, so	
47	696-743	Clay, blue, sti	•
17 58	743-760 760-818	Sand, brown;	
10	818-828	Sand, brown to Sand, gray	to gray
12	828-840		8-835 ft, black, hard, 835-840 ft
		•, ,	, , ,
Well 223			Geographic code: 0102
		rican Ice Com	
Location: I		'	W742614
Driller: La			
Quad.: Atl	antic City t no. 36.14.		Comp. date: 03/01/1927
Permit no.		_	Elevation: 10 ft
		and Arctic Ave	Depth drilled: 845 ft
Thickness	Depth	Litholog	
(ft)	(ft)	Latitolog	"
110	0-110	Sand, with cir	iders from 0-10 ft
24	110-134	Boulders (gra	
331	134-465		avel at 213-465 ft
88	465-553		165-533 ft, sandy at 533-553 ft
54	553-607	Clay and boul	
153	607-760	Clay, blue	,
72	760-832	Sand; shells a	t 760-772 ft; brown at 772-802;
••	200 210	gravel at 80	2-832 ft
10	832-842	Clay	
		•	
Well 226			Geographic code: 0102
	name: Atla	(ntic City Electr	
Owner or r Location: l	N392158	ntic City Electi	
Owner or a Location: I Driller: La	N392158 yne-N.Y.	ntic City Electi	ric Company W742640
Owner or i Location: l Driller: La Quad.: Atl	N392158 yne-N.Y. antic City	ntic City Electr	ric Company W742640 Comp. date: 1924
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee	N392158 yne-N.Y. antic City t no. 36.14.	ntic City Electr V (723 I	ric Company W742640 Comp. date: 1924 Elevation: 10 ft
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no.	N392158 yne-N.Y. antic City t no. 36.14. 56-75	ntic City Electr	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft
Owner or I Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other	ntic City Electr 723 I rs, 1968, p. 33, 3	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft
Owner or I Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth	ntic City Electr	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness (ft)	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth	ntic City Electr 723 I rs, 1968, p. 33, 3	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft
Owner or r Location: l Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness (ft) Recent:	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)	ntic City Electr 723 I rs, 1968, p. 33, Litholog	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)	ntic City Electr 723 I rs, 1968, p. 33, Litholog	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft) 0-12 12-52	ntic City Electr 723 I rs, 1968, p. 33, Litholog Fill Sand, fine, cle	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft) 0-12 12-52 y Formation	rtic City Electr 723 I rs, 1968, p. 33, 2 Litholog Fill Sand, fine, cle	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft) 0-12 12-52 y Formatio 52-55	ntic City Electry 723   723   725   726, 1968, p. 33, 726   726	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100	rtic City Electr 723 I rs, 1968, p. 33, 2 Litholog Fill Sand, fine, cle	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand:	rtic City Electry  723   1 rs, 1968, p. 33, Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse,	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37. y
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100	rtic City Electry  723   1  723   1  723   1  724   1  725   1  726   1  727   1  728   1  729   1  720   1  72	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37. y
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235	ric City Electry  723   1  723   1  723   1  724   1  725   1  726   1  727   1  728   1  729   1  720	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37. y
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 I Formatio	ric City Electry  723 l rs, 1968, p. 33, Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse, Sand, coarse, Clay, blue at Clay, blue at	ric Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  white white; gravel
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264	ric City Electry  723   1  73, 1968, p. 33, 1  Litholog  Fill Sand, fine, cle  723   1  Sand, fine, cle  723   1  Sand, fone, cle  724   1  Sand, coarse,  725   1  Sand, coarse,  726   1  Sand, brown; cle  Sand, brown; cle	ric Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264	rs, 1968, p. 33, 1 Irs, 1968, p. 33, 1 Litholog  Fill Sand, fine, clous Clay, blue Sand, coarse, Sand, coarse, Clay, blue at 1 Sand, brown; c muddy (silty Clay, sandy at 1	cic Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft elay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264 264-356 356-665	rs, 1968, p. 33, 1  Irs, 1968, p. 33, 1  Litholog  Fill Sand, fine, clous Clay, blue Sand, coarse, Clay, blue Clay, blue at Sand, brown; c muddy (silty Clay, sandy at 1 ft; hard, sand	cic Company W742640 Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft elay streaks at 264-324 ft; fine, ) at 324-356 ft
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 i Formatio 235-264 264-356 356-665	rs, 1968, p. 33, 1 Irs, 1968, p. 33, 1 Litholog  Fill Sand, fine, clon: Clay, blue Sand, coarse, I: Clay, blue at 1 Sand, brown; c muddy (silty Clay, sandy at 1 ft; hard, sand Hardpan	cic Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  can  white  white; gravel 235-246 ft, sandy at 246-264 ft elay streaks at 264-324 ft; fine, c) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft
Owner or r Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clar Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264 264-356 356-665	rs, 1968, p. 33, 3 Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse, n: Clay, blue at 3 Sand, brown; c muddy (silty Clay, sandy at 3 ft; hard, sand Hardpan Clay, soft, blue	cic Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  can  white  white; gravel 235-246 ft, sandy at 246-264 ft lay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft  se at 667-691 ft and 695-703 ft,
Owner or i Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 i Formatio 235-264 264-356 356-665 665-667 667-703	rtic City Electry  723 I  rs, 1968, p. 33, 3  Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse, n: Clay, blue at 3  Sand, brown; c muddy (silty Clay, sandy at 3 ft; hard, sand Hardpan Clay, soft, blue sandy at 69	cic Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  can  white  white; gravel 235-246 ft, sandy at 246-264 ft lay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft  se at 667-691 ft and 695-703 ft,
Owner or i Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264 264-356 356-665 665-667 667-703	rtic City Electry  723 I  rs, 1968, p. 33, 3  Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse, n: Clay, blue at 3  Sand, brown; c muddy (silty Clay, sandy at 3  ft; hard, san Hardpan Clay, soft, blu sandy at 69 Sand, coarse	ric Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft lay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft  se at 667-691 ft and 695-703 ft, 1-695 ft
Owner or i Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309 2 36	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264 264-356 356-665 665-667 667-703	ric City Electry  723 I  rs, 1968, p. 33, 3  Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse, n: Clay, blue at 3  Sand, brown; c muddy (silty Clay, sandy at 4  ft; hard, san Hardpan Clay, soft, blu sandy at 69  Sand, coarse Clay, very sof	ric Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft lay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft the at 667-691 ft and 695-703 ft, 1-695 ft
Owner or i Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309 2 36	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264 264-356 356-665 665-667 667-703 703-714 714-753 753-819	ric City Electry  723 I  rs, 1968, p. 33, 3  Litholog  Fill  Sand, fine, cle  r:  Clay, blue  Sand, coarse,  r:  Clay, blue at 3  Sand, brown; comuddy (silty)  Clay, sandy at 4  ft; hard, sand  Hardpan  Clay, soft, blue  sandy at 69  Sand, coarse  Clay, very sof  Sand, brown,	ric Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft lay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft  se at 667-691 ft and 695-703 ft, 1-695 ft
Owner or i Location: I Driller: La Quad.: Atl Atlas Shee Permit no. From Clari Thickness (ft) Recent: 12 40 Cape May 3 45 Cohansey 135 Kirkwood 29 92 309 2 36	N392158 yne-N.Y. antic City t no. 36.14. 56-75 k and other Depth (ft)  0-12 12-52 y Formatio 52-55 55-100 y Sand: 100-235 d Formatio 235-264 264-356 356-665 665-667 667-703	ric City Electry  723 I  rs, 1968, p. 33, 3  Litholog  Fill Sand, fine, cle n: Clay, blue Sand, coarse, n: Clay, blue at 3  Sand, brown; c muddy (silty Clay, sandy at 4  ft; hard, san Hardpan Clay, soft, blue sandy at 69  Sand, coarse Clay, very sof	ric Company W742640  Comp. date: 1924 Elevation: 10 ft Depth drilled: 833 ft 37.  y  ean  white  white; gravel 235-246 ft, sandy at 246-264 ft lay streaks at 264-324 ft; fine, ) at 324-356 ft 356-426 ft; tough, blue at 426-521 dy at 521-665 ft the at 667-691 ft and 695-703 ft, 1-695 ft

Well 227			Geographic code: 0102
Owner or r	ame: Pre	sident Hotel	5 1
Location: 1	N392058		W742711
Driller: A.	C. Schulte	s	
Quad.: Atl	antic City		Comp. date: 03/28/1955
Atlas Shee	t no. 36.14	.754	Elevation: 10 ft
Permit no.	36-220		Depth drilled: 865 ft
From Clark	k and othe	rs, 1968, p. 39	; log by F.J. Markewicz, N.J.
Geological		_	,
Thickness	Depth	Litholo	ogy
(ft)	(ft)		_
Recent Se	ries:		
26	0-26	Sand, fine to	o medium, light-olive-gray,
		angular to	subangular, mostly quartz;
		high perce	entage of heavy minerals
Cape May	/ Formati	on:	
12	26-38		gray, angular to subangular; icaceous and fossiliferous
62	38-100	Sand, fine, 1	ight-gray, uniform, fossiliferous, icaceous; scattered forams
Cohansey	Sand:		, –
30	100-130	Sand, fine to	o coarse, light-gray, fairly
		clean, ang	ular to subangular, high per-
		centage of	f heavy minerals

## WELL 227 PRESIDENT HOTEL

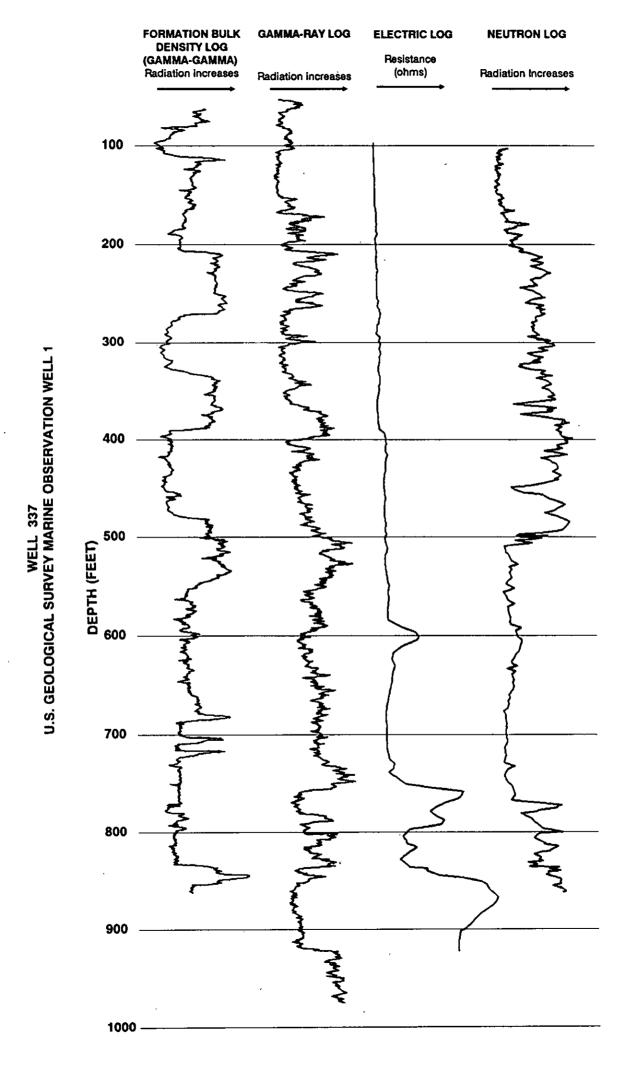


# WELL 239 BALLY'S PARK PLACE, INC.

Wall 227	(comt.)				·	
Well 227 Thickness		Lithology				
(ft)	(ft)					
41	130-171	Sand, fine to very coarse, light-yellowish-gray, angular to subround		IA-RAY LOG	ELECTRIC Spontaneous- F	
47	171-218	Sand, fine to medium, light-yellow-gray,	Hadiati	on Increases	Potential (mv)	(ohms)
		fairty clean, 171-208 ft; grayish-red, clayey, 15-percent pea-sized gravel, 208-	100 -		- + -	<del>```</del>
		218 ft	100 -			
33	218-251	Sand, fine, yellowish-gray; 50-percent lignite; some shells		į		
22	251-273	Sand and pea-size gravel, light-gray to yellowish-gray				7
38	273-311	Sand, fine to medium, light-gray below 298		į	i,	<b>\</b>
Kirkwaa	d Formatio	ft; pea-size gravel; micaceous silt	000	}	کر .	{
92	311-403	Sand, fine to coarse, light-gray; slightly	200 -	)		<del></del>
74	311-403	clayey; micaceous; some pea-size gravel		کے	ستستعم	}
239	403-642	Clay, light-olive-gray; slightly micaceous; sand, fine to coarse; diatomaceous; few		}	<b>}</b>	}
		fossil fragments		1	کـــــ	}
162	642-804	Clay, light-olive to gray, sandy, slightly		Į.	محسح	}
		micaceous, fossiliferous; shell fragments; few forams		1	کـــــــــــــــــــــــــــــــــــــ	}
41	804-845	Sand, medium to very coarse, medium-	300 -	ح_	<u></u>	<del></del>
`-	00.00	dark-gray, fossiliferous, mostly quartz;		· }	<u></u>	}
		few forams		\$	and a second	}
20	845-865	Clay, medium-gray, silty, moderately		3	<u> </u>	<b>\$</b>
		micaceous, fossiliferous; pea-size gravel		Ì	<u>_</u>	(
Well 239		C		į	Į.	<i>[</i> *
	name: Ball	Geographic code: 0102 ly's Park Place, Inc.	400 -	<u> </u>	<u> </u>	
Location:		W742604	400 -	2		
	ayne-N.Y.	***************************************		7	No.	· ·
	tlantic City	Comp. date: 12/07/1979		کر	~	7
Atlas She	et no. 36.14		_	~	}	
Permit no		Depth drilled: 884 ft	E	3	}	1
Thickness		Lithology	DEPTH (FEET) 00 -	تعم	j	}
(ft)	(ft)	Soud fire and a defeature design	<u>u</u> 500 –			
22 20	31-53 53-73	Sand, fine; gravel and soft clay streaks Sand; gravel; lignite; clay, gray, soft	돈	₹ `	}	/
64	73-137	Sand, fine to coarse	<u></u>	حر _	كمر	ζ
87	137-224	Sand, fine to medium; some gravel	<u> </u>	· Y	~	L
21	224-245	Sand and gravel; streaks of sandy clay,	_	<b>{</b>	2_	3
		white and yellow		7	2	ζ
50	245-295	Sand, fine to medium; streaks, sandy clay, gray		3	Ţ.	}
5	295-300	Clay, gray	600 -			<del></del>
10	300-310	Sand, fine, hard-packed		خر	}	(
17 7	310-327 327-334	Clay, gray, soft, sandy Sand and gravel, hard-packed		}	}	\
23	334-357	Clay, soft; sand streaks		>	}	\
23	357-380	Sand, fine to medium, gray; some clay streaks			ر	}
20	380-400	Clay, sandy; hard packed sand		•	>	<b>\</b>
154	400-554	Clay, gray, sandy, 400-443 ft; tough, 443-554 ft	700 -	سمع		
22	554-576	Clay, gray, sandy; gravel; shells; hard streaks	700 -		7	
66	576-642	Clay, gray, tough; shells at 576-599 ft; hard streaks at 599-642 ft		٤	2	کے
48	642-690	Clay, gray and brown, tough; shells		٤	خي	خر
1	690-691	Very hard streaks			<i></i>	حے
15	691-706	Sand, gray; clay, brown, soft; shells; hard streaks		1	سمر	
21	706-727	Clay, sandy; sand, fine to medium, gray	800 -	<u> </u>		
8	727-735	Sand and shells	500	<b></b>	/	===
15	735-750	Clay, soft, sandy; streaks of tough clay		ځ	Į	3
15	750-765	Sand; clay, soft; shells		~	سع	حسح
5	765-770	Clay, tough		<u> </u>	***************************************	$\geq$
24	770-794	Sand, fine; some shells		<b>₹</b>	حج	~
49 41	794-843	Sand, fine to medium, gray, brown		-	-	
41	843-884	Clay, sandy, 843-862 ft, very tough. 862-884 ft	900 -		- <del></del> -	<del></del>

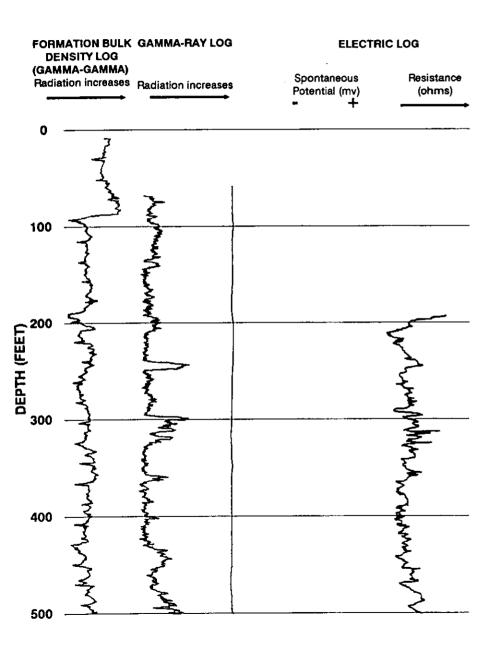
Well 280			Geographic code: 0102		7	193-200	Sand, white	
Owner or	r name: Res	orts Internat	ional Hotel		1	200-201		no microfossils
	: N392133		W742522	4	4	201-245		; some lignite at 220-245 ft;
Driller: L	ayne-N.Y.							nite at 245 ft
Quad.: At	tlantic City		Comp. date: 08/26/1979	5	5	245-300	Sand, gray	= =
Atlas She	et no. 36.14	4.819	Elevation: 8 ft		5	300-305	Clay, no dia	itoms
Permit no			Depth drilled: 887 ft	9	5	305-400		no microfossils at 305-350 ft;
Thickness	s Depth	Lithol	logy				diatomac	eous marine clay at 370-390 ft
(ft)	(ft)			1 8	2	400-482		e diatoms; sponge spicules at
150	0-150	Beach sand	l; shells; gravel; clay					t and 446-482 ft; some com-
20	150-170		to coarse; gravel; shells					shells at 425-446 ft
8	170-178		w and white, mixed with gravel	19	1	482-673		e diatoms and sponge spicules;
2	178-180	Hard strea		1	•	102 015	few diato	ms at 482-500 ft; sandy; many
33	180-213		s, yellow, white and brown; sand;	ł				
	100 210		ood (lignite)	1 1	7	673-690		559-579 ft
7	213-220	Clay, green			ó	690-730	Clay; few di	
48	220-268	Sand medi	ium to coarse, white; gravel; clay	"	U	090-730		; little clay; very few diatoms at
-10	220-200	streaks	din to coarse, writte, graver, clay		^	<b>500 550</b>	690-710 ft	
67	268-335				0	730-750		, no microfossils
G7	200-333		sandy; some gravel; wood		5	750-775		ay, no microfossils
22	225 260		at 290-335 ft	6	0	775-835	Sand, brown	nish, water-bearing
33	335-368		o coarse, gray; gravel; clay streaks					
324	368-692		green, brown; sand streaks;					
_			hells; hard streaks	Wel	l 313			Geographic code: 0102
2	692-694	Hard strea		Owi	егог:	name: Atla	ntic City Coo	oling Company
41	694-735		to coarse; gravel; shells; lignite			N392153	,	W742553
41	735-776	Clay, brown	n and gray; sand streaks; shells			riah White		
65	<i>7</i> 76-841	Sand, fine	to medium; gravel; shells; light			antic City		Comp. date: 1895
		clay strea	iks			t no. 36.14.	811	Elevation: 7 ft
46	841-887	Clay, sandy	; sand streaks; shells		nit no.			Depth drilled: 813 ft
		•	•			lman, 1896	n 91	Depth drined, 513 ft
Well 309			Geographic code: 0102			Depth	Lithold	ogy
	name: Citi	zanc los and	Cold Storage Co.	(1	t)	(ft)		
		zens ice anu			4	0-4	Meadow mu	ud
Location:		T	W742513	6	6	4-70	Sand, gray a	t 4-40 ft, white at 40-70 ft
	homas B. I		<b>5</b>		5	70-75	Clay, brown	
	tlantic City		Comp. date: 1894	I	5	75-90	Gravel, vari	
	et no. 36.14	1.587	Elevation: 7 ft		3	90-93	Clay, white	
Permit no			Depth drilled: 805 ft		7	93-110	Gravel	
			cated on Baltic Avenue, between		Ó	110-150	Sand, yellov	w
Massachu	isetts and C	Connecticut A	venues	11		150-268		, layered at 150-212 ft
Thickness	s Depth	Lithol	ogv	I	4	268-292		; streaks of water-bearing sand
(ft)	(ft)		<b></b>	I	3	292-375		brown or red
20	0-20	Sand		18		375-555	· ·	Drown of 1ca
48	20-68	Clay and m	ıarl	1	5	555-570	Clay	Manadania and
22	68-90		ravel; fine white clay at 88 ft					flowed seven gpm
320	90-410		lay; fine white clay at 187 ft	12		570-690	Clay	n 16
150	410-560	_	brackish water at 430 ft	1	0	690-710		flowed five gpm
10	560-570		se; brackish water		1	710-721	Clay	
208	570-778		four sand seams; coarse sand at	I	4	721-745	Sand with w	/ater
200	370-176	763 ft. m	ood (lignite) and shells at 765 ft	I	0	745-755	Clay	
4	778-782		nite); clam shells		0	755-785		sh brown; with water
4 23				2	8	785-813		; water-bearing; 6 inches
23	782-805		tough; underlain by sand,				light-blui:	sh clay
		coarse to	pea-size, brown, water-bearing					
Well 311			Geographic code: 0102	Wel	l 114			Geographic code: 0102
Owner or	r name: Dei	nnis Hotel		Owi	ner or	name: Brig	hton Hall	
Location:	: N392127		W742607			N392127		W742607
Driller: U	Jriah White	;				riah White		
	tlantic City		Comp. date: 1896	1		lantic City		Comp. date: 1895
	et no. 36.14		Elevation: 10 ft			et no. 36.14	730	Elevation: 10 ft
Permit no			Depth drilled: 835 ft			56-87	. 137	
	olman, 189	7 n 168	Depth dimed: 055 it					Depth drilled: 843 ft
			t			olman, 1896		a
hickness	Depth	Lithol	logy			Depth	Lithol	ogy
(ft)	(ft)	<b>.</b> .			ft)	(ft)		
55	0-55		, gray, 0-22 ft, slightly darker, 22-55 ft		5	0-65		s; 5-10 ft of mud at base
15	55-70	No record		23	15	65-300	Sand, yellov	wish; gravel and pebbles at top
13	70-83		y; marine diatoms	10	00	300-400	Sand, drab	colored
7	83-90	Sand, white		30	00	400-700	Clay, diator	maccous; mollusk fossils, 642-670 ft
10	90-100	Clay, no m	icrofossils	3	50	700-730		elly clay; shells; no microfossils
10	100-110	Sand, white			3	730-743		d; shells; water-bearing
45	110-155		arse as cracked hominy, white at		7	743-770		, no diatoms
			ft, orange-yellow at 130-155 ft		70	770-840	Sand, brow	nish, changing to gray near
38	155-193	Sand, oran	ge-yellow, brown-sugar color, 155			<del></del>		indant water
		165 ft, co	parse, 165-175 ft, finer, 175-193 ft		3	840-843		gray, micaceous
		,		,	-			0,

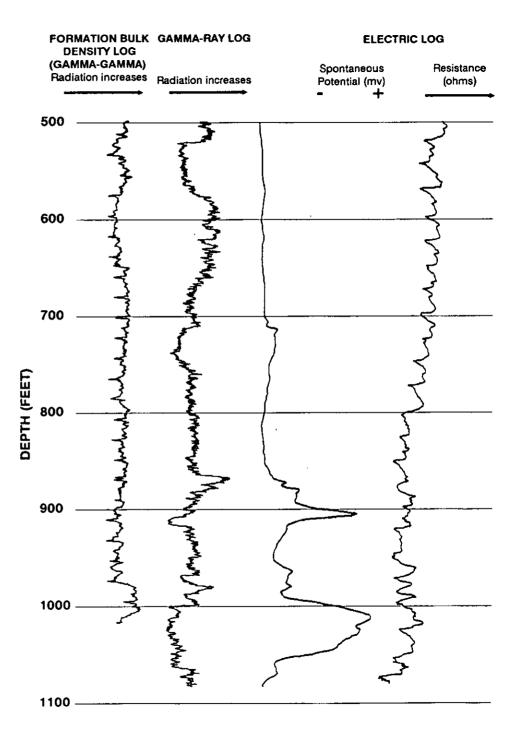
Well 337		Geographic code: 0102	1		increasing amount of light and (NT) and
	name: U.S.	Geological Survey, marine observation well 1			increasing amount of light-gray (N7) and olive-gray (5Y 4/1) clay; some silt
Location:		W742507	20	310-330	Clay, dark-greenish-gray (5GY 4/1);
Driller: W	arren Geo	где			moderate amount of olive-gray (5Y 3/2)
	tlantic City	Comp. date: 07/29/1985	10	330-340	silty clay; coarse sand, gravel; some lignite
	et no. 36.24		10	330-340	Clay, olive-gray (5Y 4/1); very little sand; pyrite; microfossils
Permit no		Depth drilled: 931 ft	20	340-360	Sandy clay, olive-gray (5Y 4/1); abundant
		rm 59 ft above the sea floor.	ł		very fine to medium quartz sand and silt
Thickness	- <del></del> -	Lithology	10	360-370	Sandy clay, olive-gray (5Y 4/1); silt;
(ft) 20	(ft) 0-20	Shally along generalsh block (5C 2/1), and	į		abundant shell fragments; less than 20
20	0-20	Shelly clay, greenish-black (5G 2/1); some very fine sand with the shell fragments;	20	370-390	percent fine quartz sand Sandy clay, dark-greenish-gray (5GY 4/1),
		pieces of wood (lignitic) at 10-20 ft		370-370	many shells; silt; fine quartz sand
10	20-30	Clay and gravel, dark-greenish-gray	20	390-410	Clayey sand, dark-greenish-gray (5GY 4/1);
		(5GY 4/1), gravel is subround to round,			fine to medium quartz sand; shell frag-
10	30-40	up to 10 mm diameter; few shell fragments	10	410 430	ments; silt; clay
10	30-10	Clay, dark-greenish-gray (5GY 4/1); some gravel up to 10 mm diameter; very few	10	410-420	Silty clay, dark-greenish-gray (5GY 4/1); shell fragments, very fine sand
		shell fragments	30	420-450	Clay, dark-greenish-gray (5GY 4/1); some
10	40-50	Clay, dark-greenish-gray (5G 4/1); some			fine to medium sand; shell fragments and
40	<b>50.</b> 50	subround to round gravel, to 15 mm diameter			silt, 440-450 ft
10	50-60	Sandy clay, dark-greenish-gray (5G 4/1);	50	450-500	Silty clay, dark-greenish-gray (5GY 4/1);
		abundant angular to subangular coarse sand; some subround to round gravel, up	10	500-510	shell fragments less than 4 mm diameter Silty clay, dark-greenish-gray (5GY 4/1);
		to 10 mm diameter	10	200-210	some shell fragments; abundant hard
10	60-70	Sandy clay, dark-greenish-gray (5G 4/1),	Ì		dark-greenish-gray silt
		decreasing clay content	30	510-540	Clay, olive-gray (5YR 4/1), very dense; some
10	70-80	Clayey sand, dark-greenish-gray (5G 4/1),	-10		shell fragments and microfossils
		similar to previous sample except for	10	540-550	Sand, very fine to fine, light-brownish-gray
10	80-90	decreasing clay			(5YR 6/1), well sorted, subangular, quartz; trace heavy minerals; little olive-gray clay
10	00-20	Sand and gravel, dark-greenish-gray (5G 4/1), subround to round; very coarse	10	550-560	Silty sand, olive-gray (5Y 3/2); very fine to
		sand; gravel up to 10mm diameter, some			fine subangular sand, moderately sorted;
		angular gravel up to 15 mm diameter;	1		some light-olive-brown (5Y 5/6) clay,
		some dark-greenish-gray clay			mixed with olive-gray (5Y 3/2) silty clay;
20	90-110	Sandy clay, medium-bluish-gray (5B 5/1);	70	540.570	some shell fragments
		fine sand, angular to subround; olive-gray	, ,	560-570	Silty clay, light-olive-gray (5Y 5/2); trace of very fine to fine subround quartz sand
10	110-120	silty clay; gravel up to 10 mm diameter Sand, medium, gray (N4), some coarse; silt;	10	570-580	Silty clay, light-olive-gray (5Y 5/2), mostly
10	110-120	lignite			soft clay with some firm silt
10	120-130	Sand, medium, light-gray (N6), well	20	580-600	Clay, dark-greenish-gray (5GY 4/1); moderate
		rounded quartz with fine sand; silt; much	10	600 640	amount silt; few shell fragments, 590-600 ft
10	120 140	less lignite than previous sample	10 20	600-610 610-630	No record
10	130-140	Sand, medium to coarse, light-gray (N6-7),	] 20	010-030	Silty clay, dark-greenish-gray (5GY 4/1); some shell fragments less than 1mm
		moderately sorted, some fine and well rounded; abundant silt; lignite	į		diameter
20	140-160	Sand, very fine to coarse, medium to light-	30	630-660	Silty clay, dark-greenish-gray (5GY 4/1); no shells
		gray (N5-6), well rounded, quartz; silt;	10	660-670	Silty clay, dark-greenish-gray (5GY 4/1),
••		abundant lignite; few heavy minerals	10	(70.000	with little soft very-light-gray (N8) clay
10	160-170	Sand, fine to medium, light-gray (N7),	10	670-680	Silty clay, dark-greenish-gray (5GY 4/1); little
10	170-180	moderately sorted; abundant silt Silty sand, light-gray (N7); very fine sand;	40	680-720	angular to subangular gravel 5-7 mm diameter Silty clay, dark-greenish-gray to olive-gray;
	170-100	abundant silt			3 percent shell fragments; trace of
10	180-190	Sandy silt, brownish gray (5YR 4/1); 5 to			glauconite and lignite at 690-700 ft; in-
		10 percent medium to coarse sand; abun-			creasing 3-5 percent fine vitreous quartz
		dant clay; lignite			sand, 700-710 ft; 10 percent shell frag-
10	190-200	Silty sand, medium-light-gray (N6); very	20	720-740	ments, 710-720 ft Clayey silt and sand, dark-greenish-gray
20	200-220	coarse sand; abundant silt Sand, medium to coarse, very-light-gray	20	120-140	(5GY 4/1); fine to medium sand; shell
	200-220	(N8), quartz, some fine sand; gravel up to			fragments
		3 mm diameter; small amount of medium	30	750-780	Clayey silt, olive-gray; very fine sand; shell
		gray (N5) clay			fragments; trace of glauconite; increased
10	220-230	Sand, fine to medium, very-light-gray (N8),	10	000 010	medium to coarse quartz sand, 780-800 ft
		quartz; less coarse sand and gravel than	10	800-810	Sand, medium to very coarse, olive-gray,
20	230-250	previous samples Sand, medium to coarse, very-light-gray	10	810-820	vitreous; some very fine to fine sand, silt Sand, coarse to very coarse, olive-gray,
20	250-250	(N8), quartz; gravel up to 3 mm diameter;		010 020	subround; some clay
		lignite, 240-250 ft	30	820-850	Silty sand, olive-gray; medium to coarse sand
40	250-290	Sand and gravel, sand is medium to coarse,	30	850-880	No sample
		quartz, with gravel up to 10 mm diameter;	20	880-900	Clay, dark-greenish-gray, some clayey silt;
20	290-310	small amount of light-olive-gray (5Y 6/1) clay	30	900-930	minor light-gray clay; shell fragments Clay, dark-greenish-gray; some silt;
20	250-310	Sand and gravel, sand is medium to coarse quartz, with gravel up to 10 mm diameter;	] 57	700-93U	few shell fragments at 900-910 ft
		A Praise ab to to min diameter,			



Well 338	ame: IIS	Geographic code: 0102 Geological Survey, marine observation well 2	_ 10	300-310	Sand, fine to coarse, white (N9) and pinkish-
Location: N Driller: Wa	N391726	W742221			gray (5YR 8/1), subangular to subround, quartz; some gravel; light-olive-gray (5Y6/1) silt; trace lignite
Quad.: Atla Atlas Sheet Permit no.	antic City t no. 36.24 36-5972	Comp. date: 09/04/1985	90	310-400	Gravel, white (N9), transparent and pinkish- gray (5YR 8/1), subround to round, poorly sorted; sand, fine to coarse, light-
Thickness (ft)	Depth (ft)	Lithology			olive- gray (5Y 6/1); silt; trace lignite; trace shell fragments at 370-390 ft; abun- dant black chert at 390-400 ft
20	0-20	Shells, mostly fragments, some unbroken, to 3/4 inch in diameter; moderate amount of	10	400-410	Sandy silt and gravel, dark-greenish-gray (5GY 4/1); some clay
10	20-30	gray (N5), very fine, sandy clay Shells and gravel, shell fragments with	10	410-420	Silty clay, dark-greenish-gray (5GY 4/1); some sand and gravel
40	30-70	rounded quartz gravel, up to 10mm diameter; some very fine gray sandy clay Clay, dark-greenish-gray (5GY 4/1); very	50	420-470	Silty clay, dark-greenish-gray (5GY 4/1); some sand; very abundant lignite at 425- 429 ft; less lignite at 430-470 ft
		fine sand; silty; micaceous; some angular gravel 10mm in diameter; some shell frag- ments at 30-50 ft	40	470-510	Silty clay and clay, dark-greenish-gray (5GY 4/1); equal amount of light-olive- gray (5Y 6/1) clay, and coarse sand, gravel
10 5	70-80	Clayey silt, dark-greenish-gray (5GY 4/1); very fine sand; some angular gravel	80	510-590	Clay, olive-gray (5Y 4/1) and grayish-brown (5YR 4/1); trace shell fragments; trace very
3	80-85	Gravel, up to 4 mm diameter, light-gray, quartz, subangular to subround, some an-	30	590-620	fine quartz sand and heavy minerals, 550-590 ft Clayey silt, olive-gray (5Y 4/1); abundant light gray (NG) along pages at all foresterns
15	85-100	gular; abundant lignite; few shell fragments Silty clay and gravel, equal amounts; gravel, yellowish-orange, subangular to sub- round; silty clay, dark-greenish-gray	10	620-630	light-gray (NG) clay, some shell fragments Silty clay, olive-gray (5Y 4/1); abundant hard silt; shell fragments, to 3 mm diameter
10	100-110	(5GY 4/1); micaceous Silty clay, dark-greenish-gray (5GY 4/1) and light-gray (N6); very fine sand; some very	15 3	630-645	Clayey silt, olive-gray (5Y 4/1); some fine sandy silt; increasing very fine sand; some shell fragments at 640-645 ft
20	110-130	coarse sand and gravel Silty clay, light-gray (N6); very fine sand; medium-dark-gray (N4) clay; trace of light-	20	645-648 648-650 650-670	Chert, black (N1); olive-gray silt Silt, olive-gray (5Y 4/1); sand, very fine, sub- round; some shell fragments Sand, very fine to fine, bluish-white,
20	130-150	olive-brown (5Y 5/6) clay, abundant gravel Gravel, brownish-yellow and white, round, poorly sorted; medium to coarse sand; abun-			subround, quartz, in olive-gray (5Y 4/1) silty matrix
20	150-170	dant lignite Gravel, white, dark-yellowish-orange (10YR6/6); some poorly sorted fine to	50	670-720	Silt, olive-gray (5Y 4/1); some well sorted very fine sand; shell fragments; some brownish clay at 680-720 ft
5	170-175	coarse subround sand; abundant lignite Sand, white to dark-yellowish-orange (10YR6/6), poorly sorted, round to sub- round; little silt; trace lignite	20	720-740	Clayey silt, olive-gray (5Y 4/1), alternately hard and loose; clay, medium-light-gray (N6); shell fragments; no light-gray clay, and few shell fragments at 730-740 ft
	175-180 180-200	Clay, olive-gray (5Y 4/1), firm Sand, fine to medium, white and light-bluish-	10	740-750	Silty clay, olive-gray (5Y 4/1); hard silt; shell fragments; trace light-gray clay
		gray (5B 7/1), subangular to subround, moderately sorted, few coarse; some silt; trace lignite	10 10	750-760 760-770	Silt, dusky-yellow-green (5GY 3/2); some clay Clay, olive-gray (5Y 4/1); very fine sand; some silt; shell fragments
38	200-238	Sand, medium to coarse, white and light- bluish-gray (5B 7/1), subround to	20 10	770-790 790-800	Clayey silt, olive-gray (5Y 4/1); clay; some shell fragments Sandy silt, olive-gray (5Y 4/1); sand, coarse,
7	238-245	subangular, moderately sorted; trace silt and lignite Silt, dusky-yellow (5Y 6/4); soft clay with	10	800-810	subround, shell fragments, trace clay Silty clay, olive-green; shell fragments
	245-250	some very fine sand; olive-gray clay Silt, pale-olive (10Y 6/2); some lignite; trace	20	810-830	Clayey silt, olive-gray; medium sand; abundant shell fragments
10	250-260	sand and gravel Silt, light-olive-gray (5Y 6/1); some sand, fine to	10	830-840	Sand, medium to coarse, olive-gray, subround; abundant shell fragments; some silt, clay
	260-270	medium, angular to subangular, trace lignite Sand, fine to medium, white, moderately well sorted, subangular, pale-olive silt; abun- dant lignite	40	840-880	Sand, medium, transparent, some white, quartz, subround; light-olive-gray (5Y 6/1) silt matrix; trace shell fragments; in- creasing fine sand at 860-870 ft; increasing
20	270-290	Sand, fine to coarse, white (N9), subangular to subround, moderately sorted, quartz; light- olive-gray (5Y 6/1) silt; moderate lignite	10	880-890	silt and trace of clay at 870-880 ft Silty sand, olive-gray (5Y 4/1), well sorted; very fine subrounded sand; silt; some clay
5	290-295	Gravel, white, light-bluish-gray (5B 7/1) and grayish-yellow (5Y 8/4), subround to	10 20	890-900 900-920	Silt, olive-gray (5Y 4/1); some fine sand; clay Clay, olive-gray (5Y 4/1); some fine sand;
5 :	295-300	round; sand, fine to coarse, some sub- round; trace silt Lignite, olive-black (5Y 2/1), fragments;	10	920-930	shell fragments; trace pyrite Shelly clay, Olive-gray (5Y 4/1); very abundant shell fragments
	-	gravel; fine to coarse sand; moderate amounts of silt	5	930-935	Clay, olive-gray (5Y 4/1); shell fragments; some fine to medium sand

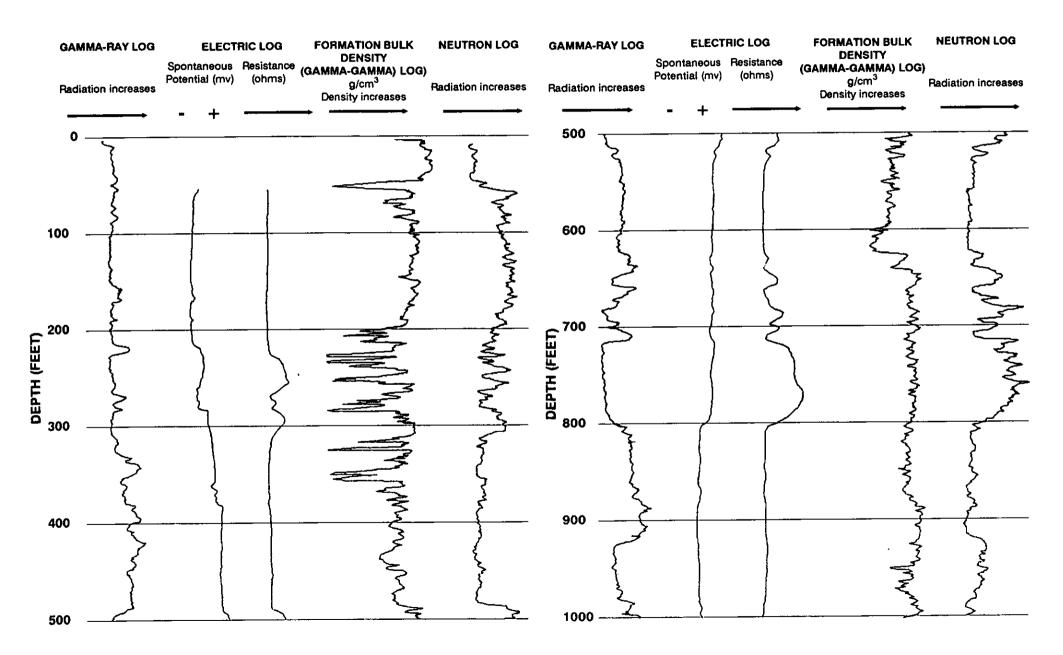
WELL 338
U.S. GEOLOGICAL SURVEY MARINE OBSERVATION WELL 2



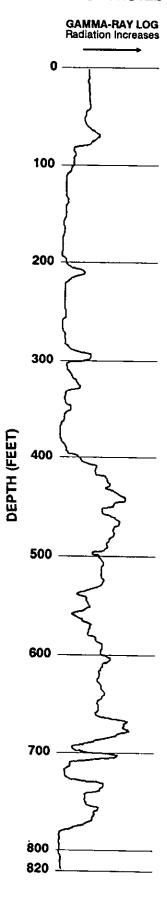


Well 344	Geographic code: 0102	30	620-650	Sand, fine;	some cilt
Owner or name: 1	S. Department of Energy	40	650-690		um to coarse; increasing silt
Location: N39224		130	690-820	Sand, medi	um; silty; shell hash at 690-700 ft
Driller:		10	820-830	Silt; fine sa	ani, siny, shen nash at 090-700 ft
Quad.: Oceanville	Comp. date: 04/1978	10	830-840		nules (gravel)
Atlas Sheet no. 36		70	840-910	Sand fine t	o coordinately
Permit no. 56-65	Depth drilled: 1,004 ft	1 ~	040-710	and orner	o coarse; some silt; some pebbles ules (gravel)
U.S. Geological S	rvey observation well; log by Virginia	ľ		and grain	uics (graver)
Polytechnic Instit	tc.				
Thickness Dept	Lithology	Well 350	1		Geographic code: 0102
(ft) (ft)	<b></b>		r name: Tray	more Hotel	Geographic code: 0102
70 Ò-70	Sand, fine to coarse, granular		: N392124	more Hotel	W742548
50 70-12			Jriah White		₩ /42346
	at mid-interval		tlantic City		Comp. date: 1899
110 120-23	Sand, fine to coarse; granular (gravel)		eet no. 36.14.	<b>Q17</b>	Elevation: 8 ft
10 230-24	Sand, fine to medium; scattered	Permit n		.017	Depth drilled: 830 ft
	granules (gravel)	10211111 12	0. 20-00		Depth drifted, 630 ft
10 240-25	No record	From W	oolman, 1900	n 106	
20 250-27	Silt; fine to coarse sand				sical log on page 28.
30 270-30		110 11110	ogic log avai	idoic, gcopily	sical log of page 26.
	(gravel) toward end of interval	İ			
10 300-31					
	(gravel); some silt	Well 351			Geographic code: 0102
20 360-38			r name: Mari	lhorough-Rie	chheim Hotel
20 380-40			: N392123	ioorongii-Dic	W742600
40 400-44		Driller: -			W 742000
20 440-46	Sand, fine to coarse; some silt		tlantic City		Comp. data; 1022
10 460-47			et no. 36.14.	<b>Ω17</b>	Comp. date: 1922 Elevation: 7 ft
10 470-48		Permit no		OI.	
10 480-49		10	J. 20-07		Depth drilled: 823 ft
40 490-53	Sand, medium to coarse; some silt	No lithol	ogic log avail	lahle	
60 530-59			ical log on pa		
30 590-62		Coophys	ioe on he	.5° 20	

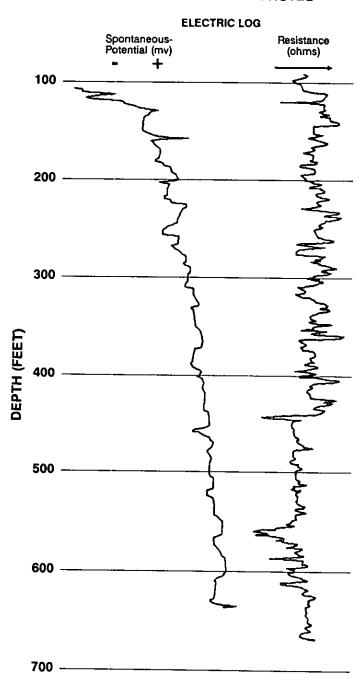
WELL 344 U.S. DEPARTMENT OF ENERGY



WELL 350 TRAYMORE HOTEL



WELL 351
MARLBOROUGH-BLENHEIM HOTEL



## **Brigantine City**

Well 074		Coornells and 0102	20	00.410		
	name: Cits	Geographic code: 0103 y of Brigantine	20 70	90-110 110-180		w; yellow clay streak at 110 ft
Location:		W742226	70	110-100		e of a good quality brown sugar; ik at 155 ft
Driller: La		** /~220	27	180-207	-	ellow; clay at 205 ft
	igantine In	ilet Comp. date: 06/1980	33	207-240		ellow, slightly lighter in color
	et no. 36.15		20	240-260		ellow, shade of (a)
Permit no		Depth drilled: 830 ft	20	260-280		ellow, slightly reddish cast
		et, near Beach Avenue, Brigantine, N.J.	21	280-301		ellow, not as red; black sand,
Thickness		Lithology		200 001		noticed above; clay streak at 288
(ft)	(ft)				ft	ioneco above, clay streak at 200
<b>`</b> 53	ò-53	Sand, fine; shells; white gravel, marsh grass	19	301-320		llow, slightly reddish cast
		at 0-23 ft; very thin black clay streak at 23-34	28	320-348		ellow, slightly red shade of (d)
		ft	10	348-358	Sand and c	lay, brownish; sponge spicules
65	53-118	Sand, fine to medium; shells at 53-78 ft;	31	358-389		lay, alternating
		gravel at 96-118 ft; hard yellow clay streak	24	389-413		, few diatoms
		at 108 ft	58	413-471		nish; diatomaceous at 413-434 ft;
31	118-149	Sand, fine to coarse; gravel; small yellow				ited shells at 434-454 ft
		clay streaks at 118-138 ft	46	471-517		i, diatomaceous; fine at 471-484 ft
6	149-155	Clay, gray	8	517-525	Sand, some	
26	155-181	Sand, coarse; gravel; shells	13	525-538	Clay, bluish	n, diatomaceous
44	181-225	Clay, yellow, white, sandy; sand and gravel	2	538-540	Sand	
		streaks at 190-225 ft	85	540-625	Clay, bluish	n, diatomaceous
43	225-268	Sand, fine to coarse; gravel at 225-247 ft;	45	625-670	Clay, fine to	o coarse sand; comminuted shells
		brown sandy clay, 247-268 ft			at 625-64	
21	268-289	Clay, gray, sandy; green streaks of clay		670	Sand, some	
20	289-309	Sand, fine to coarse; gravel; sandy clay streaks	58	670-728	Clay, sandy	
43	309-352	Clay, gray, sandy; gravel at 330-352 ft	70	728-798		mish; coarse at 728-748 ft; finer
23	352-375	Sand, fine to coarse; gravel; streaks of			at /48-76	3 ft; fine at 763-798 ft
122	275 507	yellow, white, red and gray clay				
132	375-507	Clay, gray; soft and sticky at 375-398 ft;	Well 306			C
		tough at 398-443 ft; sticky, some gravel at 464-507 ft		nama: Dri	gantine City	Geographic code: 0103
44	507-551	Clay, green and gray; sand streaks;	Location:		gantine City	W742348
,,	00, 001	gravel; shells; hard streak at 521-522 ft		ayne-N.Y.		11 1425-10
87	551-638	Clay, brown and gray; sticky at 594-615 ft	Quad.: Oc	•		Comp. date: 09/13/1966
25	638-663	Clay, brown; hard streak at 656-657 ft	-	et no. 36.14	1 617	Elevation: 5 ft
19	663-682	Clay, gray and white; sand; gravel	Permit no			Depth drilled: 840 ft
22	682-704	Sand; gravel; white clay streaks			et and Bay Av	ve., Brigantine, NJ.
23	704-727	Sand, coarse; shells; hard streaks		cal log on	•	·, <b>B</b>
78	727-805	Sand, fine to medium; gravel; shells; light-	Thickness			la
		clay streaks (thin clay streaks)	(ft)	(ft)	Lithol	logy
25	805-830	Clay; sandy at 805-817 ft; tough at 817-830 ft	2	0-2	Orininal or	ound and white sand
			13	2-15	Sand; brow	
			50	15-65		white clay streaks at 25-65 ft
Well 305		Geographic code: 0103	20	65-85	Sand, pack	
Owner or	name: Bri	gantine	60	85-145	Sand; sand	
Location:	N392427	W742147	70	145-215	Clay, sandy	• •
Driller: U	riah White	e	80	215-295		ed; sandy clay
Quad.: Bi	rigantine Ir	nlet Comp. date: Summer, 1895	40	295-335		clay streaks
	et no. 36.1:		149	335-484		and; mixed at 410-440 ft
Permit no		Depth drilled: 798 ft	32	484-516	Clay	,
From Wo	olman, 189	96, p. 77.	80	516-596	•	and; white at 556-596 ft
754 1 1	D44	T *st = 1	1		_ · · .	

Thickness Depth

(ft) 0-60

60-90

(ft) 60

30

Lithology

Sand, gray; shells at 40-60 ft Sand, white; white clay streak at 70 ft

74

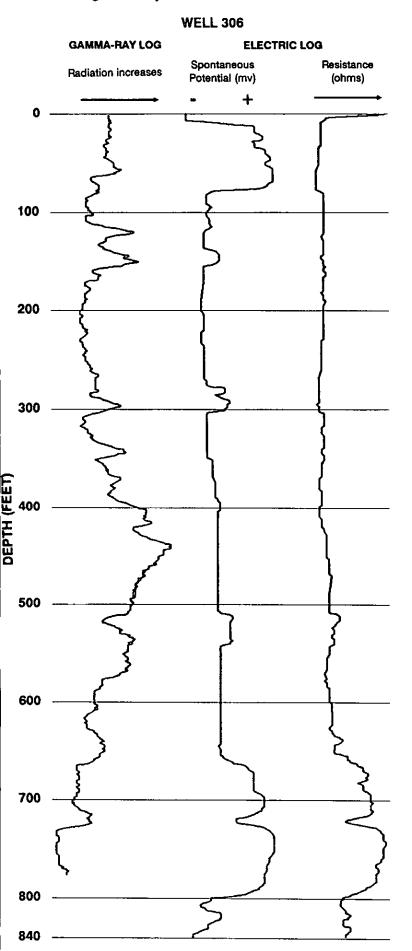
118

596-670

670-788

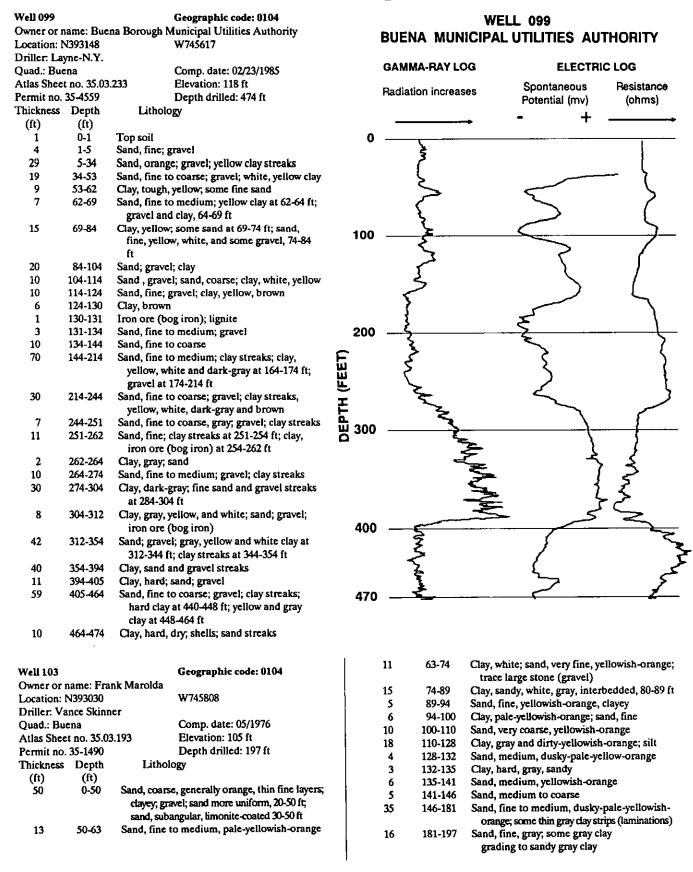
Sand and clay; hard packed sand, 596-646 ft Sand, coarse, 670-723 ft, 737-788 ft; clay streaks

## **Brigantine City**



Well 348		Geographic code: 0103
Owner or	name: Brig	gantine Water Department
Location:		W742348
Driller, La	ync-N.Y.	
Quad.: Oc	eanville	Comp. date: 10/07/1952
Atlas Shee	et no. 36.14	.614 Elevation: 5 ft
Permit no		Depth drilled: 785 ft
From Clai	k and othe	ers, 1968, p. 33, 39; located at Circle and
		gantine, NJ.
Thickness		Lithology
(ft) Recent se	(ft)	
18	0-18	Fill
12	18-30	Marsh mud
	y Formati	
17	30-47	Sand and gravel
3	47-50	Clay, soft
35	50-85	Sand and gravel
Cohanse	y Sand:	<b>6</b>
13	85-98	Clay, tough
50	98-148	Sand
9	148-157	Clay
107	157-264	Sand; gravel; clay streaks, 185-264 ft
	d Formatic	
56	264-320	Clay, sandy; gravel, 264-295 ft; soft, 295-320 ft
40	320-360	Sand and clay
145	360-505	Clay; tough at 400-470 ft; soft at 470-505 ft
65	505-570	Sand, hard; clay
104	570-674	Clay, tough
104	674- <i>77</i> 8	Sand, coarse; shells at 674-694 ft; gray at 694-
7	770 705	734 ft; brown at 734-778 ft
,	778-785	Clay
Well 349		Geographic code: 0103
Well 349 Owner or	name: Brig	Geographic code: 0103
		Geographic code: 0103 gantine Borough W742153
Owner or	N392432	gantine Borough
Owner or Location: Driller: La	N392432	gantine Borough W742153
Owner or Location: Driller: La Quad.; Bri	N392432 lyne-N.Y.	gantine Borough W742153  let Comp. date: 12/12/1925
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no.	N392432 lyne-N.Y. lgantine In lt no. 36.15 l. 56-9	gantine Borough W742153  let Comp. date: 12/12/1925
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth	Reantine Borough  W742153  let Comp. date: 12/12/1925  .171 Elevation: 10 ft
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft)	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft)	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Sand, blue
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Clay, blue
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Clay, blue Clay, blue Clay, blue Clay, blue Clay, blue Clay, blue Clay and shells
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495	wantine Borough W742153  let Comp. date: 12/12/1925 171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Clay, blue
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599	santine Borough W742153  let Comp. date: 12/12/1925 5.171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Clay, blue Clay, blue Clay, blue Clay, blue Clay, blue Clay, blue Clay and shells
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662	santine Borough W742153  let Comp. date: 12/12/1925 171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Clay, blue Clay, blue Clay, blue Clay, blue Sand, blue Clay, blue Shells and stone (gravel)
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745	santine Borough W742153  let Comp. date: 12/12/1925 171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Sand, blue Clay, blue Clay, blue Sand, blue Clay, blue Sand, blue Clay, blue Shells and stone (gravel) Clay, blue; hard pan
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771	gantine Borough  W742153  let Comp. date: 12/12/1925  171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay, and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray
Owner or Location: Driller: La Quad.: Bri Atlas Shee Permit no. Thickness (ft) 22 6 48 7 286 126 41 63 63 83 26 59	N392432 tyne-N.Y. igantine In et no. 36.15 . 56-9 Depth (ft) 0-22 22-28 28-76 76-83 83-369 369-495 495-536 536-599 599-662 662-745 745-771 771-830	santine Borough W742153  let Comp. date: 12/12/1925 .171 Elevation: 10 ft Depth drilled: 840 ft Lithology  Sand, blue Clay, blue Sand, gray Clay, blue Clay, blue Clay, blue Clay and shells Clay and shells Clay, blue Shells and stone (gravel) Clay, blue; hard pan Clay, soft Sand, brown and gray

## **Buena Borough**



#### **Buena Borough**

Well 104		Geographic code: 0104
Owner or r	ame: Mo	nfardini Brothers
Location: N	N393302	W745638
Driller: Va	nce Skinn	er
Quad.: Bud	na	Comp. date: 05/17/1982
Atlas Shee	t no. 31.43	
Permit no.	31-19096	Depth drilled: 160 ft
Thickness	Depth	Lithology
(ft)	(ft)	-
10	0-10	Sand, fine, yellow; white clay lenses
10	10-20	Sand, fine, light color
10	20-30	Sand, fine to medium, orange, clayey
10	30-40	Sand, fine; white clay layers
10	40-50	Clay, orange, 8 ft layer, some white sand
60	50-110	Sand, fine, orange, clayey
50	110-160	Sand, fine to medium, dark-orange

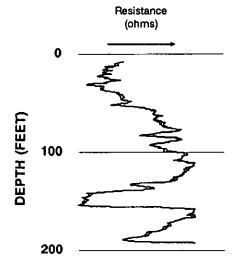
Well 105		Geographic code: 0104
Owner or a	name: Dor	n Visconti
Location: 1	N393113	W745620
Driller: Va	ince Skinn	er
Quad.: Bu	ena	Comp. date: 03/26/1982
Atlas Shee	t no. 35.03	262 Elevation: 108 ft
Permit no.	35-2418	Depth drilled: 160 ft
Thickness	Depth	Lithology
(ft)	(ft)	<del></del>
10	0-10	Sand, medium, orange
80	10-90	Sand, fine to medium, light-colored; white
		clay layers at 30-60 ft
30	90-120	Sand, fine to medium, yellow at 90-110 ft,
		orange at 110-120 ft
40	120-160	Sand, medium, orange, very clean

### Buena Vista Township

Well 101 Geographic code: 0105 Owner or name: Buena Regional School District Location: N393208 W745503 Driller: A.C. Schultes Quad.: Buena Comp. date: 02/1972 Atlas Sheet no. 31.43.685 Elevation: 110 ft Permit no. 31-5832 Depth drilled: 196 ft Thickness Depth Lithology (ft) (ft) ò-í Fill Clay, sandy Clay, yellow 11 1-11 6 11-17 11 17-28 Sand Clay, yellow Sand and clay layers 28-39 11 98 39-137 16 137-153 Clay, brown 43 153-196 Sand

# WELL 101 BUENA REGIONAL SCHOOL DISTRICT

**ELECTRIC LOG** 



Well 106	;	Geographic code: 0105
Owner o	r name: Bue	na Vista Township
_	: N393033	W745447
Driller: \	Vance Skinn	er
Quad.: B	luena	Comp. date: 08/17/1978
Atlas Sh	eet no. 35.03	
Permit n	o. 35-1725	Depth drilled: 136 ft
Thicknes	s Depth	Lithology
(ft)	(ft)	<del></del>
30	Ò-30	Sand, fine, white, clayey, siliceous
60	30-90	Sand, fine, pale-grayish-orange; trace thin
		clay strips (laminations)
10	90-100	Sand, medium, pale-grayish-orange
20	100-120	Sand, fine, pale-grayish-orange; slightly clayey
15	120-135	Sand, medium, orange-brown
1	135-136	Sand, gray; clay

Well 136		Geographic code: 0105
Owner or a	name: Eric	Hensel
Location: 1	N392741	W745229
Driller: De	lmarva D	rilling
Quad.: Do	rothy	Comp. date: 04/23/1968
Atlas Shee	t no. 35.04	
Permit no.	35-963	Depth drilled: 165 ft
Thickness	Depth	Lithology
(ft)	(ft)	<b></b>
1	Ò-1	Top soil
14	1-15	Sand, fine to coarse, tan, 1-4 ft, white, 4-15 ft
2	15-17	Clay
13	17-30	Sand, fine to medium, tan
4	30-34	Clay, yellow
1	34-35	Sand, fine to coarse, tan
23	35-58	Clay, gray at 35-51 ft, blue at 51-58 ft
39	58-97	Sand, fine, tan
63	97-160	Sand, fine to coarse, tan; iron ore (bog iron)
		gravel
5	160-165	Sand, fine, tan

Owner or r			
Location: 1	·	W745220	
Driller: D'Agostino Well Drilling			
Quad.: Do		Comp. date: 06/11/1982	
Atlas Shee			
Permit no.	35-3292	Depth drilled: 250 ft	
Thickness	Depth	Lithology	
(ft)	(ft)		
6	0 <b>-6</b>	Topsoil, black, loose	
9	6-15	Sand, fine, brown; clay	
45	15-60	Sand, fine to medium, brown; clay	
25	60-85	Sand, medium to fine, brown, some coarse	
15	85-100	Sand, fine to medium, brown; bits clay	
40	100-140	Sand, medium to fine, light and dark-gray,	
		some coarse	
50	140-190	Clay, black, sticky; sand, fine	
20	190-210	Sand, fine, dark-gray, some medium	
40	210-250	Sand, medium, light-gray, some fine	
Well 142		Geographic code: 0105	
Owneror			
Location: N392837		W745240	
Driller: Va			
Quad.: Five Points		Comp. date: 03/30/1971	
Atlas Shee			
Permit no.		Depth drilled: 155 ft	
Thickness		Lithology	
(ft)	(ft)		
10	0-10	Gravel, buff, clayey	
30	10-40	Sand, medium, dark-buff; slightly clayey,	
		some very coarse layers at 20-40 ft	
11	40-51	Sand, medium, light-buff; slightly clayey	
29	51-80	Sand, fine; buff at 51-74 ft; light-buff, slightly	
		clayey at 74-80 ft	
33	80-113	Sand, generally medium, buff; trace very	
		thin white clay strips (laminaions)	
13	113-135	Sand, medium to coarse, buff; darker-buff	
		at 126-135 ft	
20	135-155	Sand, fine to medium, light-buff; slightly	
		clayey; increasing clay at 141-155 ft	

Geographic code: 0105

Well 137

Well 143		Geographic code: 0105
		aracco Farms
Location: 1	N392817	W745443
Driller: Va	nce Skinn	er
Quad.: Five	e Points	Comp. date: 02/03/1977
Atlas Shee	t no. 35.03	.694 Elevation: 100 ft
Permit no.	35-1481	Depth drilled: 270 ft
Thickness	Depth	Lithology
(ft)	(ft)	
10	0-10	Gravel, buff; sand, red; slightly clayey
12	10-22	Clay, buff; stone (gravel) layers, grading to silty clay
34	22-56	Clay, hard, massive, buff; silty; grading to clayey sand
12	56-68	Sand, fine, buff, hard; clayey
22	68-90	Sand, buff, cemented; clayey
107	90-197	Clay, gray, some fine sand streaks, 120-197 ft
73	197-270	Sand, coarse, buff; grading to fine, hard, gray at 270 ft

Well 144		Geographic code: 0105
Owner or n	ame: C.C.	. Bylone
Location: N	N392843	W745449
Driller: Mi	lton Shepa	ard
Quad.: Five	Points	Comp. date: 03/28/1953
Atlas Sheet	t no. 35.03	.658 Elevation: 110 ft
Permit no.	35-152	Depth drilled: 195 ft
Thickness	Depth	Lithology
(ft)	(ft)	-
18	0-18	Gravel, buff, hard
5	18-23	Clay, buff
15	23-38	Stones (gravel); clay; sand
51	38-89	Sand, fine, buff, cemented at 38-46 ft and
		75-89 ft; gravel at 70-75 ft
4	89-93	Sand, buff
67	93-160	Clay, buff; cemented sand at 93-149 ft
10	160-170	Clay, gray
9	170-179	Clay; sand, buff
16	179-195	Gravel, buff, clean

### **Corbin City**

No wells included in this summary

### **Egg Harbor City**

Well 011		Geographic code: 0107
Owner or n	ame: Egg	Harbor City
Location: N	1393215	W743826
Driller: Artesian Well Drilling		
Quad.: Egg	Harbor (	City Comp. date: 04/1957
Atlas Sheet	no. 32.42	.494 Elevation: 40 ft
Permit no.	32-175	Depth drilled: 410 ft
Thickness	Depth	Lithology
(ft)	(ft)	
` <b>5</b>	0-5	Fill
36	5-41	Sand, coarse; white, 5-14 ft., 23-41 ft; gravel, yellow, 14-23 ft
42	41-83	Sand and clay
9	83-92	Sand, brown

15	92-107	Clay, black
13	107-120	Sand, coarse, white; gravel
61	120-181	Clay, black
16	181-197	Sand, fine, dirty
6	197-203	Sand, coarse, gray
125	203-328	Clay; black at 203-282 ft; sandy, 282-328 ft
5	328-333	Sand, coarse, water-bearing
14	333-347	Clay, stiff, sandy
5	347-352	Sand, coarse, water-bearing
4	352-356	Clay, sandy
48	356-404	Sand and gravel, water-bearing
6	404-410	Clay, sandy

#### **Egg Harbor City**

#### Well 012 Geographic code: 0107 Owner or name: Egg Harbor City Location: N393207 W743836 Driller: A.C. Schultes Quad.: Egg Harbor City Comp. date: 11/11/1964 Atlas Sheet no. 32,42,494 Elevation: 40 ft Permit no. 32-477 Depth drilled: 507 ft Thickness Depth Lithology (ft) (ft) Ò-4 Fill 8 Sand, fine to coarse 4-12 2 12-14 Clay 24 14-38 Sand, yellow 4 38-42 Clay 44 42-86 Sand, coarse; clay streaks 31 86-117 Sand, fine to medium 25 117-142 Clay, sandy, gray 24 142-166 Sand, fine, silty 26 166-192 Clay 112 Sand, silty; gray at 192-206 ft; fine, 206-304 ft 192-304 25 304-329 Sand; coarse, 304-317; 327-329 ft; fine, clayey, 317-327 ft 13 329-342 Clay; sand, fine 59 342-401 Sand; coarse, hard, 342-374 ft; fine, 374-380 ft, 389-401 ft; clayey, 374-380 ft; coarse to medium, 380-389 ft 2 401-403 Clay, silty 2 403-405 Hardpan 3 405-408 Sand, clayey 7 408-415 Clay, sandy 22 415-437 Sand 14 437-451 Clay, sandy 451-458 Sand 49 458-507 Clay, sandy

#### WELL 012 EGG HARBOR CITY

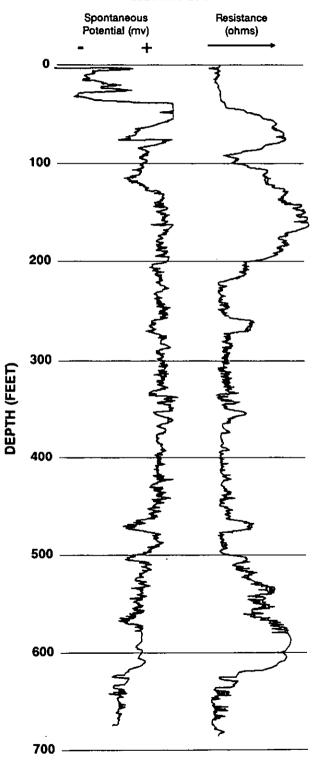
GAMMA-RAY LOG		MMA-RAY LOG	ELECTRIC LOG			
	Radiation increases		Spontaneous Potential (mv)	Resistance (ohms)		
	0 -		* T			
	100 -			}		
ET)		January 1		{		
DEPTH (FE	200 -					
	400 -			Jen Jan		
	460 –	}	3			

Well 324 Owner or	name: Eg	g Harbor City	Geographic code: 0107	10	84-94	Sand, fine to coarse, light-orange-yellow,
Location:	N393220	•	W743833	1	94-95	water-bearing Gravel conglomerate with iron-stone crust
Ouad.: E	isner and I g Harbor	Bennett City	Comp. data: 1907			6 in. thick; sandy clay, black, 6 in, thick
Atlas She	et no. 32.4:	2.494	Comp. date: 1897 Elevation: 40 ft	10	95-105	Sand, coarse, iron-rust colored; slushy (silty).
Permit no			Denth drilled: 371 ft	2	105-107	Gravel, lighter-colored, slushy (silty)
From Wo	olman, 189	8, p. 222; 1899	9, p. 73.	12	107-119	Sand fine light occurred to the
Thickness	Depth	Lithole			107-117	Sand, fine, light-orange to yellow; water-bearing at 97-119 ft
(ft)	(ft)			1	119-120	Clay, black, sandy; no microfossils
10	0-10	Mud, black;	recent freshwater diatom species	10	120-130	Sand, dark, clayey; few diatoms
3	10-13	Gravel, very	coarse; white pebbles with	12	130-142	Clay, dark, sandy, diatoms
_		limonite c	oating at 10-11 ft; muddy, 11-13 ft	4	142-146	Clay, gray, sandy
2	13-15	Gravel, coa	rse, dark	18	146-164	Clay, yellowish, sandy
9	15-24	Sand, fine, o	orange to yellow, clayey	70	164-234	Sand, dark; clayey, 164-199 ft, 216-234 ft
13	24-37	Sand, coarse	c, white, water-bearing	17	234-251	Sand, clayey, slightly yellow
8	37-45	Clay, orange	to vellow	39	251-290	Clay conder double a 251 ago control
27	45-72	Sand, very f	ine, yellow; clavey at 45-59 ft:	37	231-270	Clay, sandy; dark at 251-270 ft; lighter shade at 270-290 ft
_		slushy (sil	ty) at 59-72 ft	20	290-310	Sand and clay; coniferous wood (lignite)
6	72-78	Sand, fine; g	travel; slushy (silty)	18	310-328	Sand, brownish
. 6	78-84	Sand, very f	ine, dark-yellow, clayey	43	328-371	Sand, gray; water-bearing 346-371 ft

Well 112		Geographic code: 0108
Owner or i	name: Atla	intic City Water Department
Location: 1		W743212
Driller: La	ync-N.Y.	
Quad.: Ple	asantville	Comp. date: 08/11/1975
Atlas Shee	t no. 36.03	.796 Elevation: 20 ft
Permit no.	36-454	Depth drilled: 691 ft
Thickness	Depth	Lithology
(ft)	(ft)	-
2	0-2	Clay, yellow and white, sandy
45	2-47	Sand, fine to medium; gravel; sandy clay streaks
3	47-50	Clay, yellow and white
32	50-82	Sand, fine to medium; gravel; sandy clay streaks
27	82-109	Clay
116	109-215	Sand, fine to medium; gravel; clay streaks
32	215-247	Clay, tough, gray; sandy clay streaks
13	247-260	Sand, fine to coarse; gravel; clay streaks
88	260-348	Clay, sandy, tough; sand streaks
1	348-349	Shells; hard streaks
186	349-535	Clay, sandy; shell and sand streaks
85	535-620	Sand, fine to coarse; gravel; light-clay streaks
71	620-691	Clay, sandy

# WELL 112 ATLANTIC CITY WATER DEPARTMENT

#### **ELECTRIC LOG**



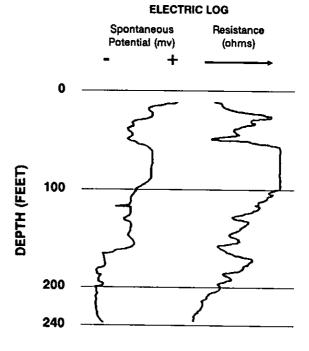
Well 119		Geographic code: 0108
Owner or r	name: New	Jersey Water Company
Location: I		W743300
Driller: C.	W. Laumar	
Quad.: Ple	asantville	Comp. date: 11/23/1971
Atlas Shee	t.no. 36.13.	
Permit no.		Depth drilled: 233 ft
Thickness	Depth	Lithology
(ft)	(ft)	<b>_</b>
` <b>á</b>	Ò-3	Loam and topsoil
11	3-14	Sand, coarse; gravel
33	14-47	Clay, solid; multicolored at 14-33 ft; gray at
		30-36 ft; sandy at 36-47 ft
3	47-50	Sand, coarse; gravel
9	50-59	Sand, fine to medium, brown
2	59-61	Sand, coarse; clay
7	61-68	Clay, solid, sandy, layered
10	68-78	Sand, fine to coarse, brown; clay
8	78-86°	Sand; sandy clay; clay layers
3	86-89	Sand, medium to coarse; hardpan
1	89-90	Clay, solid, gray
24	90-114	Sand, medium to coarse
11	114-125	Clay, solid, sandy, layered
25	125-150	Sand, brown; very fine at 125-146 ft; coarse
		at 146-150 ft
3	150-153	Very hard cemented formation
10	153-163	Sand; sandy clay; clay layers
40	163-203	Sand, coarse, brown; bits clay, hardpan
5	203-208	Sand, medium to coarse; some clay
25	208-233	Sand, fine, gray; sandy clay

# WELL 119 NEW JERSEY WATER COMPANY

	GAMMA-RAY LOG	ELECTRIC LOG
	Radiation Increases	Resistance (ohms)
0		
		<b>1</b>
100	<del>-</del>	
		<b>\( \langle \)</b>
150		

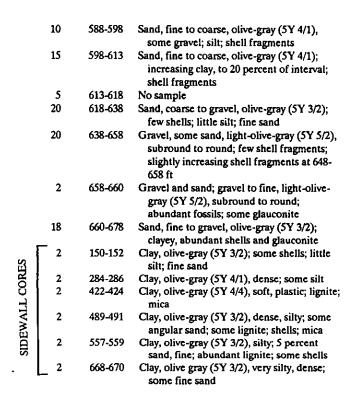
TT/ W 100				
Well 120		Geographic code: 0108		
Owneror	name: New	Jersey Water Company		
Location: 1	N392327	W743526		
Driller: A.	C. Schulter	5		
Quad.: Pie	asantville	Comp. date: 02/15/1980		
Atlas Shee	t no. 36.12	.619 Elevation: 20 ft		
Permit no.	36-1828	Depth drilled: 235 ft		
Thickness	Depth	Lithology		
(ft)	(ft)	<del></del>		
6	0-6	Sand, brown and white		
8	6-14	Clay, white and yellow		
2	14-16	Sand, brown		
29	16-45	Clay, yellow; gravel; sandstone		
54	45-99	Gravel, brown white; sand, coarse		
1	99-100	Clay		
60	100-160	Sand, hard packed at 123-160 ft		
57	160-217	Sand, medium to coarse, brown		
18	217-235	Sand, fine, gray		

#### WELL 120 NEW JERSEY WATER COMPANY

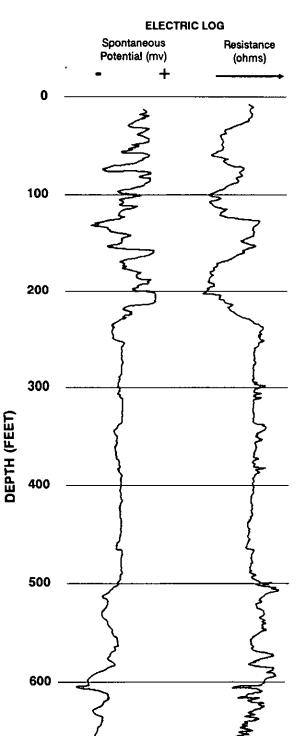


Well 126	Geographic code: 0108	34	164-198	Sand; grave	l, 164-171 ft; hard clay, 171-198 ft
Owner or name: U.S. Air Force	W	4	198-202	Clay	•
Location: N392652	W743512	47	202-249		muddy (silty) at 202-230 ft;
Driller: Ridpath and Potter Quad.: Pleasantville	Comp. date: 02/04/1965	3	249-252	coarse at	230-249 ft
Atlas Sheet no. 36.02.305	Elevation: SS ft	17	252-269	Sand; mudd	tv (siltv)
Permit no. 36-367	Depth drilled: 166 ft	28	269-297	Clay	y (anty)
Located at National Aviation Fa		20	297-317		, 297-308 ft; muddy (silty), 308-317 ft
(NAFEC) property.		2	317-319	Hardpan	
	ology	29	319-348	Sand	
(ft) (ft)		4 7	348-352 352-359	Clay	to Caller A
	wn; gravel; clay	12	359-371	Sand, mudd Marl, sandy	
2 7-9 Clay, brow 11 9-20 Sand, brow		134	371-505	Clay	, clay
	t-brown; little gravel at 20-23 ft;	6	505-511	Shells; sand	l, fine
	ny at 23-33 ft	129	<b>511-64</b> 0	Clay, hardp	an at 632-633 ft
	wn; little sand at 36-47 ft	30	640-670	Shells and s	sand
	t-brown; little sand	30	670-700	Sand	
5 60-65 Sand, bro 1 65-66 Gravel	wn	Well 286			Coornello sodo 0108
	rse; fine gravel 76-86 ft	1		riew Harbor V	Geographic code: 0108 Water Company
,	, followed by gray clay		: N391853	view 11m1001	W743208
	fine gravel	Driller: L	ayne-N.Y.		
	rse; gravel		cean City		Comp. date: 05/07/1958
	fine gravel		et no. 36.23	1.169	Elevation: 5 ft
	rse; hard pan at 110-111 ft	Permit no		4040 04	Depth drilled: 830 ft
15 116-131 Clay, blue 12 131-143 Sand, bro				rs, 1968, p. 30	0, 41; log by D.G. Parillo, N.J.
12 131-143 Sand, bro 138-142	wn, water-bearing; coarse at		al Survey. s Depth	Lithal	0.54
	er-bearing; dark at 143-	(ft)	s Depin (ft)	Lithol	ogy
	coarse at 144-166 ft	Recent:			
		40	0-40	Sand, media	um to fine, medium-gray, well
Well 128	Geographic code: 0108			rounded,	quartz; recent shell fragments;
Owner or name: South Jersey G	as Company	1		heavy mir	nerals, mostly hornblende,
Location: N392516	W743825				pyroxene and garnet; few shell
Driller: Layne-N.Y.		Come M	T		s, slightly finer at 20-40 ft
Quad.: Mays Landing	Comp. date: 01/30/1968	40	ay Formati 40-80		over come madium and and
Atlas Sheet no. 36.12.161	Elevation: 58 ft	20	80-100		o very coarse, medium-gray, quartz um to coarse, light-gray, rounded,
Permit no. 36-401	Depth drilled: 249 ft		00 100		eavy minerals, with opaques
	ology			dominant	
(ft) (ft)			ey Sand:		
5 0-5 Clay, yello 15 5-20 Sand, coa		60	100-160		um to coarse, light-gray, rounded,
	rse; gravel e to medium; gravel	90	160-250		lighty clayey at 140-160 ft
11 70-81 Clay, yello		70	100-230		um to coarse, medium-gray, well to subround, quartz, silty; few
	gh, white and gray				pebbles; cleaner (less silty), 200-
9 95-104 Sand, me	dium to coarse			210 ft	F, (),
22 104-126 Clay, gray			od Formati	on:	
	to medium, brown	30	250-280		um to coarse, medium-gray,
94 155-249 Clay, gray	r; sandy at 155-205 ft	20	200 200		l, slightly clayey quartz sand
Well 172	Geographic code: 0108	20	280-300		m-gray, clayey, sandy; finely is; no microfossils
Owner or name: Emma Kuntz	Grogiupine code. 0100	40	300-340		um, medium-gray, subround,
Location: N391842	W743247				me coarse; slighty clayey, 310-320 ft
Driller: Artesian Well Drilling		340	340-680		micaceous, medium-gray, sandy;
Quad.: Ocean City	Comp. date: 06/1949	-			sil fragments; heavy minerals are
Atlas Sheet no. 36.23.183	Elevation: 6 ft				nt opaque, well rutlilated
Permit no. 36-9	Depth drilled: 700 ft	•			e, little epidote, garnet, zircon,
Thickness Depth Lith	ology				e, rutile, kyanite-sillimanite; flat, liatoms, microscopic oolitic pyrite
(ft) (ft)	_	1			more sandy; shell fragments, 540-
6 0-6 Fill		]			ack lignitic sandy silt, 600-680 ft
4 6-10 Mud		20	680-700		ium to coarse, round, quartz;
	e at 10-28 ft; gray, 28-40 ft	1			ments, including small
3 40-43 Clay	1	35	700 735		ds; silty from 690-700 ft
22 43-65 Sand; gra	IACI	25 28	700-725 725-753		m-gray, sandy; shell fragments ium, medium to dark-gray, round,
11 65-76 Clay 8 76-84 Sand		20	120-133		lightly silty; about 25 percent
7 84-91 Gravel					ments; very coarse sand, 738-753 ft
9 91-100 Clay		32	753-785		ium to very coarse, slighty
8 100-108 Sand		1			n-gray, polished; some shell frag-
35 108-143 Clay	Latana	45	705 030		ery few shell fragments, 773-785 ft
21 143-164 Sand and	і сіау	45	785-830	Clay	

	r name: Egg	Geographic code: 0108 g Harbor Township High School	10	248-258	Sand, fine to medium, light-olive-gray (5Y 5/2), subangular, clayey; some silt; lig-
Driller: A Quad.: M	: N392344 A.C. Schulte Iays Landin	comp. date: 03/28/1985	10	258-268	nite; iron staining Sand, medium to coarse, light-olive-gray (5Y 5/2), subround to round; abundant
Permit no U.S. Geo		2.435 Elevation: 50 ft Depth drilled: 678 ft vey observation well.	10	268-278	clay, lignite; iron staining Clay, light-olive-gray (5Y 5/2) to olive-gray (5Y 3/2); sand, fine to medium; very fine
	s Depth	Lithology	40		lignite
(ft) 8	(ft) 0-8	Gravel, light-yellow to orange, loose, round;	10	278-288	Clay, olive-gray (5Y 3/2), trace sand, fine to coarse; abundant lignite; some silt
10	8-18	abundant yellow clay Gravel, light-yellow to varicolored; clay, light-yellow to white; silt; lignite	10	288-298	Clay, olive-gray (5Y 3/2); lignite; trace sand and gravel sized quartz; abundant shell fragments
10	18-28	Sand, fine to pebble (gravel), very light- yellow; abundant white clay; silt	10	298-308	Clay, olive-gray (5Y.3/2); sand, very fine to fine; some white clay; lignite; abundant
10	28-38	Sand, medium to coarse, orange to yellowish-orange; abundant orange clay; some silt	20	308-328	shell fragments Clay, olive-gray (5Y 3/2); increasing sand, very fine to medium, subround; abundant
10	38-48	Sand, fine to medium, yellowish-gray, round to subround; abundant yellow clay, lignite	20	328-348	shell fragments; some pyrite and mica Clay, olive-gray (5Y 3/2); decreasing sand;
10	48-58	Sand, very fine to medium, yellow (10YR 7/4); abundant yellow-orange clay;		020 0 10	abundant lignite at 328-338 ft; some shell fragments at 338-348 ft
10	58-68	silt; pebbles Sand, very fine to coarse, yellow (10YR 5/4), grading to burnt-orange; moderate clay;	10	348-358	Clay, olive gray (5Y 3/2); sand, 30-40 percent fine to coarse; 5 percent shell fragments; some pyrite
10	68-78	some silt and pebbles Sand, fine to medium, yellow, subround; trace white clay	20	358-378	Clay, olive-gray (5Y 3/2); 20 to 25 percent shell fragments; 15 to 20 percent very fine
10	78-88	Sand, fine to coarse, orange-yellow (10YR 6/6); trace white clay	10	378-388	to medium sand; some mica  Clay, olive-gray (5Y 3/2); some silt and mica; trace sand, very fine to fine
10	88-98	Sand and gravel; gravel, pebble to cobble, light-orange-yellow (10YR 8/6), subround to round; trace clay; trace sand, black,	10	388-398	Clay, olive-gray (5Y 3/2); large shell "pelecypod" fragments; increasing sand, fine, subround
10	98-108	gray and pink, quartz Sand, medium to coarse, light-orange-yellow (10YR 8/6), round to subround, quartz	10	398-408	Clay, olive-gray (5Y 3/2), silty; some shell fragments; some sand, fine, subround; minor white clay and mica
10	108-118	Sand, fine to coarse, brown to orange, subangular, quartz; trace sand, very fine	10	408-418	Clay, olive-gray (SY 3/2), silty; decreasing shell fragments; fine sand; some mica
10	118-128	Sand, medium to coarse, brownish-orange (10YR 5/4), quartz; some pebbles; chert;	10	418-428	Clay, olive-gray (5Y 3/2), sandy; increasing sand; some silt; few shell fragments
10	128-138	iron staining on grains Sand, very fine to medium, yellow-gray to orange-gray (10YR 7/4), round to subround, quartz, iron-stained	10	428-438	Sand, very fine to fine, light-olive-gray (5Y 5/2) to light-olive (10Y 6/2), suban- gular to subround; some shell fragments;
10	138-148	Clay, brown to gray; small amount of pyrite; lignite; silt; sand	10	438-448	some gray and green clay, little lignite Sand, very fine to fine, some medium, light-olive-gray (5Y 5/2); some shell frag-
20	148-168	Sand, very fine to fine, light-brown to gray, trace clay, brown to gray; increasing gray	10	448-458	ments and clay Sand, very fine to fine, light-olive-gray
10	168-178	chert and lignite at 158-168 ft Sand, fine, tan to light-gray to brown (5Y8/4); decreasing clay	10	458-468	(5Y 5/2), silty; some clay Clay, olive-gray (5Y 3/2); abundant shell
10	178-188	Sand, very fine to fine, light-tan becoming yellow-brown (10YR 6/2); lignite	40	468-508	fragments; silt; some fine sand and lignite Clay, olive-gray (5Y 3/2); some white clay,
10	188-198	Sand, silty to fine, yellow to orange (10YR 8/6); iron staining; abundant pyrite	30	508-538	trace sand; shell fragments at 478-508 ft Clay, tan and olive-gray (10YR 6/2); abundant shell fragments, increasing up to 6 mm in size at 528-538 ft; little sand,
20	198-218	Sand, silty to fine, yellow to brown (10YR 6/2); iron staining; some clay	20	538-558	silt Clay, olive-gray (5Y 3/2); shell fragments,
10	218-228	Sand, very fine to coarse, very-pale-orange (10YR 8/2); abundant clay	10	558-568	to 4 mm in size; increasing clay, 548-558 ft Clay, olive-gray (5Y 3/2); abundant shells,
10	228-238	Clay, olive-gray (5Y 3/2); 5 to 10 percent sandy, fine; silt; some mica	10	568-578	10 percent sand, fine to coarse; some silt
10	238-248	Clay, grayish-olive (10Y 4/2) to light-olive- gray (5Y 5/2); sand, 30 percent silt to	İ		Silt, olive-gray (5Y 3/2), clayey; few shells; some brown silty clay
		medium; lignite, very fine, black	10	578-588	Sand, fine to coarse, olive-gray (5Y 3/2), clayey; some shells



#### WELL 293 EGG HARBOR TOWNSHIP HIGH SCHOOL

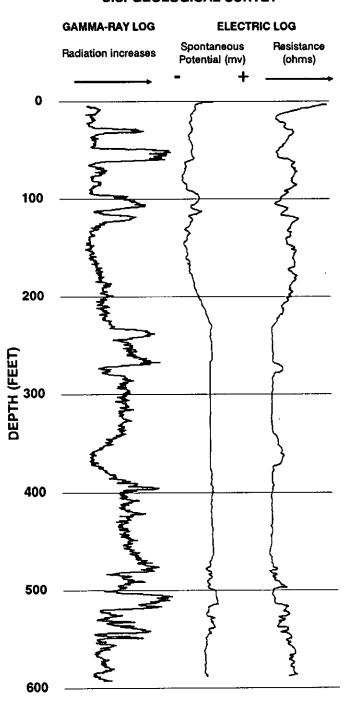


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Well 294	l	Community of the 0100	مد ا		
		Geographic code: 0108 S. Geological Survey	10	160-170	Sand, coarse at top, fine to medium at base,
Location	: N392639	W743232			dark-yellowish-orange (10YR 6/6), very
	A.C. Schulte		10	170-180	argillaceous; trace ironstone (bog iron)
	leasantville		10	170-100	Sand and clay; sand, fine to coarse, pale-
	eet no. 36.0; o. 36-5092				yellowish-orange (10YR 8/5), subangular to subround, 20 percent iron stained clay
		Depth drilled: 608 ft National Aviation Facility Eperimental			coated; clay, dark-yellowish-orange to
Center (	NAFEC) pi	roperty.			medium-gray (NS), firm, subblocky to
Thicknes	s Depth	Lithology			sub-fissile; lignite, dark-brown to black;
(ft)	(ft)				trace silt
10	0-10	Sand, fine to coarse, dusky-yellow (5Y 6/4),	10	180-190	Sand, fine to medium, dark-yellowish-brown
		loose, subangular, argillaceous, trace iron staining			(10YR 4/2), subangular, trace silica ce-
10	10-20	Sand, medium to coarse, dusky-yellow			ment; orange iron stained clay; trace
		(5Y 6/4), loose, subround; some very fine			lignitic clay with very fine pyrite crystals;
		to fine subangular sand; trace slightly	10	100.000	some silt
10	20-30	iron stained clay	10	190-200	Sand, fine to coarse, dark-yellowish-brown
10	20-30	Sand, medium to coarse, dusky-yellow (5Y 6/4) becoming yellowish-gray (5Y 7/2); trace			to moderate-yellowish-brown (10YR 5/4),
		light-yellow clay; some light-gray chert			round to subangular, some pyritic in-
10	30-40	Gravel and sand; sand, medium to very			clusions in quartz grains; increasing iron stained argillaceous material; trace
		coarse, very-pale-orange (10YR 8/2);			ironstone (bog iron)
		gravel, light-orange to light-gray, round	10	200-210	Sand, very fine to fine, moderate-yellowish-
		to subround; trace of iron-stained clay			brown (10YR 5/4), subround, 10 percent
10	40-50	coating grains Clay, grayish-yellow (5Y 6/4), blocky, soft;			iron-stained; clay, light-brown; trace silt
		sand, medium to coarse, subround; trace	10	210-220	Sand and silt; sand, very fine, moderate-
		brown lignite and iron-stained clay			yellowish-brown (10YR 5/4); grading to
10	50-60	Gravel, grayish-yellow (5Y 6/4) to very-pale-			silt at base; increasingly abundant brown
		orange (10YR 8/2), loose to very friable,			argillaceous debris; scattered very finely
		round; trace light-yellow clay coating grain surfaces; sand, medium to coarse;			crystalline pyrite
		abundant clay at base	10	220-230	Sand, very coarse to very fine, moderate-
10	60-70	Clay, very-light-gray (N8) to yellowish-gray	1		yellow-brown (10YR 5/4) to varicolored,
		(5Y 7/2), very soft, blocky; trace very fine			round; some sand, iron-cemented, bright-
10	70.00	lignite; some sand			red, yellow to brown and orange;
10	70-80	Clay and sand; clay, white (N9), becoming	10	230-240	abundant light-brown clay
		dark-yellowish-orange (10YR 6/6), soft, blocky; sand at base is very fine to medium,	10	230-240	Clay, light-olive-gray (5Y 4/4) to olive-gray
		yellowish-orange, with dark-orange coatings			(5Y 3/2), soft; abundant very fine to coarse sand, angular, very silty in part
10	80-90	Sand, fine to medium, dark-yellowish-orange	30	240-270	No record
		(10YR 6/6), very friable, subangular,	10	270-280	Sand, medium to coarse, light-olive-gray
		abundant dark-orange clay; trace rounded silt grains with 20 percent			(5Y 4/4), subangular, very argillaceous;
		exhibiting dark-orange coating			clay, brown to orange; trace pyrite; trace
10	90-100	Sand, fine to coarse, dark-yellowish-orange			light-green glauconite grains; trace light-
		(10YR 6/6), subround to subangular, very	10	200 200	gray chert
		clayey; abundant iron staining and thin dense ironstone (bog iron) laminations;	10	280-290	Sand, fine to medium, light-olive-gray
		trace lignite			(5Y4/4), subround; very clayey, olive gray;
10	100-110	Sand, medium to coarse, dark-yellowish-	10	290-300	trace pyrite; some dark-gray argillite Sand and clay; sand, fine to coarse, light-olive-
		orange (10YR6/6), subround, 30 to 40	1	270 300	gray (5Y 4/4), angular to subangular;
		percent iron stained; dark-orange clay			grading to olive gray clay, soft; silt; some
		with trace dark-gray streaks (lamina-			mica
10	110-120	tions); very lignitic, dark-brown to black Clay, medium-dark-gray (N4), subblocky to	10	300-310	Sand, very fine to fine, light-olive-gray
		slightly fissile, firm; abundant lignite;			(5Y 5/2), round to subround; 20 percent
		sand, fine to coarse			iron-stained; becoming very dayey, olive-
10	120-130	Clay, medium-dark-gray (N4) at top of	1		gray to olive-brown; very fine black carbona
		section, becoming light-brownish-gray			ceous flakes; some clay, tan to white
		(5YR 6/1) at base, firm, blocky to sub- blocky, increasingly iron stained; abundant	10	310-320	Clay, light-olive-gray (5Y 5/2), soft to very
		lignite; trace sand, fine to medium			soft; decreasing sand, very fine to fine, 20
10	130-140	Sand, fine to medium, light-brownish-gray			to 30 percent orange iron-stained; black
10	140 150	(5YR 6/1), subangular, abundant lignitic clay			carbonaceous flakes; trace pyrite; 2 per-
10	140-150	Sand, fine to coarse, light-brownish-gray	10	320-330	cent clay, tan to white
		(5YR 6/1), subangular to subround; dark- orange stained clay-coated at base; 30-40	10	J20-JJU	Clay, light-olive-gray (5Y 4/4), soft, very thinly bedded; lignite; pyrite; sand, coarse
		percent clay, grayish-orange, soft; lignitic			to very coarse, subangular to subround:
10	150-160	Sand, fine to medium, coarser at base, dark-			trace green, orange and white clay
		yellowish-orange (10YR 6/6), subangular;	10	330-340	Clay, light-olive-gray; silt sized mica; coarse
		60 percent of sand heavily iron-stained			to gravel-sized grains; some sand, gravel,
					white, predominately light-orange stained
			•		

10	340-350	Clay and gravel; clay, light-olive-gray, soft,
		firm; increasing gravel, less orange-stained, 20 to 30 percent pink and red iron stained; decreasing sand, coarse to very coarse;
10	350-360	Clay and gravel; clay, light-olive-gray, soft; abundant subround 4 mm or larger gravel, most fractured, pink and bright-
10	360-370	orange iron stained Clay, olive-gray (5Y 3/2), soft, dense, sticky, uniform; decreasing coarse sand, gravel;
10	370-380	10 percent or less silt Clay, olive-gray (5Y 3/2), soft, sticky; very sandy, fine to medium, angular to sub- round; some black lignite flakes; trace silt
10	380-390	and pyrite Clay and sand; clay, olive-gray (5Y 3/2), soft to very soft, sticky; trace silt; sand, coarse
		to very coarse, olive-gray to light-olive- gray, subangular, grains appear to be composed of fine sand cemented into very coarse sand grains by silica; inclusions of olive-gray clay and pyrite are common
10	390-400	Clay, olive-gray (5Y 3/2), soft, uniform, sticky, dense; decreasing very coarse sand; trace sand, very fine to fine, rounded; trace red and orange sand;
10	400-410	pyrite coating Clay, olive-gray (5Y 3/2), soft, blocky, very sticky, dense, uniform; trace sand, light-
10	410-420	olive-gray; very fine pyrite; trace mica Clay, olive-gray (5Y 3/2), soft, uniform; sand, fine to coarse; some red to orange iron staining; some pyrite and mica
10	420-430	Clay, olive-gray (5Y 3/2), blocky, soft; trace pyrite; some coarse sand; some silt; mica
10	430-440	Clay, olive-gray (5Y 3/2), blocky, sticky, soft; some silt; sand, medium to coarse; pyritic;
10	440-450	micaceous Clay, olive-gray (5Y 3/2) and dusky-yellowish- brown (10YR 2/2), soft, sticky, firm, blocky, silty, pyritic, dense in part, iron
10	450-460	stained; some sand, fine to coarse Clay, olive-gray (5Y 3/2), soft, sticky, uniform; trace angular silt; pyritic; mica, decreas-
10	460-470	ing brown clay with some sand Clay, olive-gray (5Y 3/2), some dusky- yellowish-brown (10YR 2/2), soft, firm,
10	470-480	pyritic, silty; trace sand; micaceous Clay, olive-gray (5Y 3/2), blocky, soft, dense, sticky, uniform; trace silt; trace sand,
10	480-490	dusky-yellowish; micaceous Clay, olive-gray (5Y 3/2), soft, blocky, dense; very fine euhedral pyrite; silt; some
10	490-500	angular sand; trace fossil fragments; micaceous Clay, olive-gray (5Y 3/2), blocky, firmer, less sticky; trace silt; abundant shells with 30 percent pitted, altered to glauconite, some
10	500-510	whole specimens; white clay, trace sand Clay and shells; clay, olive-gray (5Y 3/2) to dusky-yellowish-brown (10YR 2/2); shells, grayish-orange-pink (10R 8/2);
10	510-520	clay, olive-gray, soft to firm; pyritic; micaceous; some alteration to glauconite; brown very sandy clay; trace mica Clay and shells; clay, olive-gray (5Y 3/2) to grayish-orange-pink (10R 8/2), soft, sticky; abundant pelecypod fragments; trace glauconite and lacy pyrite

### WELL 294 U.S. GEOLOGICAL SURVEY

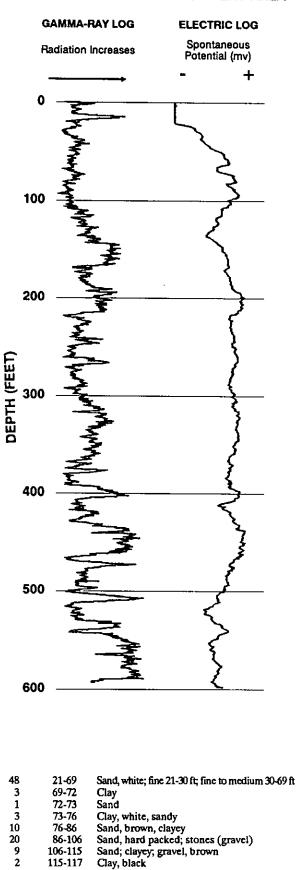


Webl 315	Well 215					
Owner or name: Mr. Fiffield Loadion: N9391847 UP4307 UP16187 UP4307 UP16187 UP4307 UP16187 UP4307 UP16187 UP4307 UP16187 UP4308 UP4308 UP43087 UP4308 UP43087 UP4308 UP43087 UP4308 UP43087 UP43087 UP43087 UP4308 UP43087 UP43087 UP43087 UP43087 UP43087 UP43088 UP43087 UP4	44 CH 313		Geographic code: 0108	16	64-80	Clay, tan
Location: N991847	Owner or	r name: Mr.				
Driller				1		
Quadi: Ocean City   Comp. date: 1891   Elevation: 5f to Depth drilled: 397 ft   Depth drilled: 397 f			***************************************			
Atlas Sheet no. 36.23.169   Elevation: 5 ft   Permit no. 56.32   Prom Woolman, 1893, p. 281.			Comp. date: 1801			
Permit no. 56-83				/"	140-210	
Prom Woolman, 1893, p. 281.				1 00	240 240	
Thickness   Depth				30	210-240	
(ii) 40 0-40 Beach sand 40 Beac	<b>-</b>					219-240 ft
10   40-90   Mud, some shells   18   299-317   Sand, fine, gray; clay, gray	Thicknes	s Depth	Lithology		240-262	Sand, medium, brown
10	(ft)	(ft)		37	262-299	Sand, medium to coarse, gray, white clay,
18			Beach sand			
8 59.58 Gravel, coarse 2 58-60 Clay, white, gray 3 33-38.2 Clay, white, gray and, fine, gray 4 66-70 Clay, dark 9 67-70 Clay, dark 19 82-75 Clay,				18	299-317	
2						
6 60-66 Gravel, coarse sand 4 66-70 Clay, dark 14 70-84 Gravel, coarse; arter 19 84-75 Sand, gray, lignite, 160-164 ft 19 19 84-77 Sand, gray, lignite, 160-164 ft 19 275-294 Clay, gravel at 93-405 ft 19 345-397 Clay, solid, greenish-blue 51 346-397 Clay, solid, greenish-blue 6 Geographic code: 0108 6 Went or or name: Egg Harbor Township High School Coatton: N392344 W743749 5 Driller N.J. Geological Survey Ound: Maye Landing 6 Comp. date: 06/14/1985 6 Depth clinics: 577 ft 105. Geological Survey Clinics: 18 Clay, solid commit gravel 5 13-18 Clay, sellow and white 2 18-40 Sand, fine to medium; gravel 6 40-46 Clay, yellow 18 4 65-50 Sand, fine and medium; gravel 19 140-147 Clay, white 2 170-190 Sand, fine to medium; gravel 10 170-190 Sand, fine to medium; gravel 11 121-225 Sand, coarse, white and streads 12 147-17 Liginte, large amounts; white sand, gravel; 18 212-225 Sand, medium twite clay 19 217-225 Sand, grave, and streads 19 217-225 Sand, grave, shells, signite 20 170-190 Sand, fine to medium; gravel 21 170-190 Sand, fine to medium; gravel 22 190-212 Sand, coarse, white and streads 23 147-17 Ligignite, large amounts; white sand, gravel; 19 212-25 Sand, medium to coarse, white and orange; 11 212-25 Sand, medium coarse, white and orange; 11 212-25 Sand, medium coarse, white and orange; 12 12 12 Sand, medium coarse, white and gray; lignite 13 36-37 Clay, dark-greenish-gray, shells, lignic 13 37-37 Clay, dark-greenish-gray, shells, lignic 13 37-39 Clay, dark-greenish-gray, shells, lignic 13 37-39 Clay, dark-greenish-gray shells, lignic 14 30-30 Sand, tan 15 15-30 Clay, grave; dark shell, fine at an addition: 5th 17-10s 110s 110s 110s 110s 110s 110s 110s						
4   66-70   Clay, dark   14   70-84   Greeqle, coarse; water at 84 ft   19   27-594   Greeqle, coarse; garvel   19   28-275   281-346   Sand, greegish   19   28-275   294-346   Sand, greegish   7   434-461   20   46-486   Sand, fine, gray; clay at 437-441 ft   19   27-594   Clay, greenish   7   434-461   Clay, proven; shells   20   466-486   Clay, proven; shells   20   28   28   28   28   28   28   28						
14						
19   28-275   May greenish   19   27-294   Caly greenish   19   27-294   Caly greenish   19   27-294   Caly greenish   19   28-294   Caly greenish   19						
19   275.294   Clay, greenish   52   294.346   Sand, coarse; gravel   51   346.397   Clay, solid, greenish-blue   52   461.466   Sand, fine, gray   Clay, brown; shells   No sample   Clay, brown; shells   No sample   Clay, brown; shells   No sample   Clay, brown and grayish-green   Clay, brown; shells   Clay, brown; shell						
Sand, course; gravel   5						
Start   Star			Clay, greenish			
Well 341   Geographic code: 0108   25   484-576   Clay, brown and graysish-green   Clay brown and graysish-green   Clay brown; gravel; shells, \$21-544 ft   Clay, brown and graysish-green   Clay, brown, shells at \$87-601 ft   Clay, b		294-346	Sand, coarse; gravel			
Well 34    Geographic code: 01.08	51	346-397	Clay, solid, greenish-blue			Clay, brown; shells
Downer or name: Egg Harbor Township High School   126   28   548-57   576-581   576-						No sample
Ditler: NJ. Geological Survey					521-548	Clay, brown; gravel; shells, 521-544 ft
Ditaches   Discological Survey			Harbor Township High School	28	548-576	Clay, brown and grayish-green
Driller: N.J. Geological Survey   Comp. date: 06/14/1985   Government on 36:12.435   Elevation: 50 ft   Depth drilled: 377 ft   U.S. Geological Survey observation well.				5	576-581	
Quad.: Mays Landing	Driller: N	V.J. Geologi	cal Survey			
Allas Sheci no. 36.12.435   Elevation: 30 ft						
Permit no. 36-5517					001-001	ound, medium, gray
U.S. Geological Survey observation well.   Thickness Depth Lithology						
Thickness   Depth   Lithology				ŀ	Es	telle Manor City
(ft) (ft)  13			· · · · · · · · · · · · · · · · · · ·			
Owner or name: Peaslee Wildlife Management Area			Lithology	W-11 179		Coornelis and a 0100
Coation: N391946		. ,		l .		
18-40   Sand, fine and medium; gravel   Clay, yellow   Clay, yellow   Clay, yellow   Clay, yellow   Sand, fine to medium; gravel   Sand, medium to sand, coarse, some gravel   Gravel; sandstone, yellow, hard, layered; light gray day streaks; 130-140 ft   Sand, gravel; dark clay streaks at 155-170 ft   Sand, fine to medium, white; lignite   Sand, fine to medium, white; lignite   Sand, fine to medium, white; lignite   Sand, coarse, white and pellow, stones (gravel); wood (lignite); light-gray clay layers, 200-121 ft   Sand, medium to coarse, white and orange; less wood (lignite)   Sand, medium to coarse, white and orange; less wood (lignite)   Sand, gravel; clay layers, 200-121 ft   Sand, orange, less wood (lignite)   Sand, medium to coarse, white and orange; less wood (lignite)   Sand, gravel; clay layers, 200-121 ft   Sand, streaks at 155-170 ft   Sand, medium to coarse, white and orange; less wood (lignite)   Sand, streaks at 155-170 ft   Sand, streaks at 155-180 ft   Sand,			Sand, fine to medium; gravel			
Quad: Tuckahoe		13-18	Clay, yellow and white	1		· · · · · · · · · · · · · · · · · · ·
Atlas Sheet no. 35.24.213 Elevation: 40 ft   24	22	18-40	Sand, fine and medium; gravel			
Allas Sheet no. 35.24.213   Elevation: 40 ft	6	40-46	Clay, yellow			
24   50-74   Sand, fine to medium; gravel   2   74-76   Clay, white   Sand, medium; white clay   Sand, coarse, some gravel   Sand, coarse, doctorse, some gravel   Sand, coarse, doctorse, white and yellow; stones (gravel); wood (lignite)   Sand, fine to medium, white; lignite   Sand, medium to coarse, white and orange; less wood (lignite)   Sand, fine to medium, white; lignite   Sand, medium to coarse, white and orange; less wood (lignite)   Sand, some some gravel; lignite, some gravel; l	4	46-50		Atlas She	et no. 35.24	.213 Elevation: 40 ft
2	24			Permit no	o. 35-4903	Depth drilled: 600 ft
4				Joint exp	loratory box	ehole of N.J. Geological Survey and U.S.
Thickness   Depth   Clay, clay   Clay, cla						,
124-140   Gravel; sandstone, yellow, hard, layered; light gray day streaks, 130-140 ft   18   0-18						Lithology
140-147						<b>&amp;</b>
7	10	124-140				Sand, vellow: gravel: clay streaks
23   147-170   Lignite, large amounts; white sand, gravel; dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft and clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks at 155-170 ft dark clay streaks dark dark clay streaks dark clay	7	140 147				
20   170-190   Sand, fine to medium, white; lignite   20   53-73   Sand, fine to medium, white; lignite   20   53-73   Sand, fine to medium, tan   22   190-212   Sand, orange, white and yellow; stones (gravel); wood (lignite); light-gray clay layers, 200-212 ft   521-225   Sand, medium to coarse, white and orange; less wood (lignite)   Lignite, more; coarser sand   15   225-240   Lignite, more; coarser sand   20   160-180   Clay, spirsy, sticky   15   225-240   Lignite, more; coarser sand   20   160-180   Clay, olive-gray; stones (gravel); wood (lignite)   15   145-160   Clay, gray stones (gravel); wood (lignite) and clear sand at 175-180 ft   Sand, medium, clear, white and gray, olive   Sand, medium, clear, white and gray, olive   Sand, medium, clear, white and gray, olive   Sand, medium to coarse, white, gray, clean   Clay, olive-gray; shells; lignite   50   188-238   Sand, medium to coarse, white, gray, clean   Clay, olive-green; silt; greenish-gray sand; shells; fine silt and sand layers at 355-376 ft   12   248-260   Sand, coarse, gray; white epbbles (gravel); wood (lignite)   Sand, dark-brown and green; lignite   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, dark-brown lay layers   Clay, dark-brown; sand layers   Sand, coarse, gray; shell fragments   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, dark-brown; sand layers   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, dark-brown; sand layers   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, dark-brown; sand layers   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, dark-brown; sand layers   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand, dark-brown; sand, fark-brown; sand, fark-brown; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and br						
20   170-190   Sand, fine to medium, white; lignite   20   53-73   Sand, fine to medium, tan   21   190-212   Sand, coarse, white and yellow; stones (gravel); wood (lignite); light-gray clay layers, 200-212 ft   53   525-240   Lignite, more; coarser sand   15   225-240   Lignite, more; coarser sand   240-270   Silt, fine, greenish-gray; lignite   20   160-180   Clay, gray, sticky   Sand, white; yellow at 76-135 ft; gravel, dark-yellow clay, 135-145 ft   160-180   Clay, gray, sticky   Sand, white; yellow at 76-135 ft; gravel, dark-yellow clay, 135-145 ft   Sand, white; yellow at 76-135 ft; gravel, dark-yellow clay, 135-145 ft   Sand, white; yellow at 76-135 ft; gravel, dark-yellow clay, 135-145 ft   Sand, white; yellow at 76-135 ft; gravel, dark-yellow clay, 135-145 ft   Sand, medium to coarse, white and gray, olive gray streaks; lignite   Sand, medium, clear, white and gray, olive gray streaks; lignite   Sand, medium to coarse, white, gray, clean   Sand, sand, medium, clear, white and gray, olive   Sand, sand, sand sand layers at 355-376 ft   Sand, sand, sand sand layers at 355-376 ft   Sand, sand, sand sand layers   Sand, sand, sand sand sand sand sand sand sand sand	23	147-170				
22   190-212   Sand, coarse, white and yellow; stones (gravel); wood (lignite); light-gray clay layers, 200-212 ft sound (lignite) coarse, white and orange; less wood (lignite) coarser sand   20   160-180   Clay, olive-gray; stones (gravel); wood (lignite) and clear sand at 175-180 ft sand, white and gray, olive gray stoles; lignite   20   160-180   Clay, olive-gray; stones (gravel); wood (lignite) and clear sand at 175-180 ft sand, white and gray, olive gray stells; lignite   230-230   Clay, darker-greenish-gray; shells; lignite   50   188-233   Clay, olive; sand streaks at 203-238 ft   160-180   Clay, olive-gray; stoles; lignite   50   188-238   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Clay, olive-gray; stoles; lignite   50   188-238   Sand, medium to coarse, white, gray, clean   160-180   Clay, olive; sand streaks at 203-238 ft   160-180   Clay, olive; sand streaks a		450 400				
Weight   Wood (lignite); light-gray clay layers, 200-212 ft   13   212-225   Sand, medium to coarse, white and orange; less wood (lignite)   15   145-160   Clay, gray, sticky   160-180   Clay, olive-gray; stones (gravel); wood (lignite) and clear sand at 175-180 ft   160-180   Clay, olive-gray; stones (gravel); wood (lignite) and clear sand at 175-180 ft   160-180   Clay, olive-gray; stones (gravel); wood (lignite) and clear sand at 175-180 ft   160-180   Clay, olive-gray; stones (gravel); wood (lignite) and clear sand at 175-180 ft   160-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray; stones (gravel); wood (lignite)   160-180   Sand, medium, clear, white and gray, olive gray; streaks; lignite   160-180   Sand, medium, clear, white and gray, olive gray; streaks; lignite   160-180   Sand, sand, clear, white and gray, olive gray; stones (gravel); wood (lignite)   160-180   Sand, sand, doarse, gray streaks; lignite   160-180   Sand, sand, sand, gray, sticky   175-180   Sand, clear, and gray, olive gray; streaks; lignite   175-180   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   175-180   1						
13   212-225   Sand, medium to coarse, white and orange; less wood (lignite)   15   225-240   Lignite, more; coarser sand   30   240-270   Sitt, fine, greenish-gray, lignite   25   305-330   Clay, clive; hard shell layers, lignite   25   305-330   Clay, clive; parenish-gray, shells; lignite   10   330-340   Clay, light-gray; shells; lignite   50   188-238   Clay, clive; sand streaks at 203-238 ft   248-260   Clay, clive-greenish-brown   15   273-290   Clay, dark-greenish-brown   17   273-290   Clay, clive-gray; shells; fignite   17   273-290   Clay, clive-gray; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   17   273-290   Clay, clive-gray; shells fragments   18   30-372   Clay, clive-green; shelf fragments   17   273-290   Clay, clive-gray; shell fragments   18   30-372   Clay, clive-gray; shell fragments   18   30-372   Clay, clive-gray; shell fragments   19   Sand; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   30-340   Clay, clive-gray; shells   18   Sand, shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   Sand, shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Clay, clive-gray; shell fragments   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   Sand; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   Sand; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   Sand; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   Sand; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   18   Sand; shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310 ft   273-290   Shells; clan, 290-298 ft; sand, lignite, 298-310	22	190-212				
Lignite, more; coarser sand   15   145-160   Clay, gray, sticky   Clay, olive-gray; stones (gravel); wood   (lignite) and clear sand at 175-180 ft   180-188   Sand, medium, clear, white and gray, olive gray streaks; lignite   180-180   Sand, medium, clear, white and gray, olive gray streaks; lignite   10   330-340   Clay, light-gray; shells; lignite   10   330-340   Clay, light-gray; shells; lignite   10   376-377   Clay, olive-green; silt; greenish-gray sand; shells; fine silt and sand layers at 355-376 ft   12   248-260   Clay, olive-green; lignite   Clay, olive-green; lignite   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   Sand; alax-brown (as alax-brown (as alax-brown (as alax-brown (as alax-brown (as alax-brown (as alax-brown (as ala			wood (lignite); light-gray clay layers, 200-212 ft	69	70-145	Sand, white; yellow at 76-135 ft; gravel, dark-
Lignite, more; coarser sand   20	13	212-225	Sand, medium to coarse, white and orange;			yellow clay, 135-145 ft
15   225-240   Lignite, more; coarser sand   30   240-270   Silt, fine, greenish-gray; lignite   35   270-305   Clay, olive; hard shell layers, lignite   25   305-330   Clay, darker-greenish-gray; shells; lignite   10   330-340   Clay, light-gray; shells; lignite   50   188-233   Clay, olive; sand streaks at 203-238 ft   36   340-376   Clay, olive-green; silt; greenish-gray sand; shells; fine silt and sand layers at 355-376 ft   12   248-260   Clay, brown and green; lignite   248-260   Clay, brown and green; lignite   Clay, olive; sand streaks at 203-238 ft   248-260   Clay, olive;			less wood (lignite)			
30	15	225-240		20	160-180	Clay, olive-gray; stones (gravel); wood
35   270-305   Clay, olive; hard shell layers, lignite, 284-305 ft 25   305-330   Clay, darker-greenish-gray, shells; lignite 10   330-340   Clay, light-gray; shells; lignite 30   340-376   Clay, olive-green; silt; greenish-gray sand; shells; fine silt and sand layers at 355-376 ft 1   376-377   Clay, dark-greenish-brown		240-270				(lignite) and clear sand at 175-180 ft
25 305-330 Clay, darker-greenish-gray; shells; lignite 10 330-340 Clay, light-gray; shells; lignite 36 340-376 Clay, olive-green; silt; greenish-gray sand; shells; fine sit and sand layers at 355-376 ft 1 376-377 Clay, dark-greenish-brown  Well 347 Geographic code: 0108  Owner or name: Comfort Inn Location: N392257 W743008  Driller: A. C. Schultes  Quad.: Pleasantville Atlas Sheet no. 36.13-555  Permit no. 36-5339 Depth (ft) (ft) (ft)  15 0-15 Sand (ft) (ft) (ft)  15 0-15 Sand (ft) (ft) (ft)  16 (15) 17 (15) 18 -238  Clay, olive; sand streaks at 203-238 ft Clay, olive; sand streaks at 203-238 ft Clay, olive; sand, medium to coarse, white, gray, clean Clay, brown and green; lignite Sand, coarse, gray; white pebbles (gravel); wood (lignite) Sand; dark-brown clay layers Clay, dark-brown; sand layers Clay, dark-brown; sand layers Clay, olive-gray; shell fragments Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown; sand layers Clay, dark-brown; sand layers Clay, dark-brown; sand layers Clay, dark-brown; sand layers Clay, olive-gray; shell fragments Shells; clay, olive Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Shells; clay, olive Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft Clay, olive-green Sand, fine; shells Sand, fine; shells Sand, fine; shells Sand, fine, gray at 38-49 ft; medium, light- Sand; shells; sand, fine		270-305		8	180-188	
10 330-340 Clay, light-gray; shells; lignite 36 340-376 Clay, olive-green; silt; greenish-gray sand; 36 340-376 Clay, olive-green; silt; greenish-gray sand; 376-377 Clay, dark-greenish-brown  Well 347 Geographic code: 0108  Owner or name: Comfort Inn  Location: N392257 W743008  Quad.: Pleasantville Atlas Sheet no. 36.13.555 Elevation: 5 ft Permit no. 36-5339 Depth drilled: 661 ft  Thickness Depth (ft) (ft) (ft) 15 0-15 Sand (ft) (ft) 15 0-15 Sand (ft) 16 0-15 Sand (ft) 17 273-290 (ft) 188-238 Clay, olive; sand streaks at 203-238 ft 238-248 Sand, medium to coarse, white, gray, clean 248-260 Clay, brown and green; lignite 248-260 Sand, carven, lignite 248-260 Sand, carven, lignite 248-260 Clay, brown and green; lignite 248-260 Sand, carven, lignite 24						gray streaks; lignite
36   340-376   Clay, olive-green; silt; greenish-gray sand; shells; fine silt and sand layers at 355-376 ft shells shells shell sh				50	188-238	Clay, olive: sand streaks at 203-238 ft
Shells; fine silt and sand layers at 355-376 ft   12   248-260   Clay, brown and green; lignite   Sand, coarse, gray; white pebbles (gravel); wood (lignite)   wood (lignite)						Sand, medium to coarse, white, gray, clean
1 376-377 Clay, dark-greenish-brown  Well 347 Geographic code: 0108  Owner or name: Comfort Inn  Location: N392257 W743008  Driller: A.C. Schultes  Quad.: Pleasantville Atlas Sheet no. 36.13.555  Permit no. 36-5339  Thickness Depth Lithology  (ft)  (ft)  15  15  15  15  15  15  15  15  15  1	50	540-570				
Well 347   Geographic code: 0108   5   268-273   Sand; dark-brown clay layers	1	276 277				
Second Composition   Second	1	3/0-3//	Clay, dark-greenish-orown		200-200	
Owner or name: Comfort Inn Location: N392257			Geographic code: 0108	۱ ،	269 272	,
Location: N392257	Well 347					Sand, dark-brown clay layers
Driller: A.C. Schultes   Comp. date: 05/17/1985   Governments   Clay, olive-gray; shell fragments   Clay, olive-gray; shell fragments   Clay, olive-gray; shell fragments   Shells; clay, olive   Clay, olive-gray; shell fragments   Shells; clay, olive   Clay, olive		r name: Con				OI
Quad.: Pleasantville         Comp. date: 05/17/1985         12         372-384         Shells; clay, olive         Shells; clay, olive           Atlas Sheet no. 36.13.555         Elevation: 5 ft         6         384-390         Clay, brown           Permit no. 36-5339         Depth drilled: 661 ft         20         390-410         Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft           15         0-15         Sand         8         410-418         Clay, olive-green           15         15-30         Clay, gray         42         418-460         Sand, fine; shells           4         30-34         Sand, tan         13         460-473         Shells; clay, olive-green           4         34-38         Clay, brown         7         473-480         Clay, hard; shells           26         38-64         Sand; fine, gray at 38-49 ft; medium, light-         10         480-490         Shells; sand, fine	Owner or		W74300R			
Atlas Sheet no. 36.13.555	Owner or Location:	: N392257		20	290-310	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft
Permit no. 36-5339	Owner or Location: Driller: A	: N392257 A.C. Schulte	s	20 62	290-310 310-372	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments
Thickness Depth (ft) (ft) and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft  15 0-15 Sand 8 410-418 Clay, olive-green  15 15-30 Clay, gray 42 418-460 Sand, fine; shells  4 30-34 Sand, tan 13 460-473 Shells; clay, olive  4 34-38 Clay, brown 7 473-480 Clay, hard; shells  26 38-64 Sand; fine, gray at 38-49 ft; medium, light-  10 480-490 Shells; sand, fine	Owner or Location: Driller: A Quad.: Pi	: N392257 A.C. Schulte leasantville	s Comp. date: 05/17/1985	20 62 12	290-310 310-372 372-384	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive
Thickness   Depth   Lithology   and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft	Owner or Location: Driller: A Quad.: Pl Atlas Sho	: N392257 A.C. Schulte leasantville eet no. 36.13	s Comp. date: 05/17/1985 5.555 Elevation: 5 ft	20 62 12	290-310 310-372 372-384	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive
(ft) (ft) brown clay at 398-405 ft  15 0-15 Sand 8 410-418 Clay, olive-green  15 15-30 Clay, gray 42 418-460 Sand, fine; shells  4 30-34 Sand, tan 13 460-473 Shells; clay, olive  4 34-38 Clay, brown 7 473-480 Clay, hard; shells  26 38-64 Sand; fine, gray at 38-49 ft; medium, light-  10 480-490 Shells; sand, fine	Owner or Location: Driller: A Quad.: Pl Atlas She Permit no	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339	S Comp. date: 05/17/1985 5.555 Elevation: 5 ft Depth drilled: 661 ft	20 62 12 6	290-310 310-372 372-384 384-390	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown
15 0-15 Sand 8 410-418 Clay, olive-green 15 15-30 Clay, gray 42 418-460 Sand, fine; shells 4 30-34 Sand, tan 13 460-473 Shells; clay, olive 4 34-38 Clay, brown 7 473-480 Clay, hard; shells 26 38-64 Sand; fine, gray at 38-49 ft; medium, light- 10 480-490 Shells; sand, fine	Owner of Location: Driller: A Quad.: Pl Atlas She Permit no Thickness	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339 s Depth	S Comp. date: 05/17/1985 5.555 Elevation: 5 ft Depth drilled: 661 ft	20 62 12 6	290-310 310-372 372-384 384-390	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft
15 15-30 Clay, gray 42 418-460 Sand, fine; shells 4 30-34 Sand, tan 13 460-473 Shells; clay, olive 4 34-38 Clay, brown 7 473-480 Clay, hard; shells 26 38-64 Sand; fine, gray at 38-49 ft; medium, light- 10 480-490 Shells; sand, fine	Owner of Location: Driller: A Quad.: Pl Atlas She Permit no Thickness	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339 s Depth	S Comp. date: 05/17/1985 5.555 Elevation: 5 ft Depth drilled: 661 ft	20 62 12 6	290-310 310-372 372-384 384-390	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and
4 30-34 Sand, tan 13 460-473 Shells; clay, olive 4 34-38 Clay, brown 7 473-480 Clay, hard; shells 26 38-64 Sand; fine, gray at 38-49 ft; medium, light- 10 480-490 Shells; sand, fine	Owner of Location: Driller: A Quad.: Pl Atlas She Permit no Thickness (ft)	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339 s Depth (ft)	Comp. date: 05/17/1985  5.555 Elevation: 5 ft Depth drilled: 661 ft Lithology	20 62 12 6 20	290-310 310-372 372-384 384-390 390-410	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft
4 34-38 Clay, brown 7 473-480 Clay, hard; shells 26 38-64 Sand; fine, gray at 38-49 ft; medium, light- 10 480-490 Shells; sand, fine	Owner of Location: Driller: A Quad.: Pl Atlas She Permit no Thickness (ft) 15	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339 s Depth (ft) 0-15	S Comp. date: 05/17/1985 S.555 Elevation: 5 ft Depth drilled: 661 ft Lithology Sand	20 62 12 6 20	290-310 310-372 372-384 384-390 390-410 410-418	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft Clay, olive-green
26 38-64 Sand; fine, gray at 38-49 ft; medium, light- 10 480-490 Shells; sand, fine	Owner or Location: Driller: A Quad.: Pl Atlas She Permit no Thickness (ft) 15	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339 s Depth (ft) 0-15 15-30	Comp. date: 05/17/1985  5.555 Elevation: 5 ft Depth drilled: 661 ft Lithology  Sand Clay, gray	20 62 12 6 20 8 42	290-310 310-372 372-384 384-390 390-410 410-418 418-460	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft Clay, olive-green Sand, fine; shells
	Owner or Location: Driller: A Quad.: Pl Atlas She Permit no Thickness (ft) 15 15	: N392257 A.C. Schulte leasantville eet no. 36.13 o. 36-5339 s Depth (ft) 0-15 15-30 30-34	S Comp. date: 05/17/1985 S.555 Elevation: 5 ft Depth drilled: 661 ft Lithology  Sand Clay, gray Sand, tan	20 62 12 6 20 8 42 13	290-310 310-372 372-384 384-390 390-410 410-418 418-460 460-473	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft Clay, olive-green Sand, fine; shells Shells; clay, olive
gray, 43-30 it; gravei, medium, ian, 30-04 it 30 490-320 Sand, medium to coarse; shells	Owner or Location: Driller: A Quad.: Pl Atlas She Permit no Thickness (ft) 15 15 4 4	: N392257 A.C. Schulte leasantville cet no. 36.13 o. 36-5339 s Depth (ft) 0-15 15-30 30-34 34-38	Comp. date: 05/17/1985  5.555 Elevation: 5 ft Depth drilled: 661 ft Lithology  Sand Clay, gray Sand, tan Clay, brown	20 62 12 6 20 8 42 13 7	290-310 310-372 372-384 384-390 390-410 410-418 418-460 460-473 473-480	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft Clay, olive-green Sand, fine; shells Shells; clay, olive Clay, hard; shells
	Owner or Location: Driller: A Quad.: Pl Atlas She Permit no Thickness (ft) 15 15 4 4	: N392257 A.C. Schulte leasantville cet no. 36.13 o. 36-5339 s Depth (ft) 0-15 15-30 30-34 34-38	Comp. date: 05/17/1985  S.555 Elevation: 5 ft Depth drilled: 661 ft Lithology  Sand Clay, gray Sand, tan Clay, brown Sand; fine, gray at 38-49 ft; medium, light-	20 62 12 6 20 8 42 13 7	290-310 310-372 372-384 384-390 390-410 410-418 418-460 460-473 473-480 480-490	Shells; clean, 290-298 ft; sand, lignite, 298-310 ft Clay, olive-gray; shell fragments Shells; clay, olive Clay, brown Sand; shells; sand, fine, green at 390-398 ft and 405-410 ft; sand, fine to medium, and brown clay at 398-405 ft Clay, olive-green Sand, fine; shells Shells; clay, olive Clay, hard; shells Shells; sand, fine

#### WELL 347 COMFORT INN

### **GAMMA-RAY LOG ELECTRIC LOG Spontaneous** Resistance Radiation increases Potential (mv) (ohms) 0 100 200 DEPTH (FEET) 300 400 500 600 660 20 520-540 Clay, brown; sand and shells at 528-540 ft 5 55 540-545 545-600 Sand, fine; shells Clay, brown; silt at 545-560 ft; clay, green and brown at 560-570 ft; shells at 570-600 ft 2 4 0-2 Topsoil 2-6 Sand and stones (gravel) 6-11 Sand, fine, brown 11-14 Sand and stones (gravel); clayey 14-21 Clay, white, sandy

# WELL 178 PEASLEE WILDLIFE MANAGEMENT AREA

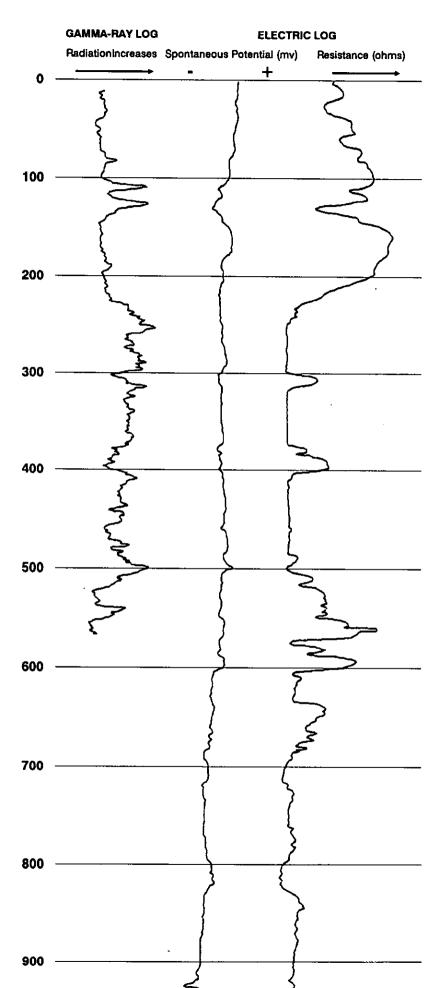


### Folsom Borough

Well 098	Geographic code: 0110	Thickness	Depth	Lithology
Owner or name: Southern Count	ties Land Company	(ft)	(ft)	<b>~</b>
Location: N393614	W745017	3	117-120	Sand, fine, hard packed
Driller: A.C. Schultes		8	120-128	Clay, fine, black, silty
Quad.: Newtonville	Comp. date: 08/01/1969	18	128-146	Sand, very fine, silty; black clay
Atlas Sheet no. 31.34.892	Elevation: 73 ft	2	146-148	Clay, fine, silty
Permit no. 31-5381	Depth drilled: 166 ft	6	148-154	Sand, silty
		2	154-156	Clay, fine, silty
		10	156-166	Sand

## Galloway Township

Well 033		Geographic code: 0111	9	261-270	Sand, medium to coarse, gray, very coarse sand
Owner or r	name: U.S	. Geological Survey	11	270-281	Sand, very fine, gray
Location: N Driller: C.V		W742701 n	9	281-290	Sand, very fine, greenish-gray, clayey, silty clay streaks
Quad.: Oce	eanville	Comp. date: 08/29/1959	38	290-328	Clay, gray, solid
Atlas Shee	t no. 36.04	.487 Elevation: 27 ft	93	328-421	Clay, greenish-gray, solid; some shells
Permit no.	36-294	Depth drilled: 1,002 ft	22	421-443	Clay, brownish-gray, solid
Observatio	n well; fro	m Clark and others, 1968, p. 30, 42; log by	8	443-451	Clay, gray, silty, sand, fine, layers; shell
H.R. Ande	rson, U.S.	Geological Survey.			fragments
Thickness	Depth	Lithology	11	451-462	Clay, gray, sandy and solid; sand, fine, layers;
(ft)	(ft)				shell fragments
1	0-1	Pavement and road bed	107	462-569	Clay, gray, solid; shell fragments
Cape May	y Formatik	on:	12	569-581	Sand, very fine, gray, some clay, many shell
7	1-8	Sand, medium to coarse, gray; grit (very			fragments
		coarse sand); little gravel	28	581-609	Sand, fine, gray; sandy clay lumps
1	8-9	Gray clay; bog (bog iron)	25	609-634	Clay, greenish-gray; mica; solid at 609-621 ft;
16	9-25	Sand, medium to coarse, gray; grit (very			silty at 621-634 ft
_		coarse sand); gravel	10	634-644	Clay, greenish-gray, sandy, shell
8 10	25-33 33-43	Sand, fine to medium, multicolored; some clay Clay, gray, solid	9	644-653	Clay, greenish-gray; sandy, very fine to fine; solid clay streaks; mica; shell fragments
31	43-74	Sand, gray; fine to medium at 43-64 ft; fine	18	653-671	Clay, greenish-gray, solid
		at 64-74 ft	27	671-698	Sand, medium to coarse, gray
9	74-83	Sand, very fine to fine, multicolored; few grits	16	698-714	Sand, gray, silty; some clay; mica; solid clay
		(very coarse sand); gravel; some clay			streaks at 705-714 ft
11	83-94	Sand, very fine, gray, clayey, sandy clay streaks	42	714-756	Clay, brownish-gray, solid
8	94-102	Sand, very fine layers, gray; solid, sandy clay	Piney P	oint (?) For	
Cohansey	Sand:		41	756-797	Clay, gray, solid; some shells
22	102-124	Clay, gray; sandy, fine	28	<b>7</b> 97-825	Clay, greenish-gray, sandy; mica
10	124-134	Sand, fine, light-gray; some mica	26	825-851	Clay, green; sandy, fine, 825-841 ft; layers
7	134-141	Sand, medium to coarse, brown			fine sandy and solid clay at 841-851 ft
11	141-152	Clay, solid; sandy clay; sand, fine, gray,	23	851-874	Clay, gray, solid; shell fragments; sandy at
		layered			862-874 ft
19	152-171	Sand, fine, brown	25	874-899	Clay, greenish-gray, solid; shells; mica 874-
Kirkwood		· <del></del>			885 ft; sandy 885-899 ft
	171-193	Sand, fine, black	11	899-910	Clay, greenish-brown; sandy, fine to coarse;
	193-201	Sand, medium, gray			sandstone streaks
	201-223	Sand, very fine, gray; some clay; mica	21	910-931	Clay, greenish-brown; sandy, medium
	223-232	Clay, gray, solid	71	931-1002	Clay, greenish-gray; sandy, fine to coarse; shell
19	232-251	Sand, fine to medium, gray; sandy clay lumps			
10	251-261	Sand, very fine to fine, gray; few grits (very			
		coarse sand)	l		



970

Galloway Township

WELL 033 U.S. GEOLOGICAL SURVEY

#### Galloway Township

Well 041		Coornenbia andri 0111	W-D 046		Communication (111
					Geographic code: 0111
		riew Country Club W742752			thville Development Company
Location: I Driller: A.		· - ·	Location: I		W742740
Quad.: Oct					ctric Motor Works
Atlas Shee		Comp. date: 02/02/1972	Quad.: Oce Atlas Shee		Comp. date: 10/12/1982 .412 Elevation: 30 ft
Permit no.		Depth drilled: 270 ft	Permit no.		Depth drilled: 182 ft
Thickness		Lithology	Thickness		Lithology
(ft)	(ft)	2	(ft)	(ft)	zamorogy
15	0-15	Sand and stone (gravel)	10	0-10	Sand, orange
4	15-19	Clay	18	10-28	Sand, fine to medium, yellow
<i>7</i> 0	19-89	Sand	4	28-32	Sand, yellow, clayey; small stones (gravel)
40	89-129	Clay; silty at 89-101 ft	15	32-47	Sand, fine to medium, gray
31	129-160	Sand	43	47-90	Sand, medium; gray and brown at 47-62 ft;
8	160-168	Clay, silty			light-gray at 62-90 ft
72	168-240	Sand, stone and gravel	10	90-100	Clay lenses; sand, medium
30	240-270	Clay	67	100-167	Sand, dark-gray; fine at 100-107 ft; medium
387-31-044		Conservation and a 0111	16	1/3 100	to coarse, 107-152 ft; slightly fine, 152-167 ft
Well 044	æ	Geographic code: 0111	15	167-182	Sand, fine; gray, 167-180 ft; clayey, 180-182 ft
		n of Smithville	Well 047		Geographic code: 0111
Location: l Driller: La		W742818		name: Seau	riew Country Club
Quad.: Oc	•	Comp. date: 07/19/1981	Location:		W742825
Atlas Shee				tesian Wel	
Permit no.		Depth drilled: 186 ft	Quad.: Oc		Comp. date: 07/07/1969
Thickness		Lithology	_	t no. 36.03.	
(ft)	(ft)	zamology	Permit no.	36-408	Depth drilled: 250 ft
11	0-11	Sand and gravel; clay, gray	Thickness	Depth	Lithology
1	11-12	Sand, orange; gravel	(ft)	(ft)	<b></b>
2	12-14	Clay, gray; sand; yellow clay	`16	<b>0-16</b>	Sand; gravel at 0-9 ft
12	14-26	Sand, fine to coarse, white, orange; gravel	25	16-41	Clay, sandy
9	26-35	Gravel and bog iron	64	41-105	Sand and gravel
16	35-51	Clay, white; sandy at 36-46 ft	4	105-109	Clay, white
4	51-55	Sand, silt, clay	80	109-189	Clay, gray; sandy at 109-150 ft
10	55-65	Clay, gray, yellow streaks; bog iron	61	189-250	Sand and gravel
11	65-76	Sand, fine to medium; yellow and white, gravel			
		65-75 ft; bog iron at 75-76 ft	Well 053		Geographic code: 0111
10	76-86	Clay, gray, sand streaks		name: Smit	thville Development Company
18	86-104	Clay, light and dark, sandy; gravel and sand	Location:		W742728 T
1	104-105	streaks at 86-96 ft; soft, 96-104 ft	Driller: Al	osecon Ele	ctric Motor Works
1 2	105-107	Clay, tough Sand, fine	Quad.: Ne	w Gretna	Comp. date: 10/08/1982
3	107-110	Clay, tough, tan		t no. 36.04	
6	110-116	Sand, fine; brown wood (lignite)	Permit no.		Depth drilled: 182 ft
20	116-136	Sand, fine to medium; gravel, clay streaks,	Thickness	Depth	Lithology
		116-126 ft; gray, clay, 126-136 ft	(ft)	(ft)	
40	136-176	Sand, fine to coarse, gray; gravel; yellow,	10	0-10	Sand, fine to medium, yellow
		white clay streaks; fine silty sand, 146-176 ft	52	10-62	Sand, medium, yellow; clayey at 28-62 ft
10	176-186	Sand, fine, gray; yellow, white, gray clay streaks	30	62-92	Sand, clayey, fine at 62-77 ft; very fine, 77-92 ft
			45	92-137	Sand, medium; tan to yellow, 92-107 ft;
Well 045		Geographic code: 0111	73	74-137	yellow at 107-137 ft; no clay at 122-137 ft
		thville Water Company	15	137-152	Sand, very fine to medium, yellow
Location:		W742812	30	152-182	Sand, tan; medium to fine, 152-167 ft; fine,
Driller, La		Comp. dots. 07/19/1001			167-182 ft
Quad.: Oc	eanville et no. 36.03	Comp. date: 07/18/1981 3.635 Elevation: 32 ft			
Permit no.		Depth drilled: 202 ft	Well 054		Coorrenbie code: 0111
Thickness	_	Lithology		T	Geographic code: 0111 vn of Smithville
(ft)	(ft)	Lamology	Location:		W742807
14	0-14	Sand, fine to medium; white, yellow clay streaks	Driller: La		W 142507
3	14-17	Clay, gray	Quad.: No	-	Comp. date: 10/31/1979
1	17-18	Gravel and yellow clay	_	t no. 36.03	
9	18-27	Clay, gray, brown; gravel, 22-27 ft	Permit no		Depth drilled: 199 ft
5	27-32	Sand, medium to coarse; gravel	Thickness		Lithology
9	32-41	Sand, fine to medium; gravel; white and	(ft)	(ft)	Latitology
		yellow clay streaks	20	0-20	Sand and gravel
11	41-62	Clay, white, yellow, silty; coarse sand streaks	25	20-45	Clay; gray, 20-41 ft; white, sandy, 41-45 ft
10	62-72	Clay, dark, light-gray; yellow streaks sand, bog iron	14	45-59	Gravel; heavy, white at 45-52 ft; large, sand
10	72-82	Sand, fine, streaks; bog iron; gravel		,	and clay at 52-59 ft
33	82-115	Clay, yellow, gray, 82-92 ft; gray, fine sand,	32	59-91	Clay, dark-gray
^		92-102 ft; light and dark-gray, 102-115 ft	3	91-94	Sand, fine
9	115-124	Sand, fine; gray clay streaks	15	94-109	Clay, brown, sandy
2	124-126	Clay, gray	13	109-122	Sand, fine to medium; clay, white
4 55	126-130	Sand streaks; clay, gray	57	122-179	Sand, medium to coarse; white clay streaks
33 17	130-185 185-202	Sand, fine to coarse; gravel; white clay, 142-185 ft Sand, fine; clay			at 122-144 ft
11	100-202	cano, mo, cuj	19	179-198	Lignite
			1	198-199	Clay, hard, gray

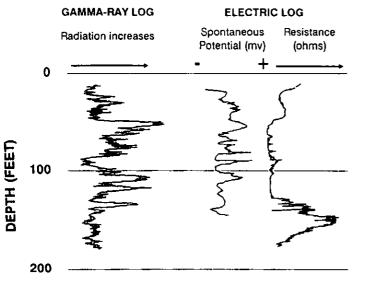
Well 110		Geographic code: 0111	W-II	Il 124 Geographic code: 0111
	name: Free	1 Schroer		II 124 Geographic code: 0111 mer or name: Biocraft Labs Inc.
Location:		W743300	_	cation: N392901 W743521
	red Schroei reen Bank			iller: Layne-N.Y.
	et no. 32.43	Comp. date: 03/28/1956  485 Elevation: 65 ft		ad.: Pleasantville Comp. date: 11/11/1970
Permit no		Depth drilled: 429 ft		as Sheet no. 36.02.646 Elevation: 65 ft mit no. 36-422 Depth drilled: 208 ft
Log by Fr	ed Schroer,	NJ. Geol. Survey (0-255 ft, 420-429 ft), M.E.		st borehole.
Thickness	NJ. Geol. 5 Depth	Survey (225-420 ft)		ickness Depth Lithology
(ft)	(ft)	Lithology	(It)	ft) (ft)
	en Format	lon:	1	F
10	0-10	Gravel	21	21 1-22 Clay, tough, yellow and white, sandy; fine to coarse sand and gravel streaks
Cohanse	•		54	
25 28	10-35 35-63	Sand, fine Clay, hard, white, yellow streaks; 8-in. layer		white clay streaks
	50 00	fine sand in clay bed at 41-48 ft, lower 3 ft of	4	
		clay bed softer and black to dark-green	16 14	branch and a second branch and a second
33	63-96	Sand, fine, yellow	14	14 96-110 Clay, soft, yellow and brown; fine to coarse sand streaks
10	96-106	Sand, coarse; seems to produce good water but is clayey, 30 gpm, 10 ft of drawdown	35	
34	106-140	Sand, fine, yellow; very small streaks coarse	••	streaks of yellow, black and white clay
		sand; white clay lumps	30 20	
5	140-145	Sand, coarse; probably water-bearing but not tested		20 175-195 Sand; clay, gray; lignite 7 195-208 Clay, tough, gray
25	145-170	Clay, hard, sticky, green, becoming very soft,	•	WELL 124
39	170-209	muddy (silty); hard layer changing to soft Clay, green; some sand		
7	209-216	Sand, very fine, gray		BIOCRAFT LABS, INC. ELECTRIC LOG
9	216-225	Clay and sand		
5	225-230	Sand, coarse, gray, becoming fine		Spontaneous Resistance Potential (mv) (ohms)
5 5	230-235 235-240	Sand, fine, gray, becoming very fine Sand, very fine; clay		, , ,
-	d Formatio			• + ———
15	240-255	Sand, fine to coarse; clay; small lignite pieces, 255 ft		0 ————
	y Formatio			
15	225-240	Sand, fine; light-gray-buff, 225-235 ft; light-gray, 235-240 ft		\
Kirkwoo	d Formatio			
10	240-250	Sand, fine to coarse, gray	E	
7	250-257	Clay, gray; silt	Щ	/
8	257-265	Sand, fine, brownish-gray, some pebbles to	ОЕРТН (FEET)	
20	265-285	1/3 inch in diameter	Ť	100
33	285-318	Sand, fine, brownish-gray Clay, brown; silty sand; sand, fine to coarse.	Ē	\
50	200 010	light-brownish-gray	ᇤ	
17	318-335	Sand, brownish-gray; silty, 318-325 ft; fine	ā	\ .
25	225 260	to medium, clayey 325-335 ft		\
25	335-360	Silt; brownish-gray, slightly clayey at 335- 347 ft; light-brown, medium sand, 347-360 ft		
10	360-370	Sand, fine to medium, buff; some interbedded		\ <b>&gt;</b>
,		clay and coarse grains		200
50	370-420	Sand, light-gray, fine to very coarse, 370-400 ft;		220—————
5	420 425	fine to medium, 400-420ft		WELL 123
4	420-425 425-429	Sand Clay		BIOCRAFT LABS, INC.
•	760-727	Clay		·
Well 123		Geographic code: 0111		ELECTRIC LOG
		raft Labs Inc.		Spontaneous Resistance
Location: Driller: La		W743557		Potential (mv) (ohms)
Quad.: Ple		Comp. date: 12/14/1971		• +
	et no. 36.02.			•
Permit no	. 36-418	Depth drilled: 208 ft		0
Observation		•••		•
Thickness (ft)		Lithology		. ~ ~ ~
1	(ft) 0-1	Topsoil		
13	1-14	Clay, yellow, white, sandy; coarse gravel		,
74	14-88	Sand, fine to coarse, white; gravel; soft white	Щ	1 }
•	00.00	and yellow clay streaks	Ξ	
8 8	88-96 96-104	Clay, yellow, sandy, fine, medium sand streaks Clay, soft, black	=	100
20	90-104 104-124	Sand, fine to medium, brown; black, white and	Ξ	
		soft-yellow clay streaks	оертн (FEET)	; }
42	124-166	Sand, fine to coarse, dark-gray; gravel; light	2	<b>;</b>
43	166 200	streaks of gray and white clay		
42	166-208	Clay, gray, soft, sandy; fine sand and lignite streaks at 166-195 ft; tough at 195-208 ft		
		The state of the s		200
				200 — — — — — — — — — — — — — — — — — —

#### Galloway Township

Well 125		Geographic code: 0111			
Owner or r	name: Agri	ies Exploration Corporation			
Location: l		W743S26			
Driller: Jos	seph Strau	ber			
Quad.: Ple	asantville	Comp. date: 06/11/1967			
Atlas Shee	t no. 36.02				
Permit no.	36-398	Depth drilled: 700 ft			
Explorator	y well.	•			
Thickness	Depth	Lithology			
(ft)	(ft)	-			
198	0-198	Sand, coarse to fine, light-gray; little gravel			
107	198-305	Clay, dark-gray, silty			
65	305-370	Sand, medium to fine, dark-gray, little silt			
40	370-410	Sand, medium to fine, gray, some brown clayey silt layers			
250	410-660	Sand, medium to fine, gray; shells; some brown silt layers at 410-460 ft; some			
40	660-700	brown clayey silt layers at 460-660 ft Sand, medium to fine, gray, few shells; some green clay layers at 680-700 ft			

Well 127		Geographic code: 0111
Owner or i	name: Atla	ntic City Medical Center
Location: 1	N392908	W743213
Driller: A.	C. Schultes	5
Quad.: Ple	asantville	Comp. date: 12/07/1982
Atlas Shee	t no. 36.03	
Permit no.	36-3110	Depth drilled: 175 ft
Thickness	Depth	Lithology
(ft)	(ft)	<del>-</del>
22	0-22	Sand, brown; gravel
1	22-23	Stones (gravel), large
7	23-30	Clay, white
15	30-45	Sand, fine, white
12	45-57	Clay, yellow and white
24	57-81	Clay; white at 57-63 ft and 73-81 ft; white and
		yellow, 63-71 ft; gray and white, 71-73 ft;
		brown sand, 57-63 ft; gravel, 80-81 ft
2	81-83	Gravel and stones
1	83-84	Clay
2	84-86	Gravel and sand
22	86-108	Clay; white, gravel, 86-101 ft; gray, yellow,
		101-104 ft; gray, fine gray sand, 104-108 ft
10	108-118	Sandstone; sand, tan, white; lignite
10	118-128	Clay, light-tan; pyrite
47	128-175	Sand, medium, brown

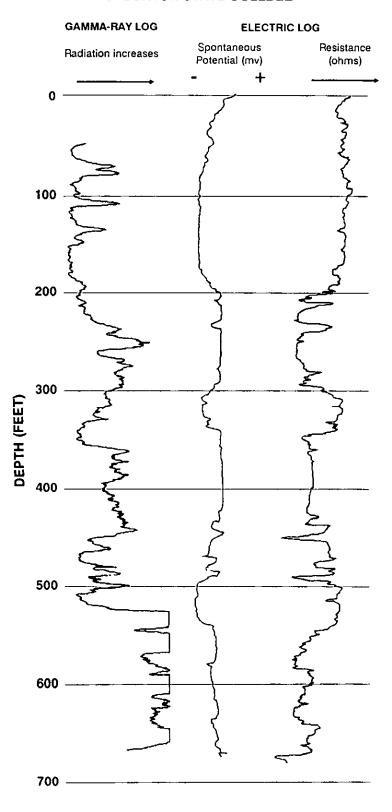
#### **WELL 127** ATLANTIC CITY MEDICAL CENTER



TT 11 44 5		
Well 215	nama: San '	Geographic code: 0111 View Golf Club
Location: I		W742830
Driller: Ar		
Quad.: Oc		Comp. date: 03/26/1931
Atlas Shee	t no. 36.03.	_
Permit no.	56-81	Depth drilled: 278 ft
Thickness	Depth	Lithology
(ft)	(ft)	-
41	0-41	Gravel and sand
12 8	41-53 53-61	Sand, coarse, sharp (angular grains) Sand, coarse, white
9	61-70	Clay, yellow, sandy, stiff
10	70-80	Sand, yellow; fine to coarse at 70-73 ft;
_		medium to fine at 73-80 ft
3	80-83	Sand; coarse, hardpan, ironstone, 80-82 ft;
9	83-92	medium to coarse, yellow at 82-83 ft Gravel; sand, fine and coarse
7	92-99	Sand; fine, brownish-yellow, brown-sugar
		texture, 92-97 ft; medium to fine and
•	00 400	gravel to 1.5 inches, 97-99 ft
9	99-108	Sand, coarse, yellow; gravel to 0.25 inches,
23	108-131	99-104 ft; gravel to 0.75 inches, 104-108 ft Sand; medium to fine, yellow at 108-125 ft;
	100 101	very fine, clayey at 125-131 ft
4	131-135	Clay, yellow
7	135-142	Sand, fine to medium
1	142-143	Gravel, medium; yellow sand, with darker-
3	143-146	red grains Sand, coarse; sandstone; rock and gravel
5	146-151	Clay, blue, stiff
14	151-165	Clay, black, stiff; some gravel
6	165-171	Clay, red and blue streaks; yellowish-blue
21	171-192	at 165-169 ft; reddish-blue at 169-171 ft Clay; yellow at 171-176 ft; blue at 176-192 ft
10	192-202	Sand, white; medium to fine at 192-193 ft;
		medium to coarse at 193-202 ft
1	202-203	Sand, medium to coarse, yellow and red
15 5	203-218 218-223	Sand, coarse, brown; little yellow clay, 213-218 ft Sand, fine, brownish-yellow; some clay
,	210-223	streaks at 221-223 ft
16	223-239	Sand; coarse, some clay at 223-227 ft; fine to
25	239-264	medium, light-yellow at 227-239 ft
చ	239-204	Sand, brown; very fine at 239-248 ft; lighter color, 245-248 ft; fine, clayey, 248-264 ft
14	264-278	Sand, very fine; clay, black
		, , , , , , , , , , , , , , , , , , , ,
Well 289		Geographic code: 0111
Owner or	name: Stoc	ekton State College
Location:		W743130
Quad.: Ple	C. Schulter	
	et no. 36.03	Comp. date: 01/11/1985 .456 Elevation: 40 ft
Permit no.		Depth drilled: 680 ft
		ey observation well.
Thickness	Depth	Lithology
(ft)	(ft)	
10	210-220	Sand, medium to coarse, light-olive-gray
10	220 220	(5Y 5/2), quartz; silt; clay; no fossils
10 10	220-230 230-240	Clay and silt; poor sample recovery Clay, grayish-olive-green (SGY3/2), silty;
		coarse to fine; no fossils
20	240-260	Sand; very coarse to coarse, dark-greenish-
		gray (5FY 4/1), subround, quartz; silt;
40	260-300	clay; shell fragments, 250-260 ft
70	200-300	Clay, olive-gray (5Y 4/1), silty; some sand at 260-270 ft; very little sand at 270-280 ft
20	300-320	Sand; coarse to very coarse, olive-gray (5Y 3/2),
		subangular, silt; no fossils 310-320 ft
20	320-340	Clay, sandy
20	340-360	Sand; coarse, 340-350 ft; coarse to very coarse, olive-gray (5Y 3/2), 3 to 4 mm subangular
		pebbles, some silt, no fossils at 350-360 ft

30	360-390	Clay, silty, olive-gray (5Y 4/1), 370-380 ft, olive-
10	390-400	black (5Y 2/1), some very sity, 380-390 ft Sand, fine to medium, dusky-yellowish-brown (10YR 2/2), subangular, silt with pale-
10	400-410	brown (5YR 5/2) clay clumps Sand, coarse, olive-gray (5Y 4/1), subangular, quartz; pebbly; shell fragments in a silty clay matrix; some clumps of light-gray
30	410-440	(N7) silty clay Clay, silty; some fine sand; olive-gray (5Y 4/1), few coarse sand grains at 410-420 ft; greenish-black (5G 2/1) at 420-430 ft; dark-
10	440-450	greenish-gray (5GY 4/1) at 430-440 ft Clay, olive-gray (5Y 3/2), silty; trace of fine sand and lignite
20	450-470	Silt, olive-gray (5Y3/2); 5-10 percent shell fragments; lignite; clayey, trace fine sand, 450-460 ft; sandy, interbedded silty clay, at 460-470 ft
30	470-500	Sand, olive-gray (5Y 3/2); fine to coarse, subangular, shell fragments, 470-480 ft; fine to pebbly, trace shell fragments, pebbles milky-white, 480-490 ft; medium, 15 percent coarse shell fragments, some clay in matrix, last few feet of sample is a grayish-olive-green (5GY 3/2) to dusky-yel-
10	500-510	low-green (5GY 5/2) clay layer at 490-500 ft Silt, grayish-green (5G 5/2), clayey; trace of interbedded grayish-olive-green fine sand; 5-10 percent shell fragments; lignite
10	510-520	Sand, fine, dark-greenish-gray (5G4/2), silty; abundant lignite, shell fragments; trace gravel
10	520-530	Sand, medium, dark-greenish-gray (5GY 4/1), subround, trace fine to very fine sand; lignite; very few shell fragments
10	530-540	Sand, fine to coarse, grayish-olive (10Y 4/2); trace shell fragments
20	540-560	Sand, coarse to very coarse, dusky-yellow- green (5GY 5/2); some angular gravel, fine sand; silt; mostly coarse sand, small interbedded zone of dark-yellow-brown (10YR 2/2) silty clay, lignite, trace shell fragments at 550-560 ft
10	560-570	Silt, grayish-olive-green (5GY 3/2), clayey, micaceous; some lignite; trace pyrite and very fine sand; olive-green to dusky-yel- low-brown clay
10	570-580	Clayey silt and silty clay; clayey silt, olive-gray (5Y 3/2); silty clay, dark-yellowish-brown
40	580-620	(10YR 4/2); mica; lignite Silt, olive-gray (5Y 3/2), clayey, micaceous; lignite; some very fine sand at 585-586 ft and 590-620 ft; olive-green to dusky-yel- low-brown clay at 580-590 ft; some medium sand at 590-600 ft; olive-green- clayey silt at 600-620 ft
30	620-650	Clay, dark-yellowish-brown (10YR 6/2), silty; some lignite; some mica and very fine sand at 620-640 ft; trace pyritic shell frag- ments at 630-640 ft; small light-brown (5YR 6/4) clay lumps at 640-650 ft
10	650-660	Shells, fragments, abundant; some clay, olive-gray (5Y 5/1), with olive-gray (5Y 3/2) still predominant; some lignite
20	660-680	Silt, olive-gray (5Y 5/1), clayey, glauconitic; shell fragments; glauconite primarily a fine to medium interbedded sand; lignite at 670-680 ft

### WELL 289 STOCKTON STATE COLLEGE



#### Galloway Township

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260-305

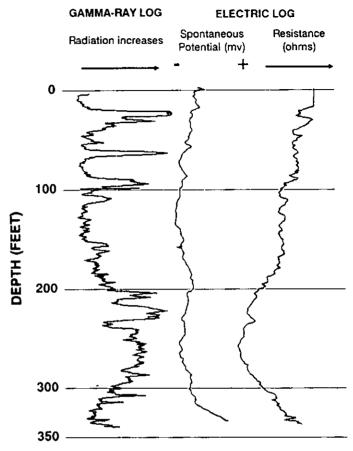
305-320

320-330

330-336

#### Well 340 Geographic code: 0111 Owner or name: Stockton State College Location: N392933W743130 Driller: N.J. Geological Survey Quad.: Pleasantville Comp. date: 06/27/1985 Atlas Sheet no. 36.03.456 Elevation: 40 ft Permit no. 36-6551 Depth drilled: 336 ft U.S. Geological Survey observation well. Lithology Thickness Depth (ft) (ft) 24 0-24 Sand, medium to coarse, white; gravel 1 24-25 Clay, white 25-30 5 Sand, white and yellow 30-50 20 Clay, yellow and white; sand streaks 50-60 10 Sand, fine to medium, white 8 60-68 Sand, medium to coarse, white and red; sandstone layers 2 68-70 Clay, bright-pink 24 70-94 Sand, coarse, yellow, white and red; sandstone layers 94-97 3 Clay, light-gray; wood (lignite) 8 97-105 Clay, brown, white and gray 7 105-112 Clay, very-light-gray; heavy lignite 8 112-120 Clay, darker-gray, wood (lignite); sand layers 40 120-160 Sand, fine to coarse, brown 40 160-200 Sand; clear and gray at 160-170 ft; gray clay streaks at 170-200 ft 10 200-210 Silt, gray, very fine sand; olive-gray day streaks 210-260 Clay, olive-gray; wood (lignite); streaks of 50 white and blue stones (gravel) at 250-260 ft

#### Well 340 Stockton State College



#### **Hamilton Township**

Well 009		Geographic code: 0112			
Owner or name: Scholler Brothers, Inc.					
Location: N	N393332	W744427			
Driller: A.0	C. Schultes	<b>:</b>			
Quad.: Egg	Harbor C	City Comp. date: 02/05/1958			
Atlas Sheet	t no. 32.41.	435 Elevation: 90 ft			
Permit no.	32-320	Depth drilled: 178 ft			
From Clark	c and other	rs, 1968, p. 28, 44; log by D.G. Parillo, N.J.			
Geological	Survey.				
Thickness	Depth	Lithology			
(ft)	(ft)	_			
Cape May	and Coha	nsey Sand (undifferentiated):			
21	2-23	Sand, medium to very coarse; gravel, reddish-			
		brown, clayey; gravel up to 0.5 inches at			
		2-8 ft; much weathered feldspar at 3-8 ft;			
		yellow at 8-23 ft; gravel to 1 inch at 13-23 ft			
5	23-28	Sand, coarse to very coarse, yellowish-orange,			
		quartz			
9	28-37	Sand, medium to coarse, yellow, quartz;			
		1 percent heavy mineral with 80 percent			
		opaque; gray clay streaks at 33-37 ft			
20	37-57	Sand, fine to medium, grayish-yellow; mica;			
		few coarse grains; some gray clay at 47-52 ft;			
15	57-72	Sand, medium to coarse, yellow, clean, quartz			

Clay; darker-gray at 260-300 ft; dark, sand

Sand, coarse, clear and gray; stones (gravel)

streaks at 300-305 ft

Sand, medium to coarse, white

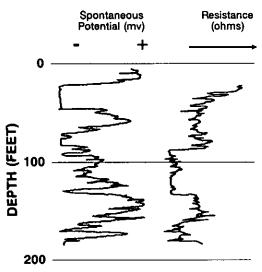
Sand, finer; brown-gray clay streaks

	_	
7	72-79	Sand, medium to very coarse, grayish-yellow, slightly clayey; quartz grains up to 3/8 inch
5	79-84	Sand, medium to coarse, light-gray, clean, quartz
6	84-90	Sand, medium to coarse, yellowish-brown; some ironstone (bog iron); brown clay lenses at 87-90 ft
5	90-95	Sand, medium, orange, quartz; very clayey
15	95-110	Sand, fine, mostly yellowish-orange; ironstone (bog iron); coarse quartz grains
25	110-135	Sand, fine, yellowish-orange, slightly micaceous; slightly clayey at 125-135 ft
20	135-155	Sand, fine, orange, quartz, very clayey; coarse at 140-155 ft
5	155-160	Clay, orange, micaceous, moderately sandy
3	160-163	Sand, medium to coarse, brown, clean, quartz
10	163-173	Sand, fine, yellowish-brown; mica; trace coarse quartz; brown clay lumps; more brown clay, 168-173 ft
Kirkwoo	od Formatio	n:
5	173-178	Clay, gray, finely micaceous, lignitic, sandy; diatoms with concentric very fine pyrite spheres

Well 010		Geographic code: 0112
Owner or r	name: Atla	intic City Expressway
Location: I	N393302	W744408
Driller: A.	C. Schulte:	ş
Quad.: Egg	Harbor (	City Comp. date: 08/17/1964
Atlas Shee	•	
Permit no.	32-474	Depth drilled: 186 ft
Thickness	Depth	Lithology
(ft)	(ft)	By
ž	0-2	Top soil
10	2-12	Sand, brown, clayey
11	12-23	Sand, coarse, yellow; clay
26	23-49	Clay, yellow and white, sandy; brown sand at
		38-49 ft
78	49-127	Sand, brown; very fine, clay at 49-60 ft; gravel
,0	77-127	60-86 ft; fine to coarse at 60-79 ft and 86-127
		ft; coarse at 79-86 ft; some clay, 86-127 ft
54	127-181	· · · · · · · · · · · · · · · · · · ·
J4	12/-101	Sand, dark-brown; fine to coarse at 127-137
5	101 104	ft; coarse to small gravel at 137-181 ft
J	181-186	Clay, black

#### **WELL 010** ATLANTIC CITY EXPRESSWAY

#### **ELECTRIC LOG**



Well 014		Geographic code: 0112				
Owner or r	Owner or name: Atlantic County Girl Scout Camp					
	Location: N392933 W744604					
Driller: U.	S.Geologic	cal Survey				
Quadrangl						
Atlas Shee						
Well Permi	it no. 35-4					
From Owe	ns and oth	ers, 1988; exploratory corehole.				
Geophysica		· · · · · ·				
Thickness	Depth					
(ft.)	(ft.)					
Cohansey						
2	0-2	Sand, medium, light-brownish-gray				
		(10YR6/2), silty; sand, fine to medium,				
		brownish-yellow (10YR6/8), silty				
2	2-4	Sand, fine to medium, brownish-yellow				
		(10YR6/8), silty; sand, medium to coarse,				
		very pale-brown (10YR7/4), scattered				
		granules of rounded quartz, up to 0.25 inches				
2	4-6	Sand, medium to coarse, very pale-brown				
		(10YR7/4), with scattered quartz				
		granules; sand, silty to very fine, yellow				
		(10YR7/6), with scattered pebbles				
2	6-8	Sand, silty to fine, very pale-brown (10YR7/4);				
		scattered pebbles and cobbles; abundant				
		ilmenite				
2	8-10	Sand, silty to fine, very pale-brown (10YR7/4),				
		with scattered pebbles				
2	10-12	Silt and silt with fine sand, very pale-brown				
		(10YR8/3); sand, dark-reddish-brown				
		(2.5YR3/4), limonite-cemented, in bottom				
		two inches; iron-stained bands scattered				
		throughout, reddish-yellow (7.5YR6/8)				
2	12-14	Clayey silt at top, light-gray (10YR7/1);				
		sand at bottom, silty to fine, reddish-				
		yellow (7.5YR6/8)				
2	14-16	Clayey silt, light-gray (10YR7/1), grading				
		to sand, medium, reddish-yellow (75YR6/8),				
		silty, grading to sand, fine, reddish-yellow				
		(7.5YR8/6), well-sorted, at bottom				

2	16-18	Sand, medium to fine, yellow (10YR7/6), silty, with white (10YR8/2) oxidized layers
2	18-20	Sand, medium to coarse, light-gray (10YR7/1), silty; grading downward to al- ternating layers of yellow (10YR7/6) and white (10YR8/2), fine to medium sand
2	20-22	Sand, medium to coarse, very pale-brown (10YR7/4), silty at top, bottom of interval
2	22-24	Sand, medium to coarse, very pale-brown (10YR7/4), silty; grading downward to silt, light-gray (10YR7/1); overlying sand, medium to coarse, white (10YR8/2)
2	24-26	Sandy silt, white (10YR8/2); overlying sand, medium to coarse, very pale-brown (10YR8/3), with more oxidized layers
2	26-28	Same as 24-26 ft.; sand, medium to coarse, yellow (10YR7/8), heavily oxidized, bottom 2 in.
2	28-30	Sand, medium to coarse, yellow (10YR7/8); grading down to very coarse, white (10YR8/1); grading to very coarse, dark- reddish-brown (2.5YR3/4); grading to very coarse, brownish-yellow (10YR6/6)
2	30-32	Sand, brownish-yellow (10YR6/8), well sorted, gravel; overlying silty, fine sand
2	32-34	Sand, medium to coarse, brownish-yellow (10YR6/8), clay-silt matrix; silt, light-gray, 3-4 inches thick at 33 ft.
2	34-36	Sand, fine to medium, yellow (10YR7/6), at top of a downward-coarsening sequence; below is sand, medium to coarse, brownish-yellow (10YR6/6); overlying sand, medium to coarse, very pale-brown (10YR7/3); sand, coarse to very coarse, yellow (10YR7/3), silty, light-gray (10YR4/1) silt partings, at bottom
3	36-39	Sand, coarse to very coarse, brownish-yellow (10YR6/6); grading down to sand, fine to medium, yellow (10YR7/6)
2	39-41	Sand, fine to medium, yellow (10YR7/6); inter- bedded with sand, very coarse, well-sorted

		•			
Wel 1 014 (	cont)				overlying sand, fine to medium, gray
Thickness		Lithology			(2.5YR5/0), well-sorted, with blebs of
(ft)	(ft)	-			clayey silt and some coarse sand
2	41-43	Sand, very coarse, white (10YR8/2); overlying	2	83-85	Sand, fine to medium, gray (7.5YR9/0); some
		sand, fine to medium, yellow (10YR7/6)			coarse sand; traces of silt; grading to in-
2	43-45	No recovery, probably very coarse sand or			creased silt, with some clayey silt laminae
		gravel	2	85-87	Sand, fine to medium, gray (7.5YR5/0), silty
2	45-47	Sand, very coarse, light-brownish-gray	2	87-89	Clayey silt, very dark-gray (10YR3/0), with
		(10YR6/2); grading to medium, brownish-			traces of fine sand; grading to sand,
		yellow (10YR6/8); overlying medium to			medium to coarse, very dark-gray
3	47-50	fine, brownish-yellow (10YR6/8)		00.04	(7.5YR3/0), silty
3	47-30	Sand, medium, light-brownish-gray (10YR6/2), silty; grading down to sand, fine to	2	89-91	Sandy silt, very dark-gray (7.5YR3/0); thinly
		medium, brownish-yellow (10YR6/6),			interbedded with sand, fine to medium,
		with some silt partings at top	2	91-93	very dark-gray (7.5YR3/1), clean
1	50-51	Sand, fine to medium, brownish-yellow	2	71-73	Sandy silt, very dark-gray (10YR3/1), micaceous; overlying sandy silt, dark-
		(10YR6/6), heavy-mineral content in-			grayish-brown (10YR3/2), layered with
		creasing with depth			fine sand, gray (10YR6/1)
2	51-53	Sand, fine to medium, brownish-yellow	2	93-95	Clayey and sandy silt, dark-gray (10YR4/1);
		(10YR6/8)			interbedded with sand, medium to coarse,
2	53-55	Sand, fine to medium, yellow (10YR7/8),			dark-gray (10YR4/1), micaceous, slightly
		with 0.08 inch light-gray clay partings			silty
		"flasers"	2	95-97	Sand, medium to coarse, dark-gray (10YR5/1),
2	55-57	Sand, fine to medium, brownish-yellow			silty; overlying sand, medium to coarse,
		(10YR6/8), silty, crossbedded, heavy			medium-gray (10YR5/1) and light-gray
2	57.50	mineral concentrations	_		(10YR6/1), well sorted
2	57-59	Sand, medium to coarse, brownish-yellow	. 3	97-100	Sand, medium to coarse, dark-gray
		(10VR6/8) and very pale-brown			(10YR4/1), silty; grading down to sand,
		(10YR7/4), occasional gravel beds; gravel, up to 0.5 inches			medium to coarse, gray (10YR5/1), well-
2	59-61	Sand, medium, yellow (10YR7/8), poorly			sorted; grading to sand, medium to
-	57-01	sorted, oxidized in patches to brownish-	2	100-102	coarse, dark-gray (10YR4/1), silty
		yellow (7.5YR6/8)	2	100-102	Sand, medium to very coarse, dark-gray
2	61-63	Sand, medium, light-gray (10YR7/2); trace			(10YR4/1), silty; overlying sand, medium
		of very fine ilmenite; overlying sand,			to coarse, gray (10YRS/1), well-sorted; overlying sand, medium to very coarse,
		medium to very coarse, brownish-yellow			dark-gray (10YR4/1), silty, some gravel
		(10YR6/8), silty, some granules, pebbles			and pebbles up to 0.2 inches
		and 0.16 inch wood fragments	2	102-106	Sand, fine to very coarse, dark-gray (10YR4/1),
2	63-65	Sand, fine to very coarse, brownish-yellow			silty; coarse sand grains are angular and in-
		(10YR6/8), poorly sorted, silty, some			clude many clear quartz shards up to 0.2
	<i>(5.40)</i>	pebbles			inches; increasing pebbles at 104-106 ft.
4	65-69	Sand, fine to very coarse, yellow (10YR7/8),	2	106-108	Sand, coarse to very coarse, gray (10YR5/1),
		silty; silt, very pale-brown (10YR7/3), thin			well-sorted; grading down to sand,
2	69-71	layers Sand, fine to very coarse, yellow (10YR7/8),			medium to coarse, very dark-gray
2	0,7-71	poorly sorted, silty, with granules and			(10Y R3/1), silty, with black (10Y R2/1)
		pebbles			streaks "possibly organic fragments"; over-
2	71-73	Sand, medium to coarse, very pale-brown			lying sand, fine to medium, very dark- grayish-brown (10YR3/2), slightly silty
		(10YR7/4); grading down to sand, inter-	2	108-110	Sand, fine to very coarse, dark-gray (10YR4/1),
		bedded medium and medium to coarse,	~	100-110	silty, trace organic material, including
		very pale-brown (10YR7/4) and brownish-			rounded wood fragments up to 0.8 inches
		yellow (10YR6/8); ligh-gray silt partings	4	110-114	Sand, fine to coarse, dark-gray (10YR4/1), silty
		near 71.5 ft	2	114-116	Sand, fine to coarse, dark-gray (10YR4/1),
2	73-75	Sand, medium to coarse, very pale-brown			silty, trace organic material; overlying thin-
		(10YR7/4); interbedded with finely layered			ly bedded, silt, dark-gray (10YR4/1) and
_		very coarse sand with quartz granules			sand, fine to medium, gray (10YR5/1); com-
2	75-77	No recovery			pressed wood in two (0.2-0.4 inch) layers
2	<i>77-7</i> 9	Sand, medium to coarse, dark-reddish-brown			near bottom
		(2.5YR3/4); overlying clayey to sandy silt,	2	116-118	Sand, fine to very coarse, very dark-grayish-
		brownish-yellow (10YR6/8), interbedded			brown (10YR3/2), silty, some quartz
		with sand, medium to coarse, gray (10YR6/1), silty			granules; overlying sand, fine to very
2	<i>7</i> 9-81	Sand, very fine, dark-gray (7.5YR4/0), silty;			coarse, dark-gray (10YR4/1), some silt,
_	01	some silt, dark-yellowish-orange; overly-	3	118-121	0.08-0.12 inch layers
		ing sand, fine, dark-gray (7.5YR4/0), silty	3	140-121	Sand, fine to very coarse, dark-gray (10YR4/1), silty; overlying sand, fine,
2	81-83	Sand, very fine, dark-gray (7.5YR4/0), silty,			dark-gray (10YR4/1), slightly silty
		streaks and laminae of orange clayey silt;			6-07 (10 1 1 17), on Butty anty

**ELECTRIC LOG** 

**NEUTRON LOG** 

**GAMMA-RAY LOG** 

950

53

Well 014	(cont.)		1	344-345	Sand and silty clay, olive-gray (5Y3/2), inter-
Thicknes		Lithology			bedded, finely laminated; sand, fine, micaceous
(ft) 5	(ft) 121-126	Silty clay, dark-gray (10YR4/1); shell frag- ments at bottom	3 2	345-348 348-350	No recovery Silty clay and sand, interbedded, olive-gray (5Y4/1); sand, fine to coarse, poorly
10	126-136	Sand, medium to fine, dark-gray (10YR4/1),	3	350-353	sorted; lignitic wood, a few large pieces No recovery
19	126 155	poorty sorted; overlying sand, fine to medium, micaceous, silty	8	353-361	Clay, olive-gray (5Y4/1), laminated, with thin interbeds of silty, very fine sand;
7	136-155 155-162	No recovery Sand, medium to fine, olive-gray (5Y3/2),	2	363-365	intense bioturbation; very carbonaceous Silty clay, olive-gray (5Y3/2), micaceous,
Kirkwo	od Formati	clayey, scattered pebbles	2	361-363	oxidized in part to yellowish-gray (5Y7/2) No recovery
1	162-163	Sand, fine to medium, olive-gray (5Y3/2),	10	365-375	Clay, silty fine sand, grayish-olive (10Y4/2),
2	163-165	clayey; diatoms common  Very clayey silt, olive-gray (5Y3/2); few interbeds of sand, medium, light-yellow;		332 279	interbedded, locally oxidized to dusky- yellow (5Y6/4); clay, laminated; lignite, finely divided, scattered throughout; some small shell fragments
		abundant diatoms; silt oxidized readily,	7	375-382	No recovery
7	165-172	coating core with jarosite	3	382-385	Sand, medium to coarse, dark-grayish-green
3	172-175	No recovery  Sand, medium, olive-gray (5Y3/2) to grayish- brown (5YR3/2), clayey, silty, abundant diatoms			(5GY4/1), clayey; some small pebbles; mollusk shells, thin walled, fragments, are common; abundant finely dispersed organic matter and pyrite
10	175-185	Sand, fine, brownish-gray (5YR4/1), very	Disconfe	-	
		clayey, micaceous, faintly bedded; small	8	385-393	No recovery
15	185-200	pieces of wood, abundant at 180 ft Clayey silt to very fine sand, micaceous,	2	393-395	Sand, medium to coarse, dusky-yellowish- brown (10YR2/2), clayey; pebbles up to 0.25 inches; finely dispersed organic mat-
		sparingly diatomaceous, laminated to			ter and pyrite are common
11	200-211	massively bedded; small pieces of wood	8	395-403	No recovery
4	211-215	No recovery	2	403-405	Sand, very coarse, olive-gray (5Y3/2), pebbly,
•	211-213	Silt, dusky-yellowish-brown (10YR2/2), slight- ly clayey, micaceous, massive; thin seams	4	405-409	slightly clayey No recovery
5	215-220	very fine sand; diatoms common at 213 ft	1 2	409-410 410-412	Clayey silt, olive-gray (5Y3/2)
15	220-235	No recovery	23	412-435	No recovery Sand, fine, grayish-brown (5YR 3/2) to
6	235-241	Clayey silt and fine sand, dusky-yellowish- brown (10YR2/2), micaceous, diatom- aceous; fine pieces of wood are common		412.433	moderate-brown (5YR3/4), clayey, silty, laminated, micaceous; abundant carbonaceous matter, finely dispersed; no
4	241-245	No recovery Sand, fine, olive-gray (5Y3/2), silty, some			recovery at 415-424 ft and 425-432 ft
·	241-243	quartz granules, diatomaceous; phos- phate grains, black, shiny	10	435-445	Silty clay and clayey silt, dark-grayish-brown (5YR3/4) to dark-yellowish-brown
Disconfo	rmity	Printe Brains, Charles, Gilliny			(10YR4/2), laminated, micaceous; scat- tered masses of pyrite; carbonaceous
7.	245-252	No recovery			matter, abundant, finely dispersed
3	252-255	Sand, medium to coarse, olive-gray (5Y3/2),	5	445-450	No recovery
9	255-264	slightly clayey; pebbles up to 0.25 inches No recovery	5	450-455	Clayey silt, moderate-brown (5YR4/1), oxidized locally to yellowish-brown
1	264-265	Shells, olive-gray (5Y3/2), coarse fragments,			(10YR2/2), massive to finely laminated;
7	265-272	thin beds in fine sand matrix No recovery	10	455-465	small fossils, thin layers up to 0.40 inches Clayey silt, brownish-gray (5YR4/1),
3	272-275	Shell layer, olive-gray (5Y3/2), coarse;			laminated; occasional thin layers of very
J	2/2-2/5	medium sand matrix; shells oriented paral- lel to bedding plane	10	465-475	fine sand; scattered small shells, some foraminifers Clayey silt, moderate-brown (5YR3/4),
9	275-284	No recovery		100 110	laminated, micaceous; shelly near 468 ft;
1	284-285	Silt and fine sand, interbedded, olive-gray (5Y3/2); finely divided woody fragments	10	475-485	microfossils abundant at 473 ft Sand, fine, grayish-olive-green (5GY3/2),
		are common	1		clayey, micaceous, bioturbated;
4	285-289	No recovery	1		glauconitic, especially in lower 5 ft; foraminifers, common near 476 and 484 ft
6	289-295	Clay and silt, olive-gray (5Y3/2), interbedded	Uncon	formity	totalitititers, common near 4/6 and 484 it
		with sand, very coarse, lighter colored,		Beta unit:	•
		pebbly, lignitic, throughout interval	28	485-513	No recovery
29	295-324	No recovery	2	513-515	Sand, fine, olive-gray (5Y4/1) to gravish-
1	324-325	Sand, olive-gray (5Y4/1); shells, coarse, abundant, broken, thick-walled			olive-green (5GY3/2), quartz; slightly clayey and glauconitic; abundant worn
9	325-334	No recovery		£45 5-0	shell fragments
1	334-335	Sand and silty clay, interbedded; sand, medium to coarse, olive-gray (5Y3/2); silty clay, micaceous, scattlered lignite fragments	1	\$15-519 519-520	No recovery Sand, fine to medium, olive-gray (5Y4/1) to olive-black (5Y3/1), quartz, silty; abun-
9	335-344	No recovery	5	520-525	dant worn shells and glauconite sand No recovery

					namiiton Township
0.5	525-525 <i>.</i> 5	Sand, fine to medium, olive-gray (5Y4/1), quartz, silty; abundant shell fragments and glauconite sand	7	745-752	Sand, medium to coarse, dark-yellowish-gray (5Y7/2), glauconite quartz, massive; fossiliferous, mostly broken shells (hash);
7.5 12	525.5-563 563-575	No recovery Sand, fine to medium, grayish-green (10G4/2), glauconitic quartz, indurated, laminated;			pyrite clusters; laminated, less glauconite sand, intensely bioturbated, burrows are
Unconfo		very shelly; no recovery, 565-569 ft; 571-574 ft	3	752-755	filled with glauconite sand at 748-752 ft Sand, fine, dark-yellowish-gray (5Y7/2), clayey, crudely stratified, glauconitic; scattered
Ξ.	inding unit:		1		mica; shells, large, worn, calcareous
2 18	575-577 577-595	No recovery Silty clay and sand, thinly interbedded, micaceous; silty clay, dark-greenish-gray	6 Unanta	755-761	Silty clay, brownish-gray (5YR2/1); many small shells
		(5GY4/1); sand, fine to medium, light-	Unconfor	rmity  ver Formst	lian:
		gray, glauconite quartz; woody fragments common; fine shells throughout, increas- ingly at 585-595 ft	24	761-785	Sand, medium to coarse, grayish-olive-green (5GY3/2), clayey, glauconitic; interbedded
10	595-605	Sand, very fine, olive-gray (5Y2/1) to olive- black (5Y4/1), finely laminated,	7	785-792	with calyey, silty, fine quartz sand; intense bioturbation; scattered fossils Sand, medium to coarse, dusky-green (5G3/2),
	<b></b>	micaceous; scattered small shells; occasional lignitic wood fragments			clayey, glauconite quartz; shells, large, scattered; many burrows
1 9	605-606	Sand, medium, dusky-green (5G3/1), glauconitic, loose, slightly clayey	3	792-795	Clayey silt to fine sand, pale-olive (10Y6/2), laminated
Unconfo	606-615	Sand, fine, olive-black (5Y2/1), clayey, massive to laminated, micaceous; scat- tered small shells; some burrows	20	795-815	Very clayey sand, dusky-yellow-green (5GY5/2), massive; quartz sand, slightly glauconitic; intensely burrowed; many
	lpha unit:		20	815-835	small shells Sand, fine, dusky-yellow-green (5GY5/2), glauconitic, crudely laminated; locally thin
10	615-625	Similar to 606-615 ft. interval, except massively bedded			bedded, especially near 820 ft; burrows; oc- casional indurated layers at 825-835 ft
5	625-630	No recovery	34	835-869	Clayey silt, pale-olive (10Y6/2), massive to
5	630-635	Sand, fine, olive-black (5Y2/1), very clayey, massive to laminated; shells, thin, small, scattered			faintly bedded; glauconite grains, fine, scattered; occasional large burrows, filled with glauconite sand; includes an indurat-
10	635-645	Clayey silt, dark-greenish-gray (5GY4/1), laminated; shells, thin, small, scattered			ed pyritic layer containing flattened shells, intensely burrowed, with burrows calcite
10	645-655	Clay and silt, dark-greenish-gray (5GY4/1) to olive-gray (5Y3/2), laminated; common rip-up microbreccias; pyrite masses			filled at 844 ft.; some medium quartz sand, increasing glauconite sand, intensely bur- rowed at 864-869 ft.
20	655-675	Silt and clay, olive-gray (5Y3/2), laminated; small shells and wood pieces throughout; glauconite grains, fine to very fine, 665-675 ft	16	869-885	Sand, very fine, light-olive-gray (5Y5/2), silty, massive, intensively bioturbated; fine grains of glauconite scattered through-
10	675-685	Very clayey silt, olive-black (5Y2/1) to grayish-olive-green (5GY3/2), laminated, micaceous; some glauconite sand; shells,	4 4.5	885-889 889-893,5	out; crudely stratified at 873-885 ft. No recovery Sand, very fine, light-olive-gray (5Y5/2),
10	685-695	thin, small, scattered Very clayey silt, brownish-black (5YR2/1),			silty, interbedded with dusky-yellowish- green (10GY3/2), very glauconitic sand,
Disconfo	armity	laminated; shells, thin, small, scattered; more glauconite sand than last interval			intensively burrowed; glauconitic sand is thickest from 891 to 893 ft; abundant
Subunit					phosphatic debris "fish parts" and oc- casional small shark teeth; contact with
20	695-715	Sand, silt, interbedded, bioturbated; sand, fine to medium, olive-black (5Y2/1), thin-	Unconfor		underlying bed sharp
		bedded, glauconite quartz; silt,		ınnıy <b>ıan Format</b>	ion (part):
		nonglauconitic; shells, moderate-sized,	11.5 893		Clayey silt, pale-olive (10Y6/2), crudely
		scattered; burrows, larger at 705-715 ft,			bedded, burrowed; small amounts of fine
2	715-717	particularly near 710 ft Clayey silt to fine sand, olive-black (5Y2/1)			glauconite sand; scattered large shells, but most fossils are very small
2	717-719	Sand, medium to coarse, grayish-olive-green (5GY3/2), glauconite, quartz	18	905-923	Clayey silt, pale-olive (10Y6/2), finely laminated; numerous small burrows:
6	719-725	Sand, fine, olive-black (5Y2/1), clayey, massive, clayey, burrowed; some pyrite clusters	22	923-945	abundant microfauna Clayey silt, pale-olive (10Y6/2), crudely
10	725-735	Clayey silt, sand, interbedded; clayey silt, olive-black (5Y2/1); sand, fine, layers with variable amounts of glauconite; shells, large, scattered, especially near 727 ft	_	720 710	laminated, intensively bioturbated; some large burrows; abundant microfauna; increasing fine glauconite sand at 941-945 ft
Disconfo	ormity	ange, scattered, especially field 121 ft			
Subunit	A:	Contract to the second			
10	735-745	Sand and clayey sand, interbedded; sand, medium to coarse, olive-gray (5Y3/2), glauconitic, with scattered pebbles up to 0.25 inches; clayey sand, fine to medium,			
		glauconite quartz; large shells near 743 ft; some pyrite clusters			

Well 040	Well 040 Geographic code: 0112				
Owner or n	ame: Atla	ntic City Expressway			
Location: N	N393157	W744251			
Driller: A.G	C. Schultes	<b>S</b>			
Quad.: Egg	Harbor C	City Comp. date: 09/08/1980			
Atlas Sheet					
Permit no.	36-1865	Depth drilled: 172 ft			
Thickness	Depth	Lithology <sup>1</sup>			
(ft)	(ft)	w .			
Ìź	ò-á	Fill			
10	3-13	Sand, brown			
9	13-22	Clay, white and brown			
8	22-30	Clay, white; sand, white			
12	30-42	Clay, yellow and white; sand, fine, brown			
38	42-80	Sand, brown			
4	80-84	Clay, brown			
68	84-152	Sand, brown; sandstone at 84-126 ft; medium, white clay at 84-97 ft; fine at 97-126 ft; white clay at 117-126 ft; coarse at 126-152 ft			
6	152-158	Sand, very-dark-brown; gravel; sandstone; clay, yellow			
2	158-160	Sand, coarse; gravel; clay, white, reddish			
6	160-166	Sand, coarse, tan			
6	166-172	Sand, very-dark-brown; sandstone; clay, red and white			

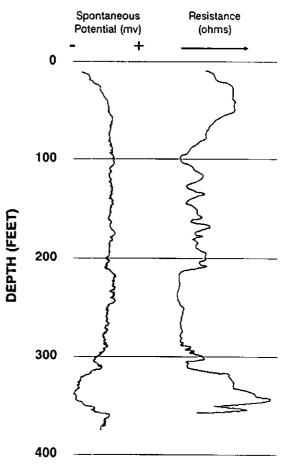
# WELL 040 ATLANTIC CITY EXPRESSWAY

	G.	AMMA-RAY LOG	ELECTRIC LOG					
	Ra	adiation increases	Spontaneous Potential (mv)	Resistance (ohms)				
	0		- +					
(FEET)	100	James Land	}					
DEPTH (FEET)	100	and the second	A MAN	7				
	200			<del></del>				

Well 130		Geographic code: 0112
Owner or 1	name: Han	nilton Township MUA
Location: I		W744439
Driller: A.	C. Schultes	1
Quad.: Ma	ys Landing	Comp. date: 11/1966
Atlas Shee	t no. 36.01.	.762 Elevation: 20 ft
Permit no.	36-391	Depth drilled: 371 ft
Thickness	- · F · · ·	Lithology
(ft)	(ft)	
14	0-14	Sand, yellow; mud; clay
13	14-27	Sand; layers of clay
4	27-31	Clay, black
14	31-45	Sand; gravel
27	45-72	Sand, clayey
22	72-94	Clay; sandy and silty at 83-94 ft
4	94-98	Sand
12	98-112	Clay, sandy
38	112-150	Sand; clay streaks at 112-145 ft
7	150-157	Clay, sandy
5	157-162	Sand; clay chips
19	162-181	Sand and gravel
36	181-217	Clay, laminated
38	217-235	Clay, sand, and grave!
40	235-275	Sand and clay
3	275-278	Hard spot
9	278-287	Clay, sandy
68	287-355	Sand, fine
16	355-371	Clay, laminated at 355-368 ft

#### WELL 130 HAMILTON TOWNSHIP MUA

#### **ELECTRIC LOG**



Well 131 Geographic code: 0112 Owner or name: Hamilton Township Municipal Utilities					
Authority Location: N392709 W7444322					
Driller: Ar					
Quad.: Ma					
Atlas Shee	,				
Permit no.		Depth drilled: 240 ft			
Thickness	Depth	Lithology			
(ft)	(ft)				
13	0-13	Sand and gravel			
2	13-15	Clay			
3	15-18	Sand and gravel			
9	18-27	Clay			
53	27-80	Sand; black at 27-31 ft; red at 31-80 ft			
20	80-100	Sand, fine, muddy (silty)			
80	100-180	Marl; sandy at 100-130 ft			
12	180-192	Sand			
5	192-197	Clay			
13	197-210	Sand, muddy (silty)			
5	210-215	Sand; wood streaks (lignite)			
15	215-230	Sand, dirty			
10	230-240	Marl			

Well 132 Geographic code: 0112

Owner or name: Arawak Paving Company Location: N393429 W744649

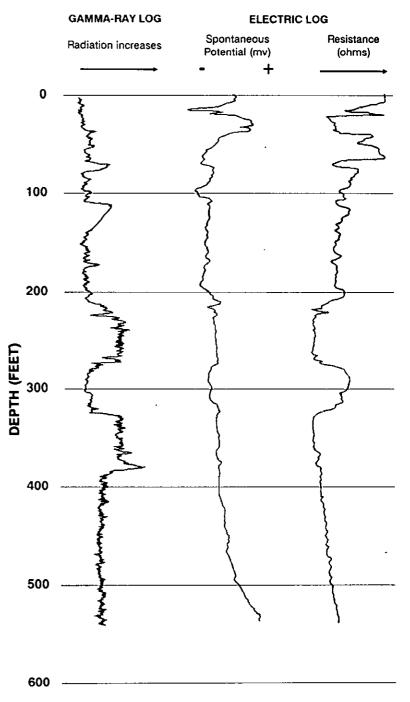
Driller: N.J. Geological Survey
Quad.: Newtonville
Atlas Sheet no. 31.34.994
Comp. date: 06/01/1985
Elevation: 70 ft
Depth drilled: 550 ft
Joint exploratory borehole of N.J. Geological Survey and U.S.
Geological Survey; log by Douglas Frost, U.S. Geological Survey, and Peter Sugarman, N.J. Geological Survey.

Depth (ft)	Lithology
0-10	Sand, fine, to gravel, dark-yellowish-orange (10YR 6/6), round to subround, frosted grains; abundant clay, trace flat car-
	bonaceous black flakes, medium-sized clear mica, dark-red ironstone (bog iron)
10-20	Sand and clay; sand, coarse to gravel, grayish- orange (10YR 7/4) to pale-yellowish- orange (10YR 8/6), subround, frosted;
	clay, light-gray to white, soft and blocky, trace iron oxided staining
20-30	Sand, fine to coarse, dark-yellowish-orange (10YR 6/6), subround to round; abun-
	dant yellow clay; trace ironstone (bog iron); some mica
30-40	Clay and sand; clay, soft, blocky, grayish- orange (10YR 7/4); sand, fine to very coarse, subround, iron stained; some
	ironstone (bog iron); trace mica and kaolinitic argillite
40-50	Sand, medium to coarse, grayish-orange (10YR 7/4) to pale-yellowish-orange (10YR 8/6), round; abundant pale-orange
	to white clay; trace black carbonaceous flakes (lignite)
50-60	Sand, medium to coarse, light-brown (5YR 5/6), subround
60-70	Sand, coarse, light-brown (5YR 5/6), round; coarse carbonaceous grains; finely crystal- tine pyrite coating; trace clay, light-gray

70-80 Sand, fine to medium, light-brown
(5YR 5/6), to moderate-yellowish-brown
(10YR 5/4), subround; clay, brown, increasing along with black carbonaceous
grains; 25-30 percent of sand with red to
brown iron stained

80-90 Sand, medium to coarse, dark-yellowishorange (10YR 6/6), subround to round,
silica cemented; trace brown clay; increasing very fine carbonaceous flakes;
abundant iron staining

#### WELL 132 ARAWAK PAVING COMPANY



Wall 132 (cont.)		1 200 200	Charles to the Company of the Compan
Well 132 (cont.) (ft)		320-330	Clay, soft, blocky, olive-gray (5Y 3/2), light- brown-gray streaks; trace platy
90-100	Sand and clay; sand, coarse, dark-yellowish-		carbonaceous flakes; coarse anhedral
	orange (10YR 6/6); clay, orange to		pyrite; sand with brown and green clays;
	pale-orange; abundant lignite and	220 240	micaceous
	pyritized plant remains; iron staining throughout	330-340	Clay, soft, blocky, sticky, olive-gray (5Y 3/2) and light-olive-gray (5Y 5/2); increasing
100-110	Clay, firm, subblocky to fissile, dusky-		sand, fine to coarse, subround; partially
	yellowish-brown (10YR 2/2), lignitic,		pyritic; iron stained, fine black carbon-
	partially pyritized; some sand, fine to		aceous flakes; some mica
110-120	coarse, subangular Clay, fissile, firm, dusky-yellowish-brown	340-350	Clay, blocky, very soft, sticky, olive-gray,
110-120	(10YR 2/2) to olive-black (5Y 2/1); abun-		(5Y 3/2) to (5Y 4/1); 5-10 percent black lignite; sand, fine to very coarse, sub-
	dant black carbonaceous flakes and		round; disseminated pyritic sand size
100 100	pyritic crystals; subround sand		nodules and coating on 40 percent of
120-130	Sand, medium to coarse, light-olive-gray (5Y 5/2), subround; clay, olive-gray;	350-360	sand; mica
	lignite; abundant pyrite coating carbon-	350-300	Clay, soft, blocky, olive-gray (5Y 3/2) to (5Y 4/1); silty clay, light-blue-gray; 10 per-
	aceous flakes and sand		cent carbonaceous material partially
130-140	Clay, soft, fissile, sticky, olive-gray (5Y 3/2);		replaced with pyrite; light-blue-gray clay;
140-150	sand with trace iron oxide; mica; pyritic Clay, subblocky, firm, olive-gray (5Y 3/2);	360-370	sandy; trace mica
140-150	abundant pyrite; trace angular chert;	300-370	Clay, soft, sticky, olive-gray (5Y 3/2); sand, light-olive-gray (5Y 5/2), dense; decreas-
	coarse sand; abundant black car-		ing lignite; trace mica; some mica
150-160	bonaceous material; trace mica	370-380	Clay, blocky, soft, sticky, olive-gray (5Y 3/2);
130-100	Clay, blocky, soft, olive-gray (5Y 3/2) to olive-black (5Y 2/1); sand, coarse,		sand, subround at top; 20-30 percent fos- sils, mostly pelecypods; trace mica
	subangular, pyrite coating; increasingly	380-390	Clay, blocky to subfissile, soft, sticky, olive-
440.450	carbonaceous with black pyritized lignite		gray (5Y3/2); trace silt and pyrite;
160-170	Clay and lignite; clay, firm, blocky, olive-gray (5Y 6/4); lignite, abundant; trace sand	390-400	increasingly abundant shells; some mica
,	with pyritic coating, some iron staining	370-100	Shells and sand, light-olive (5Y 5/2); shells, abundant, trace pyrite replacement; sand,
170-180	Lignite, grayish-black (N2), splintery to		coarse to very coarse, round, clear to
	platey, partially pyritized with some iron		white, trace amber grains; some coarse
180-190	staining; trace gray clay Clay, soft, blocky to subblocky, medium-light-	400-410	gray chert; trace green glauconitic clay
100-170	gray (N6); decreasing lignite; trace sand	400-410	Shells and sand, light-olive-gray (5Y 5/2), tan specks; sand, fine to very coarse, sub-
	at base		round to round; trace gray chert;
190-200	Sand, fine to medium, pale-olive (10Y 6/2),		40 percent of grains exhibit lacy pyrite
	subround, trace pyrite coating on some grains		growths on internal surfaces; trace iron staining; fossils appear altered to pyrite;
200-210	Sand, coarse to very coarse, olive-gray		occasional glauconite on shells
	(5Y 4/1), round, silica cemented; trace	410-420	Sand and shells; sand, medium to very coarse,
210-220	gray chert; scattered carbonaceous flakes Sand, medium to coarse, light-olive-gray		light-olive-gray (5Y 5/2), round to
210-220	(5Y 6/1), round; trace clay, light-gray; iso-		subround; abundant shells with pyritic growths; trace glauconite
	lated pyritic coatings	420-430	Shells and sand, light-olive-gray (5Y 5/2); abun-
220-230	Lignite and clay; clay, blocky to chunky, firm,	400 440	dant shells, little alteration; coarse sand
	dusky-yellowish-brown (10YR 2/2), some light-gray, lignite, brown to dark-brown	430-440	Sand, medium to very coarse, light-olive-gray
230-240	Clay and gravel; clay, soft, blocky, olive-gray		(5Y 5/2), subround, silty; brown clay with abundant shells; trace mica and anhedral
	(5Y 4/1), grading to gravel at base; gravel,		pyrite on 30 percent of fossils; scattered
	pink to white, rounded; pyritic; trace		silt size glauconite
240-250	chert Clay, soft, blocky, light-brownish-gray	440-450	Sand, coarse to very coarse, light-olive-gray
210-200	(5Y 6/1), silty; pyritic coating on some		(5Y 5/2), subround to round; trace of
	sand grains; black plant material (lignite);		light-gray chert; round black fine grains;
250 260	trace mica		25 percent clay and shells; trace pyrite on
250-260	Clay, blocky, very soft, sticky, medium-light- gray (N6); abundant silt; trace angular	450-470	sand and shells
	sand; very fine black carbonaceous flakes;	450-470	Clay, firm, subfissile, olive-gray (5Y 3/2), silty; sand, medium to coarse; 30 percent
240.000	micaceous; pyritic		shell fragments with slight glauconitic al-
260-270	Clay, mottled, very soft, medium-light-gray (N6) to very-pale-orange (10YR 8/2);		terations; trace pyrite
	sand; decreasing silt and organic	470-480	Clay and sand; clay, firm, subblocky to
	material; trace mica; trace ironstone (bog		subfissile, pyritic, olive-gray (5Y 3/2) to
270 200	iron), dark-brownish orange		light-olive-gray (5Y5/2), silty; sand,
270-280	Clay, blocky, soft, sticky, olive-gray (5Y 4/1), mottled with orange staining; sand, abun-		medium, subangular to subround, 20 percent
	dant, angular to round; black	480-490	shell fragments; lignite; some mica Sand, fine to coarse, light-olive-gray
	carbonaceous material (lignitic); trace	100-100	(5Y 5/2), subround to subangular, clay,
200 220	mica, silt, and ironstone (bog iron)		dusky-yellowish-brown with black grains;
280-320	No record		glauconite; iron stained lignite; 30-40
			percent shells

					Hamilton Township
	490-500	Sand, fine to coarse, light-olive-gray (5Y 5/2),	Well 134		Geographic code: 0112
		subround; trace lignite and glauconite;	Owner or	name: Wh	eaton Plasti-Cote Corporation
		5 percent of grains have iron stained argil-	Location:	N392641	W744123
		laceous debris on surfaces; clay, brown,		ance Skinn	
		thin, platy, 20 percent shells	(	ays Landin	
	500-510	No record	Permit no	et no. 36.01	
	510-520	Clay, firm, blocky, olive-gray (5Y 3/2), with	Thickness		Depth drilled: 194 ft Lithology
		platy dark-gray clay, calcareous and pyritic	(ft)	(ft)	Littology
		in part; sand, abundant fine to medium	41	0-41	Sand, fine; buff at 0-11 ft and 17-41 ft; stone
		orange stained sand; silty; 30 percent shells	'-	V-11	(gravel) at 0-5 ft; light-yellow at 11-17 ft;
	520-530	Sand, very fine to coarse, light-olive-gray			interbedded thin layers of white clay at 17-
		(5Y 5/2), subangular to round, becoming			31 ft; slightly clayey at 31-41 ft
		very clayey; 10-15 percent shells, altered	10	41-51	Clay, buff, sandy
		to pyrite and glauconite in part; rounded	10	51-61	Sand, fine, buff, slightly clayey
	520 540	black grains	26	61-87	Sand, fine to medium, light-buff, quartz
	530-540	Clay, firm, blocky, slightly sticky, olive-gray	8	87-95	Clay, buff
		(5Y 3/2); abundant sand at top of inter-	70	95-165	Sand, fine, buff, clayey
		val; trace of glauconitic and black grains, silty, micaceous, scattered pyrite	29	165-194	Sand, fine, gray; slightly clayey at 165-180 ft;
	540-550	Clay, firm, subblocky to fissile, olive-gray			thin black clay layers at 180-194 ft
	540-550	(5Y 3/2), becoming dusky-yellowish-			, ,
		brown (10YR 2/2); sandy in part,	Well 135		Geographic code: 0112
		subround, fine to medium; some lignite;	Owner or	name: May	s Landing Water Power Company
		decreasing mica	Location:		W744400
		oostones		W. Wells D	
Well 133		Geographic code: 0112		ays Landin; et no. 36.01	· .
	name: Atla	antic County Girl Scout Camp	Permit no		.841 Elevation: 8 ft Depth drilled: 176 ft
Location:		W744604		olman, 189	
Driller: N.			Thickness	Depth	Lithology
Quad.: Do		Comp. date: 10/10/1984	(ft)	(ft)	<del></del>
Atlas Shee	t no. 36.05				Gravel, yellow; yellowish-white clay; recent
Permit no.	35-4370	Depth drilled: 171 ft			diatom species observed on higher
		ey observation well.			ground south of well
Thickness		Lithology		22	Sand, granular (very coarse), gray
(ft)	(ft)		32	22-54	Sand, finer than previous interval, gray
ÌÓ	ò-10	Sand, fine to coarse; very coarse gravel; silty	18	54-72	Sand, bluish-gray, clayey; consid-
		sand			erable wood (lignite), well preserved
2	10-12	Sand, fine, tannish-brown; trace ironstone	26	72-98	Clay, bluish, diatomaceous
_		(bog iron) at the bottom	14	98-112	Sand, clayey, diatomaceous
2	12-14	Sand, brown to orange, clayey, silty	4	112-116	Sand, bluish when wet
2	14-16	Silt, tan, clayey, to fine brown sand	9	116-125	Sand and diatomaceous clay
8 2	16-24 24-26	Sand, light-brown; fine and silty at 16-22 ft Clay, tan, silty	7	125-132	Sand, water (water-bearing)
6	26-32	Sand, fine to medium, tannish-brown	10	132-142	Sandy clay, diatomaceous
2	32-34	Sand, fine, brownish-yellow	7	142-149	Clay, bluish, diatomaceous
5	34-39	Clay, yellow; sand	2	149-151	Sand, water (water-bearing)
2	39-41	No record	14 ·	151-165	Sand, and diatomaceous clay
1	41-42	Sand, medium to coarse, light-brown	7	165-172	Clay, blue, richly diatomaceous
1	42-43	No record	4	172-176	Sand, water-bearing
2 10	43-45 45-55	Sand, fine, brown			
20	55-75	Sand, fine to coarse, orange-brown Sand, brown; fine, silty, 55-71 ft; fine to medium	Well 138		Geographic code: 0112
20	33-13	at 71-73 ft; coarse, silty at bottom of 73-75 ft		name: Sav	
2	75-77	No record	Location:		W744726
2	77-79	Sand, brown and red, to gray clay	_	ance Skinn	
8	79-87	Sand, fine, gray, silty; clayey at 79-81 ft;	Quad.; De	et no. 35.05	Comp. date: 03/1974 .716 Elevation: 85 ft
		shell fragments at 85-87 ft	Permit no		Depth drilled: 195 ft
2	87-89	Sand, coarse, gray, silty	Thickness		Lithology
6	89-95	Clay, gray; sand, fine, light-gray at 89-91 ft;	(ft)	(ft)	<b></b>
26	95-121	silty at 93-95 ft Sand, gray; fine at 95-99 ft and 114-121 ft;	19	0-19	Sand, buff, clayey
20	/J-141	salty at 95-99 ft and 103-121 ft; coarse to	56	19-75	Sand, fine, light-buff, generally clayey; some
		fine at 99-114 ft; wood fragments (lignite)			thin strips of sandy and white clay
		at 114-116 ft	12	75-87	Clay, gray, sandy
9	121-130	Sand, coarse, gray to white	31	87-118	Sand, fine, slightly clayey; grayish-buff at
7	130-137	Wood (lignite), fine fragments; sand, coarse,			87-100 ft; buff at 100-118 ft
		white to gray	37	118-155	Sand, fine to medium, gray; some strips of
2	137-139	Sand, coarse, gray, white pebbles (gravel)	J	100	gray clay at 145-155 ft
8	139-147	Sand, very coarse, gray to white; some clay	34	155-189	Sand, fine, gray, clayey; sandy clay
15	147-162	Sand, gray; fine, 147-152 ft; coarse, 152-162 ft	6	189-195	Clay, brownish-gray, sandy
			ŀ		,

Well 291		Geographic code: 0112			WE	ELL 291	
		. Geological Survey				OGICAL SURV	FY
Location:		W745051			0.0. QLOL(	Juioal Join	_,
	J. Geologi				GAMMA-RAY LOG	ELECTRIC	LOG
Quad.: Do		Comp. date: 03/29/1985				Spontaneous	Resistance
	et no. 35.04				Radiation increases	Potential (mv)	(ohms)
Permit no		Depth drilled: 577 ft				· Otermar (mv)	(Onina)
Observati	on well, on	N.J. Department of Transportation property.				• +	
Thickness		Lithology		0			
(ft)	(ft)	<b></b>		·	-		
10	0-10	Disturbed layer			3	- ک	
10	10-20	Sand, very fine to coarse, dusky-yellow					کے
		(5Y 6/4), subangular, some white chert;				<u>}</u>	>
10	20.20	silty in part			-		7
10	20-30	Sand, fine to medium, dusky-yellow			~	<b>)</b>	)
		becoming dark-yellowish-orange (10YR			:	<b>*</b>	}
		6/6), subangular to subround, increasingly		100	<del></del>	<del></del>	<del>\[\]</del>
10	30-40	clayey, trace iron coating on grains			<del>-</del>	\{	{
10	30-40	Gravel, pale-yellowish-brown (10 YR 6/2);				کے	7
		sand, medium to coarse and pebbles, red,			چ_ <u>ے</u>	• (	ζ
		yellow, and cream, subround, loose; trace			<b>\$</b>	<b>S</b>	}
		black carbonaceous flakes and grains;			*	_ {	
10	40.50	slightly argillaceous			- <u>-</u>	۶ .	}
10	40-50	Gravel, pale-yellowish-brown (10 YR 6/2),		200	<del>_</del> _	<u>_</u>	
		increasingly larger pebble-sized grains, cream, orange and white; light-grayish-			£	>	$\geq$
		orange clayey filling; trace iron coating					$\supset$
		most grain surfaces	F		<del>- 2 -</del>		-
10	50-60	Sand, fine, grayish-orange (10YR 7/4),	Щ		<u> </u>	ļ	ار
	•••	subround, argillaceous, trace black and	ĬĬ,			\	)
		yellowish-orange iron coating	Ť		3	. }	
10	60-70	Sand, very fine to fine, grayish-orange	<b>DEPTH (FEET)</b>	300		ζ	ζ
	•	(10YR 7/4), subrounded; increasing pale-	<u>.</u>	300			
		yellowish-orange clay with silt; no pebbles	莅			. >	<u> </u>
		or carbonaceous flakes			~~~	\$	ځ
10	70-80	Sand, medium to coarse, dark-yellowish-					}
		orange (10YR 6/6); some pebbles,				`	>
		varicolored; trace dark-brown to black			$\Rightarrow$	<b>;</b>	5
		lignite flakes and clay; abundant			<u> </u>	ا م	رسم
		ironstone (bog iron) on grains		400			<del></del>
10	80-90	Sand, coarse, dark-yellowish-orange			- <b>-</b>	1	}
		(10YR 6/6); trace pebbles, subangular,				>	2
		mostly cream and light-orange; clayey;			<b>\Endowname</b>	,	}
		trace carbonaceous flakes and iron oxide			3	(	}
		coatings				<b>ሰ</b>	₹
10	90-100	Sand, very fine to fine, moderate-yellowish-				i	1
		brown (10YR 5/4), subround; 50-percent		500			
		sandy clay, cream, tan and orange; trace			~	}	<i>}</i>
		white chert; abundant iron stained clay on				- }	{
10	100 110	grains					ζ,
10	100-110	Sand, fine, with medium to coarse streaks,		550		<u>-</u> -	
		moderate-yellowish-brown (10YR 5/4),	_				
		subangular to subround; abundant dark- orange-brown clay; black lignite; some			yello	wish-gray; trace lig	nite; some silt;
		triange-brown clay, black lightle; some				eased iron staining	
		white chert; iron stone (bog iron) probab-		1	10 150-160 Clay, g	rayish-yellow, soft;	30-40 percent
10	110-120	ly in streaks				, decreasing toward	
10	120-120	No record		1		ine, grayish-yellow	
10	120-130	Sand, fine to medium, dark-yellowish-				8/4), subround; trac	
		orange (10YR 6/6), subround, silty in				gradational into cl	
		part; abundant lignite giving salt and pep-	- 1			ous fossil debris; ti	
		per appearance; 30-40 percent		1		ine to very fine, gra	
10	130-140	dark-orange clay; iron oxide stains			(5Y t	8/4) to light-gray (N	l7), subround,
10	120-140	Clay, dark-yellowish-orange (10YR 6/6), firm; sand, coarse, round; trace dissemi-				easing coarse round	
		nated silt; iron staining			dant	gray clay; no visible	iron staining;
10	140-150	Clay, dark-yellowish-gray to grayish-yellow			trace	pelecypod fragmer	nts with some al-
20	- 10-12U	(10YR 6/6), firm; sand, very fine,			terat	ion to silica, some	very fine mica
		( o, o),,,,,,					

10	180-190	Sand, fine, light-brownish-gray (5YR 6/1), subround, some iron stained orange clay on 30 percent of sand; trace light-gray to			glauconite and white noncalcareous clay; 5 percent fine to medium subround sand in bioclastic material
		white chert; some silica-replaced shell fragments; increasing multicolored clay; thin dark-brown lignite; very silty in part; some mica	10	370-380	Clay, olive-gray (5Y 3/2), firm, subfissile to subblocky, massive; decreasing angular silt; some pyritic crystals, very fine and euhedral; trace black lignite and sand;
10	190-200	Clay, olive-gray (5Y 3/2), soft, blocky, sticky, uniform, dense; trace angular silt; some calcareous pelecypod fragments and very fine mica flakes	10	380-390	decreasing fossil fragments Clay, olive-gray (5Y 3/2), soft blocky, dense, massive; silt; mica; trace clay, light-olive-
10	200-210	Clay, olive-gray (5Y 3/2), soft to slightly firm, sticky, blocky, dense; some indistinct calcareous fossil fragments; very fine eu-			brown (5Y 5/6) to dark-yellowish-brown (10YR 4/2), firm, blocky, iron oxide and lignite in clay; increasing sand, very fine to medium, subround
10	210-220	hedral pyrite crystals; trace silt; no sand Clay, olive-gray (5Y 3/2), soft, firm, dense streaks, sticky in part, silty; some pyrite crystals; trace dusky-yellowish-brown clay with sand; trace dark-brown lignite;	10	390-400	Sand, very fine to fine, light-olive-gray (5Y 5/2), subround; trace light-gray angular chert and lignite; 20-30 percent clay, light-olive-brown (5Y 5/6), firm, blocky
10	220-230	decreasing mica  Clay, olive-gray (5Y 3/2) and dusky- yellowish-brown (10YR 2/2), firm, dense, silty; sand, 30-40 percent fine to coarse,		400-410	Clay and sand, light-olive-brown (5Y 5/6) to light-olive-gray (5Y 5/2); clay, firm to soft, variable density; sand, fine, subround, trace pyrite on grains, some mica, trace black lignite and pyrite
10	230-240	subangular to round; lignite, 5-10 percent dark-brown to black; mica; trace lacey pyrite on finer grain surfaces; trace silt Clay, olive-gray (5Y 3/2) to dusky-yellowish-	. 10	410-420	Clay, light-olive-brown (5Y 5/6) at top of interval, to olive-gray (5Y 3/2) at base, firm to soft and sticky, pyritic; some black
10	250-240	brown (10YR 2/2), firm, variable density, sticky in part, silty; increasing yellowish- brown clay; hard ironstone (bog iron);	10	420-430	lignite; fine sand at top; some very fine mica in olive gray clay; no fossils Clay, olive-gray (5Y 3/2), soft, moderately dense; trace medium to coarse pyritized
10	240.250	abundant black lignite; fine to medium sand, iron stained, some lacey pyrite on surfaces			lignite, 20-30 percent sand, coarse, round to subround, with laminations of fine to medium sand cemented with silica, brown
10	240-250	Clay, olive-gray (5Y 3/2), soft, dense, trace yellowish-brown; fine sand; some lignite; pyritic crystals throughout; locally abundant very fine mica	10	430-440	clay and lacey pyrite coating coarse grains; 1-2 percent milky coarse chert; trace large shell material; abundant very fine mica
10	250-260	Clay and sand, dusky-yellowish-brown (10YR 2/2) to light-olive-gray (5Y 5/2); clay, firm to hard, fissile; black lignite in upper interval; sand, very fine to fine, sub-		130-40	Clay, olive-gray (5Y 3/2), soft to firm, less dense; 5 percent pyritized coarse black lignite; 10 percent sand, fine to coarse, subround to angular; trace shell frag- ments; micaceous
10	260-270	angular to subround, iron stained, trace mica Sand, very fine to fine, light-olive-gray	10	440-450	Clay, light-olive-gray (5Y 5/2) to olive-gray (5Y 3/2), with pale-yellowish-brown (10YR 6/2) specks, firm; silt; 30-40 per-
	•	(5Y 5/2), subround, trace white argillite grains; trace olive-gray clay; black lignite; 10 percent of grains show pyrite growths	10	450 <u>-46</u> 0	cent shells; trace glauconite with some pyrite; calcareous clay throughout Clay, olive-gray (5Y 3/2) to dusky-yellowish-
70	270-340	on surfaces; some mica No record			brown (10YR 2/2), firm, calcareous;
10	340-350	Clay and shells, olive-gray (5Y 3/2) and			increasing subangular sand; 1-2 percent very fine glauconite; abundant very large
		pinkish-gray (5YR 8/1); clay, subfissile,			shells; trace pyrite and mica
		firm, sticky dense; trace angular silt and very fine sand; some fine mica; shells are pinkish-gray, with abundant clay, various sizes appear fresh and unweathered, trace pyrite on shells	10	460-470	Clay, olive-gray (5Y 3/2) to light-olive-gray (5Y 5/2), firm, variable density; increasing sand, very coarse to fine, subangular; 1-2 percent glauconite, very fine; 40 percent shell fragments, mostly large, <i>Pecten</i> sp.,
10	350-360	Shells, pinkish-gray (5YR 8/1) and olive-gray (5Y 3/2), abundant <i>Pecten</i> sp., <i>Arica</i> sp., and some <i>Turritella</i> sp. as whole			Cardium sp., Turritella sp., and other broken shells; trace mica and coarse an- gular milky chert
		specimens, increased alteration to clay on the aragonitic shell layers, shells are 70 percent of sample; clay, firm, subfissile to fissile; trace euhedral pyrite crystals	10	470-480	Clay, olive-gray (5Y 3/2), firm, nonsticky, calcareous; 20-30 percent fossils, <i>Pecten</i> sp., <i>Cardium</i> sp., <i>Polinices</i> sp., <i>Dentalium</i> sp., <i>Turritella</i> sp., and other fragments;
10	360-370	and angular silt; some mica  Clay, olive-gray (5Y 3/2), firm, fissile, pyritic; trace silt and black lignite; 20-30 percent shells, <i>Pecten</i> sp., coarse shell fragments;			25 percent sand, coarse grains composed of fine grains cemented with silica, sub- round; mica; pyrite

Well 291 (	(cont.)		Thickness	Depth	Lithology
Thickness		Lithology	(ft)	(ft)	_
(ft)	(ft)	(532 p) C	10	0-10	Sand, orange and red; dry clay
10	480-490	Clay, olive-gray (5Y3/2), firm, variable	15	10-25	Clay, yellow, large gravel
		density, less calcareous; 10 percent sand,	20	25-45	Sand, coarse, white; stones (gravel)
		medium to coarse, subangular, 5 percent	11	45-56	Gravel, large, white, red and yellow
		milky chert grains; 15-20 percent shell	9	56-65	Clay, white, yellow stringers (laminations)
		fragments; increasing pyrite; some mica; trace glauconite	15	65-80	Gravel, multicolored; cemented sand
10	490-500	Clay, olive-gray (5Y 3/2), firm, blocky; trace	21	80-101	Sand, medium, tan and white, clean,
10	470-300	silt and sand; 5-10 percent of sand is		404 405	uniform; red pebbles (gravel)
		chert; some shell fragments with	24	101-125	Clay and silt, brown, layers
		glauconite and pyrite alterations; mica	2	125-127 127-147	Clay, white
10	500-510	Clay, olive-gray (5Y 3/2), blocky, soft, dense,	20 8	147-155	Sand, fine to medium, white, clean
		sticky, uniform, massive; trace angular silt	7	155-162	Clay, yellow
		and euhedral very fine pyrite crystals;	22	162-184	Sand and sandstone, clean
		pale-yellowish-brown clay at base with	22	102-104	Sand, medium, tan and white, clean; coarser at 170-184 ft
		fine to coarse shell fragments; trace	6	184-190	Clay, gray; wood (lignite)
		glauconite and mica	13	190-203	Sand, fine, greenish-gray; wood pebbles (lignite)
10	510-520	Clay and shells, pale-yellowish-brown	9	203-212	Clay, lighter-gray
		(10YR 6/2), becoming grayish-orange-	á	212-215	Sand, fine, gray and white, fingers (layers)
		pink (5YR 7/2) at base; clay, firm, fissile,	10	215-225	Clay, gray, hard; wood (lignite)
		noncalcareous, becoming shelly at base;	15	225-240	Clay, sand and wood (lignite), gray, layers
		shells, pale-brown, abundant pelecypods	10	240-250	Clay, gray, tight
		with 5 percent or less of gastropods; some	22	250-272	Clay, gray; white sand; trace pebbles (gravel)
		glauconite, trace pyritic crystals on shells	12	272-284	Clay, greenish-gray, shell fragments
10	520-530	Shells, grayish-orange-pink (5YR 7/2),	19	284-303	Clay, dark-gray and brown
		clayey, very fine to very coarse fragments	6	303-309	Clay, green
		and whole specimens of pelecypods and	17	309-326	Sand, green; shell fragments
		gastropods, Phacoides sp., Astarte sp.,	22	326-348	Clay, dark-gray
		Pecten sp., Turritella sp., and others,	14	348-362	Sand, fine to medium, gray; shells
		trace glauconite on shells	9	362-371	Clay, gray
10	530-540	Shells, grayish-orange-pink (5YR 7/2),	25	371-396	Sand, coarse, clean; gravel; shells; lignite
		abundant pelecypod and some gastropod			
		shell fragments; light-brown clay;	Well 322		Geographic code: 0112
		glauconitic; trace rounded sand and mica	Owner or	name: Atla	antic Company Cranberry Bogs
10	540-550	Sand and shells, light-olive-gray (5Y 5/2) to	Location:	N393233	W744700
		grayish-orange-pink (5YR 7/2); sand, very	Driller:	••	
		fine to fine, subangular to subround,	Quad.: Ne	wtonville	Comp. date: 1892
		trace rounded calcareous grains; shells, in-	Atlas Shee	t no. 31.45	5.482 Elevation: 40 ft
		creasing amount of Turritella sp.;	Permit no.	51-137	Depth drilled: 45 ft
		glauconite and white clay with pyritic crys-	From Woo	olman, 189	3, p. 295.
40	550 540	talline growth; abundant brown clay	Thickness	Depth	Lithology
10	550-560	Clay, dusky-yellowish-brown (10 YR 2/2),	(ft)	(ft)	
		firm, hard streaks; sand, very fine to	6	0-6	Clay, white
		medium, subround; trace olive-gray clay	8	6-14	Iron crust (bog iron)
		at base; glauconitic; trace mica; some silt;	31	14-45	Clay, sandy, diatomaceous
10	560-570	few black carbonaceous flakes (lignite) Clay, olive-gray (5Y 3/2) and some dusky-	***		
10	300-370	yellowish-brown (10YR 2/2), soft, sticky,	Well 323	••	Geographic code: 0112
		dense; angular silt; very fine sand; brown			rner's Bog
		clay is not silty; slightly carbonaceous;	Location:		W744700
		micaceous	Driller:		Comp. data, 1902
7	570-577	Clay, olive-gray (5Y 3/2), soft, blocky, dense,	Quad.: Ne	wtonville et no. 31.45	Comp. date: 1892 5.188 Elevation: 50 ft
		uniform, massive; decreasing silt; trace	Permit no.		Depth drilled: 106 ft
		sand and pyrite crystals; micaceous	From Woo		
		1,,,	Thickness		Lithology
					Lithology
Well 292		Geographic code: 0112	(ft)	(ft) 0-4	Sand white
	name: U.S	S. Geological Survey	2	4-6	Sand, white Hardpan, yellow
Location:		W745051	6	6-12	Clay, white
Driller: N	J. Geolog	ical Survey	65	12-77	Quicksand and gravel
Quad.: De	_	Comp. date: 05/16/1985	18	77-95	Clay, blue; pebbles (gravei)
	et no. 35.04		11	95-106	Gravel, white
Permit no	. 35-4796	Depth drilled: 396 ft	•	20.100	wen-44 Patter
Observati	on well, or	N.J. Department of Transportation property.			
		'			

### **Hammonton Town**

Well 087			Geographic code: 0113		Well 095			Geographic code: 0113
Owner or		. Wolfe			Owner or name: Board of Water Commission			Commissioners
Location:			W744426		Location: 1			W744932
Driller: De		rilling			Driller: La	yne-N.Y.		
Quad.: Ats			Comp. date: 05/23/1967	i	Quad.: Ha			Comp. date: 01/18/1978
Atlas Shee		.432	Elevation: 75 ft	}	Atlas Shee	t no. 31.34	.676	Elevation: 115 ft
Permit no.			Depth drilled: 218 ft	j	Permit no.	31-12437		Depth drilled: 298 ft
Thickness		Litholo	gy	ĺ	Thickness	Depth	Lithol	logy
(ft)	(ft)			- 1	(ft)	(ft)		
8	0-8	Berm			5	0-5	Clay, yello	
1	8-9	Topsoil			18	5-23	Sand, yello	
7	9-16		coarse, tan; gravel		8	23-31	Sand and g	•
4	16-20		y coarse, tan; gravel; gray clay		21	31-52		el; clay streaks
4	20.24		19 ft; brown clay layers, 19-20 ft		40	52-92		; sand streaks; clay, 52-72 ft
4	20-24	Sano, fine to	medium, white and tan; gray		21	92-113	Clay, sand	
			clay layers at 20-23 ft; gray clay		12	113-125	Sand and g	
7	24-31	layers at 2			29	125-154	Clay; sand	and gravel streaks at 125-135 ft;
,	24-31		coarse; some gravel; thin gray		20	154 174		eaks, 135-154 ft
		sand at 30	; tan sand at 24-30 ft; white		20 22	154-174		se; gravel; clay streak
4	31-35		y coarse, tan; gravel; bog iron		32 9	174-206		to coarse; gravel, 195-206 ft
5	35-40		ome gravel; medium to coarse		10	206-215 215-225		to medium; gravel; clay streaks
•	25 10		; fine to coarse at 38-40 ft		4	225-229		se to medium; gravel
4	40-44		y fine, tan; brown clay		6	229-235	Clay, gray Sand, fine	
5	44-49		tan and gray		63	235-298		at 235-256 ft; grayish-yellow at
2	49-51	Sand, fine to			0.5	233-270		ft; grayish-brown at 277-293 ft;
2	51-53	Clay, brown	•	1				ny at 293-298 ft
4	53-57	Clay, gray					naro, gre	19 dt 275-276 ft
3	57-60	Mud (silt), t	lack, hard		Well 096			Geographic code: 0113
2	60-62		coarse, gray, small gray day layers	1		name: Boa	nd of Water	Commissioners
9	62-71	Mud (silt), b			Location: 1			W744641
16	71-87		gravel; mostly coarse at 71-76		Driller: La			,
			coarse at 76-87 ft		Quad.: Ha			Comp. date: 07/14/1967
2	87-89	Clay, gray			Atlas Shee		483	Elevation: 90 ft
31	89-120		fine at 89-99 ft and 109-120 ft;		Permit no.	31-5022		Depth drilled: 245 ft
		fine to coa	arse at 99-109 ft; trace white clay		Thickness	Depth	Lithol	
		at 113-120			(ft)	(ft)		<b></b>
1	120-121	Clay, gray as	nd tan, mixed		10	Ò-10	Sand, fine,	light-brown
1	121-122	No record			13	10-23		gray and yellow, sandy
4	122-126	Clay, yellow			67	23-90		to coarse, brown; gravel; yellow
4	126-130	Sand, fine, t	an					e clay streaks, 43-90 ft
7	130-137	Sand, fine to	coarse, white and tan; gravel		95	90-185	Sand, fine	to medium, brown; gravel
5	137-142	Sand, fine, t	an		60	185-245	Sand, fine	to coarse, brown
8	142-150	Mud (silt), t						
1	150-151	Sand, fine to	coarse, gray		Well 097			Geographic code: 0113
3	151-154	Mud (silt), t	olack		Owner or 1	name: Atla	ntic City Ex	pressway
37	154-191		coarse; white at 154-158 ft and		Location: 1	N393700		W744926
			; tan at 158-170 ft and 174-183		Driller: A.	C. Schultes	i	
			ravel at 158-191 ft; brown, 183-		Quad.: Nev	wtonville		Comp. date: 05/04/1964
		191 ft			Atlas Shee		.946	Elevation: 85 ft
3	191-194		y coarse, brown; some gravel;		Permit no.			Depth drilled: 256 ft
•	101 105	bog iron			Thickness	-	Lithol	logy
3	194-197	Sand, fine to	coarse, white; gravel		(ft)	(ft)		
5	197-202		medium, white		3	0-3		w; stone (gravel)
1	202-203		coarse, tan; some gravel		21	3-24		w and gray
15	203-218	sana, mosth	y coarse, tan; gravel		8	24-32	Sand and g	
					34	32-66	Clay, black	
				1	48	66-114		w; some sand and gravel
				1	13	114-127	Sand and g	<del>-</del> "
				1	93 10	127-220	Clay, black	
					18 36	220-238	Sand and g	e'
					36	238-256	Sally and [	gravel; black clay at 238-256 ft

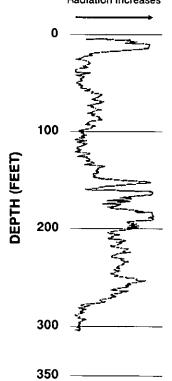
#### **Hammmonton Town**

	OMION I	, , , , , , , , , , , , , , , , , , ,			
Well 326		Geographic code: 0113			
Owner or r	name: Han				
Location: I	N393759	W744824			
Driller: Kis		ennett			
Quad.: Hai	mmonton	Comp. date: 1902			
Atlas Shee	t no. 31.34	.698 Elevation: 110 ft			
Permit no.	51-139	Depth drilled: 316 ft			
From Woo	lman, 1903	3, p. 74.			
Thickness	Depth	Lithology			
(ft)	(ft)				
6	0-6	Gravel, yellow; ironstone conglomerate			
		crusts (coating) near the top			
10	6-16	Clay, yellow, stiff			
104	16-120	Sand, fine to very coarse, yellow, water-			
		bearing at 25-120 ft			
26	120-146	Sand, darker-yellow, clayey			
16	146-162	Clay, black, stiff; somewhat sandy at 146-156			
		ft; very sandy at 156-162 ft			
20	162-182	Sand, orange-yellow, water-bearing			
14	182-196	Clay, black, stiff			
34	196-230	Clay, dark, very sandy			
8	230-238	Sand, brownish, water-bearing			
6	238-244	Sand very reculiar red upter bearing			
71	244-315	Sand, very peculiar red, water-bearing Sand, coarse, somewhat yellowish; water-			
,,	277-313	bearing at 244-310 ft			
1	315-316	Clay, black, tenacious			
1	313-310	Clay, black, tellacious			
Well 400		Geographic code: 0113			
	name: Han	monton Water Department			
Location: I		W744824			
Driller:					
Quad.: Ha		Comp. date: 1920			
Atlas Shee					
Permit no.		Depth drilled: 304 ft			
		an, N.J. Geological Survey.			
Thickness		Lithology			
(ft)	(ft)	Extribiogy			
3	0-3	Sand, fine to coarse, dark-yellowish-brown			
_	0.5	(10YR 4/2), angular, micaceous; silty or-			
		ganic matrix			
12	3-15	Sand, coarse, dark-yellowish-orange			
	0 10	(10YR 6/6), subangular, waxy quartz,			
		some medium; silty matrix			
7	15-22	Silt, light-brown (5YR 6/4); 20 percent sand,			
		fine to medium, subangular, quartz, some			
		feldspar			
21	22-43	Sand, fine to medium, grayish-orange			
		(10YR 7/4), quartz, subangular			
4	43-47	Sand, very fine to fine, moderate-yellowish-			
•	,	brown (10YR 5/4), quartz; some silty matrix			
21	47-68	Sand, medium to coarse, pale-yellowish-			
	••	orange (10YR 8/6); trace gravel, angular			
		to subangular; some silt			
1	68-69	Sand, medium, dark-yellowish-orange			
-		(10YR 6/6), some indurations; silty matrix			
55	69-124	Sand, coarse, very-pale-orange (10YR 8/2),			
		subangular; some very coarse gravel			
		, , , , , , , , , , , , , , , , , , ,			

Transit	ional, Coha	nsey Sand, Kirkwood Formation:
10	124-134	Sand, fine, pale-yellowish-brown (10YR 6/2), subangular, vitreous quartz, silty, very fine sand matrix
9	134-143	Sand, coarse, dark-yellowish-brown (10YR 4/2), angular, silty matrix
24	143-167	Clay, dark-yellowish-brown (10YR 4/2), hard, micaceous; trace sand
15	167-182	Sand, medium, pale-yellowish-brown (10YR 6/2), subangular, some mica
Kirkwo	od Formatic	
17	182-199	Silty clay, pale-yellowish-brown (10YR 6/2); some mica and quartz
20	199-219	Sand, dark-yellowish-brown (10YR 6/20; silty matrix; some interbedded siltstone
9	219-228	Sand, fine to very coarse, dark-yellowish-brown (10YR 6/2); some mica; trace grave!
20	228-248	Clay, pale-yellowish-brown (10YR 6/2); some mica and fine quartz sand
56	248-304	Sand, coarse to very coarse, pale-yellowish- brown (10YR 6/2), subround, quartz; some gravel

#### Well 400 Hammonton Water Department

GAMMA-RAY LOG Radiation increases



### **Linwood City**

Well 174		Geographic code: 0114		
Owner or name: Prudential Insurance				
Location: 1	N392047	W743500		
Driller, La	yne-N.Y.			
Quad.: Oc		Comp. date: 06/30/1983		
Atlas Sheet no. 36.12.958				
Permit no.	36-284	Depth drilled: 289 ft		
Thickness	Depth	Lithology		
(ft)	(ft)	<b>-</b>		
13	Ò-13	Sand, yellow; white sandy clay		
32	13-45	Sand, coarse, white; gravel; white clay streaks		
14	45-59	Clay, white, sandy; red sand streaks		
67	59-124	Sand, fine to coarse; yellow clay streaks at		
		59-96 ft; red, white clay streaks at 96-124 ft		
21	124-145	Sand, red; yellow clay streaks		
7	145-152	Clay, blue, soft		
48	152-200	Sand, red, fine to coarse; white clay streaks		
12	200-212	Clay, blue, tough		
17	212-229	Sand, brown, muddy (silty); wood (lignite)		
		and clay streaks		
36	229-265	Sand, gray, fine to medium; clay streaks		
29	265-289	Sand and clay, brown and gray		

### **Longport Borough**

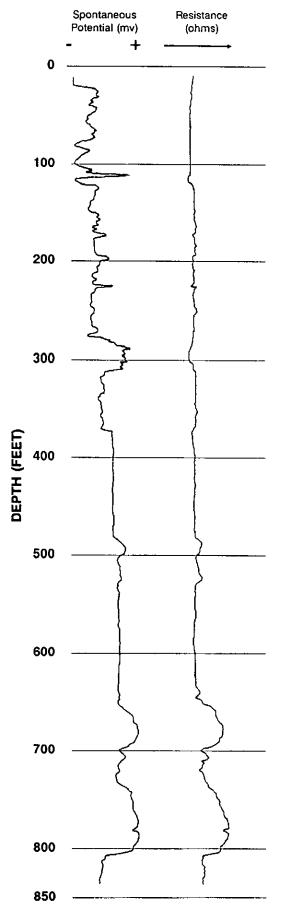
Geographic code: 0115

Well 209

Owner or name: Longport			
Location: 1	N391859	W743124	
Driller: La	yne-N.Y.		
Quad.: Oc	-	Comp. date: 08/22/1947	
Atlas Shee	t no. 36.23		
Permit no.	56-38	Depth drilled: 818 ft	
Thickness	Depth	Lithology	
(ft)	(ft)	-	
35	0-35	Sand	
21	35-56	Muck (silt)	
38	56-94	Sand	
30	94-124	Clay, sandy	
30	124-154	Sand	
11	154-165	Clay, sandy	
30	165-195	Sand, coarse	
10	195-205	Sand, muddy (silty)	
51	205-256	Sand, white	
224	256-480	Clay	
160	480-640	Clay, sandy	
68	640-708	Hardpan	
31	708-739	Clay	
31	739-770	Sand, coarse, brown	
38	770-808	Sand, fine, white	
10	808-818	Clay	
*** ** ***		G 11 1 0115	
Well 210		Geographic code: 0115	
Owner or		01	
Location:		W743129	
Driller: C.			
Quad.: Ocean City Comp. date: 11/29/1968			
Atlas Shee			
Permit no. 36-402 Depth drilled: 840 ft			
Thickness	-	Lithology	
(ft)	(ft)		
112	0-112	Sand, fine, gray; gravel; some clay streaks, 20-112 ft	
7	112-119	Clay, light-gray	
21	119-140	Sand, fine to coarse; gravel	

#### Well 210 Longport

#### **ELECTRIC LOG**



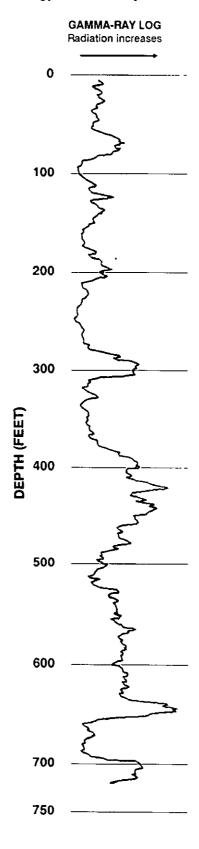
#### **Longport Borough**

Well 210 (	cont)	
Thickness	Depth	Lithology
(ft)	(ft)	
100	140-240	Sand, fine to medium, gray, gravel
30	240-270	Sand, coarse to fine, gray and black; gray clay streaks
38	270-308	Sand, fine to medium
30	308-338	Sand, fine to coarse; gravel
27	338-365	Sand, fine to medium
15	365-480	Clay, greenish-gray, sandy
73	480-553	Sand and gravel
88	553-641	Sand and clay
99	641-740	Clay, gray, some sand streaks at 641-707 ft
66	740-806	Sand, fine to medium, brown and gray
34	806-840	Clay, gray

Well 307		Geographic code: 0115		
Owner or r	name: M.S.	McCullough		
Location: 1	N391847	W743126		
Driller: Ur	iah White			
Quad.: Ocean City		Comp. date: 1895		
Atlas Sheet no. 36.23.249.		249. Elèvation: 10 ft		
Permit no. 56-79		Depth drilled: 803 ft		
From Woo	lman, 1896	, p. 83.		
Thickness		Lithology		
(ft)	(ft)	<del>-</del>		
55	0-55	Ordinary beach sand; some shell fragments,		
		45-55 ft		
20	55-75	Mud or clay, diatoms		
50	75-125	Sand, whitish		
5	125-130	Sand, clayey; no microorganisms		
38	130-168	Sand, yellowish-white		
6	168-174	Sand, clayey		
86	174-260	Sand, drab		
12	260-272	Clay, sandy		
20	272-292	Sand		
18	292-310	Clay, sandy, diatoms		
10	310-320	Sand, clay		
10	320-330	Clay, diatoms; mollusk fragments		
44	330-374	Sand, clayey		
126	374-500	Clay, diatoms; sandy at 480-500 ft		
5	500-505	Clay, sand and shells		
159	505-664	Clay, diatoms; sandy at 505-613 ft		
56	664-720	Clay, sandy; shells		
83	720-803	Sand, brown, water-bearing; lower 23 ft		
		finer, lighter-brown than above		
		. •		

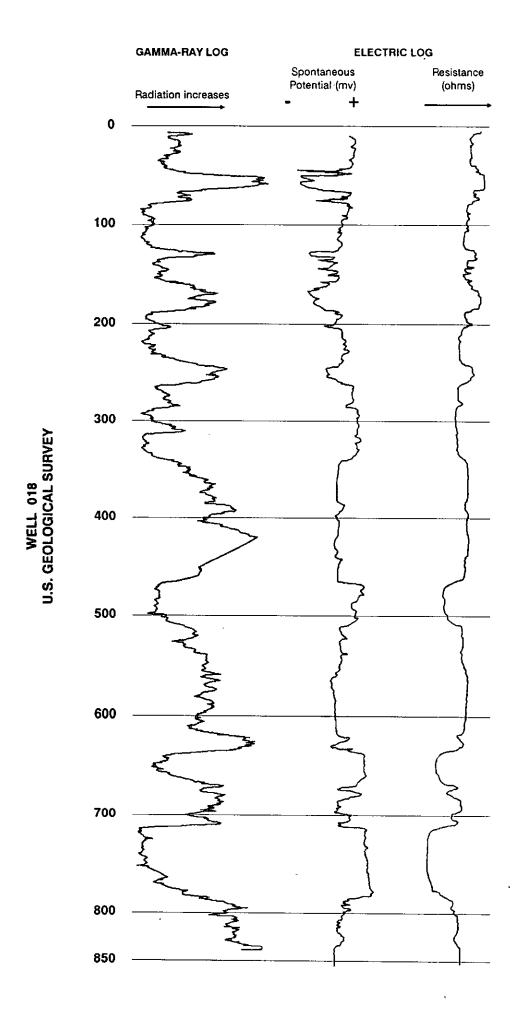
Well 376	Geographic code: 0115
Owner or name: Longport Wa	ter Department
Location: N391821	W743208
Driller:	
Quad.: Ocean City	Comp. date: 06/26/1961
Atlas Sheet no. 36.23.196	Elevation: 6 ft
Permit no. 56-80	Depth drilled: 803 ft
No lithologic log available.	-

#### Well 376 Longport Water Department



## Margate City

		9	•		
		Geographic code: 0116 Geological Survey	10	160-170	Sand, fine to medium, dusky-yellow (5Y 6/4), subround; trace iron rich clay; noncalcar-
Location:		W743008			eous; yellow stained; trace rounded light-
Quad.: Oc	.C. Schulte: ean City	Comp. date: 01/30/1985	10	170-180	gray medium chert; no lignite Sand, fine to coarse, dusky-yellow (5Y 6/4),
	t no. 36.13		"	170-100	subround, pale-reddish-brown coating on
Permit no.		Depth drilled: 840 ft			50 percent of sand; increasing dusky-yellow
		Burk Avenue, Margate, NJ.			clay, iron stained
	al log on p	A	10	180-190	Sand, fine to coarse, dusky-yellow (5Y 6/4)
Thickness (ft)	(ft)	Lithology			to yellowish-gray (5Y 7/2) at base, subround
30	0-30	Sand and gravel, light-olive-gray (5Y 6/1),			to round, abundant reddish-brown iron
		very fine to coarse gravel, subround; glass			oxides on sand; trace brown clay with con-
10	20.40	and recent plant material	10	190-200	cretionary iron (bog iron); slightly calcareous Sand, very fine to few very coarse, yellowish-
10	30-40	Sand, fine to coarse, light-brownish-gray (5Y 4/1), subround, trace iron oxide;	"	170-200	gray (5Y7/2), subround, iron-stained
		brown clay; black carbonized plant			grains; calcareous clay
		remains (lignite); trace ironstone and con-	10	200-210	Sand, very fine to coarse, yellowish-gray
10	40.50	cretionary nodules (bog iron)			(5Y 7/2), subangular to subround, trace
10	40-50	Sand, fine to coarse, light-brownish-gray			yellow iron staining on 20 percent of
		(5Y 4/1) to light-olive-gray (5Y 6/1), trace iron cementing; clay, appears to be dis-			sand; white to light-gray calcareous clay;
		continuous; black lignite	10	610 000	some subangular light-gray chert
10	50-60	Clay, light-gray (N7), soft, blocky to platy;	10	210-220	Sand and clay, yellowish-gray (5Y 7/2) to
		abundant shells; trace fine to coarse sand;			brownish-gray (5YR 4/1); sand, very fine
10	60-70	trace silt; some iron staining Sand, fine to medium, brownish-gray (5YR 4/1),			to coarse; clay, increasingly soft; some silt; trace dark-blackish-brown lignite
10	00-70	subround to round; yellow to brown iron	10	220-230	Clay, brownish-gray (5YR 4/1), very soft to
		stained sand, gravel; some brown to white			soft, blocky to slightly platy; increasingly
		clay; trace silt and black lignite; scattered			abundant dark-brown to blackish-brown
10	70.00	oyster shells in calcareous clay			lignite; disseminated silt; trace sand, fine
10	70-80	Clay, light-gray (N7) to light-bluish-gray (5B 7/1), very soft, rounded peds; trace silt	10	230-240	to medium, rounded
		and rounded sand; very fine black lignite;	10	230-240	Clay, brownish-gray (5YR 4/1), soft, platy due to abundant very-dark-brown,
		calcareous; amber colored mineral grains			medium to very coarse lignite showing
10	80-90	Sand, fine to medium, light-bluish-gray			plant fiber and root structures; thin
		(5B 7/1) to very-light-gray (N8);	-		ironstone concretionary structures (bog
10	90-100	calcareous clay; some fine lignite Sand, medium to coarse, very-light-gray			iron) in basal clay, some silt
10	70-100	(N8), subround, trace iron staining; white	10	240-250	Clay and sand; clay, brownish-gray (SYR 4/1)
		calcareous clay; some fine black car-			to light-olive-gray (5Y 5/2) to (5Y 6/1),
10	100 110	bonaceous (lignite) flakes			soft; sand, very fine to fine, silty, loose, trace iron staining; very lignitic
10	100-110	Sand, medium to coarse, very-light-gray (N8);	10	250-260	Sand, very fine to fine, light-olive-gray
		sand, very fine, subround; calcareous clay matrix; amber-colored mineral grains, 10	Į		(5Y 6/1), subangular, silty, very argil-
		percent or less iron staining; trace white	10	240.200	laceous; abundant lignite
40		clay	10	260-270	Clay, light-olive-gray (5Y 6/1), soft, very silty; lignite; thin, hard reddish-brown
10	110-120	Sand, very fine to coarse, very-light-gray			ironstone (bog iron); trace sand
		(N8), subround, few iron-stained grains; calcareous clay; trace black lignite	10	270-280	Clay, light-olive-gray (5Y 6/1), soft, uniform,
10	120-130	Sand, very fine to fine, dusky-yellow (5Y 6/4),			silty; trace rounded fine to medium sand;
		mostly subangular, 10 percent pink quartz	10	280-290	some fossils and fine lignite
		sand, 75 percent of grains exhibit reddish-	10	200-270	Clay, light-olive-gray (5Y 6/1) to grayish- olive-green (5GY 3/2), soft, blocky, very
		brown iron staining and encrustations on surfaces; trace brown to black concretion-			silty; trace shell
		ary ironstone (bog iron) in clay	10	290-300	Clay, grayish-olive-green (5GY 3/2), very
10	130-140	Sand, fine to coarse, dusky-yellow (5Y6/4),			soft, blocky, silty; sand, increasing
		becoming pale-yellowish-brown			subround to subangular; some dolomitic shell material
		(10YR6/2), subround to round; trace cal- careous clay and ironstone (bog iron).	10	300-310	Sand, fine to medium, grayish-olive-green
		iron oxide within clay, trace lignite, fine,			(5GY 3/2) to light-olive-gray (5Y 5/2),
		dark-brown to black	1		very silty; abundant clay; trace pyritic crys-
10	140-150	Sand and clay, pale-yellowish-brown	10	310-320	tals and lacey pyrite on grains
		(10YR 6/2); sand, fine to very coarse, sub-	10	310-320	Sand, very fine to coarse, light-olive-gray (5Y 5/2), subangular, very argillaceous,
		round; trace calcareous clay; abundant iron staining; decreasing lignite		•	silty; clay, soft, grayish-olive-green; some
10	150-160	Clay and sand, pale-yellowish-brown			pyrite
		(10YR 6/2) to dusky-yellow (5Y 6/4); clay	10	320-330	Sand, very fine to coarse, light-olive-gray
		is firm, blocky, noncalcareous; sand, fine	1		(5Y 5/2) to pale-olive (10Y 6/2), sub- round, pyrite coating finer grains,
		to coarse, less very coarse grains, uniform	1		dark-iron stain coating 75 percent of
		yellow to orange iron staining			grains



117-11-01-0			•		margate City
Well 018 Thicknes	(Cont.) is Depth	Litholom			and mica; trace sand, round to subround;
(ft)	s Depth (ft)	Lithology	10	470 400	black lignite flakes
10	330-340	Clay, grayish-olive-green (5GY 3/2), soft, blocky; abundant sand, fine to coarse, pyrite coating on some grains; trace ironstone in clay; some fine lignite	10	470-480	Clay, olive-gray (5Y 3/2), grayish-olive-green (5GY 3/2) mottled streaks, soft to firm, blocky; silt and fine sand; glauconitic; trace black lignite; some shells; pyrite increasing on shells and sand
10	340-350	Clay, grayish-olive-green (5GY 3/2), soft, blocky, uniform, becoming more silty; some sand, fine to very coarse; trace dolomitic shells and lignite	10	480-490	Clay, olive-gray (5Y 3/2) to light-olive-gray (5Y 5/2), soft, dense, massive; sand, very fine to coarse, round; some black carbonaceous flakes (lignite), some flakes
10	350-360	Clay, grayish-olive-green (5GY 3/2), very soft to soft, blocky; decreasing silt and coarse sand; some fossil fragments; trace pyritic crystals	10	490-500	pyritized; some fine clear mica Shells and sand; shells very-pale-orange (10YR 8/2) to grayish-orange-pink (5YR 7/2), partial and whole specimens, Tur-
10	360-370	Clay, grayish-olive-green (5GY 3/2) to olive- gray (5Y 3/2), soft to firm, blocky, uniform, silty, trace sand, fine to coarse, suban- gular; some dark-brown to black lignitic flakes; some pyritic inclusions; trace mica	10	500-510	ritella sp., Corbula sp., Astarte sp., and other gastropods and pelecypods, etc.; trace sand, very fine to very coarse sand; clay; some glauconite,  Sand, medium to coarse, dusky-yellow-green
10	370-380	Clay, olive-gray (5Y 3/2) to grayish-olive-green (5GY 3/2), soft, blocky; abundant angular quartz sand; trace dolomitic fossils; some very fine mica	. <b>10</b>	300-310	(5GY 5/2) to grayish-olive-green (5GY 3/2), subround; trace glauconite, silt, and black carbonaceous flakes (lignite); pyritic growths on flakes and sand; iron
10	380-390	Clay, olive-gray (5Y 3/2), soft, sticky when wet, very silty; sand, medium to coarse; some pyrite flakes and crystals; some lacey pyrite on sand; occasional calcareous shell fragments, pelecypod fragments; 1 percent mica	10	510-520	stained clay Sand, medium to very coarse, dusky-yellow- green (5GY 7/2) to grayish-olive-green (5GY 3/2), subround, some gravel, 3-5 percent glauconite with trace pyritic growth on larger grains; trace iron stain-
10	390-400	Clay and silt, olive-gray (5Y 3/2); clay, soft to firm, blocky to fissile, less uniform, very silty grading to clayey silt at base; some calcareous pelecypod shells; increas-	10	520-530	ing and ironstone (bog iron); grading to clay at base, soft; locally abundant black lignite; trace shells  Clay, grayish-olive-green (5GY 3/2) to olive-
10	400-410	ing sand; mica; trace pyrite  Clay, olive-gray (5Y 3/2) to light-olive-gray  (5Y 5/2), soft, round to blocky, sticky; some  pelecypod and gastropod shells; silty with  trace silt-sized glauconite; pyrite and very	10	520 540	gray (5Y 3/2), soft, sticky, lignitic; trace calcareous shells; some mica; sand, very fine to gravelly at top of section; some iron staining; trace glauconite and pyrite
10	410-420	fine clear mica; grading to sand at base Sand, fine to very coarse, light-olive-gray		530-540	Clay, olive-gray (5Y 3/2), soft to very soft, sticky, dense; some angular silt; shells; glauconite; trace pyrite; decreasing sand
		(5Y 5/2), very silty, subangular small grains to subround large grains, coarse to very coarse grains are silica-cemented fine to medium sand which have pyritic and argillaceous coating on grains; some	10	540-550 550-560	Clay, olive-gray (5Y 3/2), soft, dense, massive; some silt and sand; trace shells, mostly pelecypods; slightly glauconitic; trace pyrite and mica Clay, olive-gray (5Y 3/2) with trace light-
10	420-430	mica; trace shell fragments Clay, olive-gray (5Y 3/2), soft, sticky, dense,			olive-gray (5Y 5/2) streaks, soft, blocky; some shells and fine mica; pyritic
		silty in part; decreasing sand, very fine to medium, subround; some lignite, fine mica; trace glauconite, fine mica; trace shell fragments in very thin noncal-	10	560-570	Clay, olive-gray (5Y 3/2), soft, dense, massive, sticky; trace angular silt; some coarse sand with pyrite coated finer sand; trace fine clear mica; black lignite
10	440-450	careous clay Clay, light-olive-gray (5Y 5/2) to grayish- olive-green (5GY 3/2), firm, blocky to slight- ly fissile; very silty grading to sand; sand,	10	570-580	Clay, olive-gray (5Y 3/2), soft to very soft, blocky, dense, massive, uniform; some silt and pyrite; 2-3 percent calcareous shells; trace glauconite, pyrite and mica
10	450-460	very fine to fine with trace coarse; glauco- nite and isolated pyrite; some black car- bonaceous flakes; mica; trace shell fragments Clay, olive-gray (5Y 3/2) to grayish-olive-	10	580-590	Clay, olive-gray (5Y 3/2), soft; trace silt and sand; very pale-orange to pink pelecypod and gastropod shell debris; trace glauconite; mica
		green (5GY 3/2), soft, sticky, blocky, dense, uniform in appearance, some sand, fine to coarse, round; some pelecypod fragments; mice: trace silt	10	590-600	Clay, olive-gray (5Y 3/2), soft, blocky, massive, dense, uniform; mica; shells; trace glauconite and pyrite; some sand; mica flakes
10	460-470	fragments; mica; trace silt  Clay, olive-gray (5Y 3/2), soft to very soft  "when wet," blocky, dense, massive; trace silt; some glauconite; white clay; pyrite	10	600-610	Clay, olive-gray (5Y 3/2), soft, dense, uniform; 5 percent shells, slightly altered to glauconite; some angular silt; pyritic; decreasing lignite; micaceous

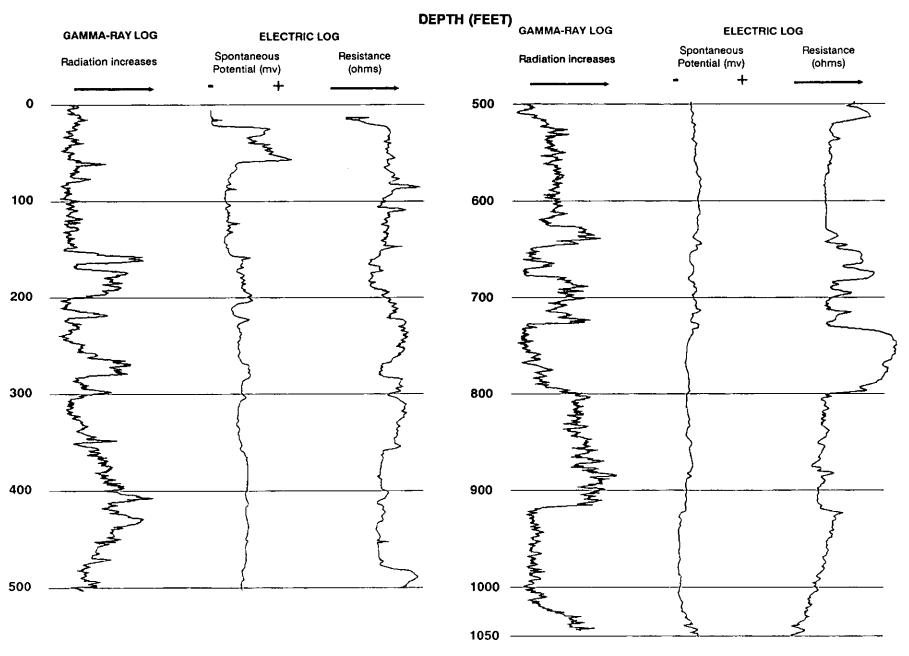
### **Margate City**

Well 018	(Cont.)	Litholom		10	<i>7</i> 70-780	Sand, medium to coarse, light-olive-gray
	-	Lithology				(5Y 5/2), subround; increasing clay; trace
(ft) 10	(ft) 610-620	Clay, olive-gray (5Y 3/2), soft, sticky, blocky, 1-3 percent silt; some pelecypod shells; decreasing pyrite; micaceous		10	780-790	angular silt; some shells  Sand and clay, light-olive-gray (5Y 5/2) to olive-gray (5Y 3/2); sand, medium to coarse, subround, trace fine to medium subangular
10	620-630	Clay, olive-gray (5Y 3/2) with light-olive-gray (5Y 5/2) streaks, soft to firm, dense; trace sand, very fine to medium, subround; trace shell fragments; very fine black lignite		10	790-800	sand; olive-gray clays; some glauconite Sand and clay; sand, light-olive-gray (5Y 5/2), decreasing fine to coarse, increasing sub-
10	630-640	Clay, olive-gray (5Y 3/2), soft, sticky when wet, dense, massive, very uniform, silty; pelecypod shells 10 percent altered to glauconite; micaceous		10	800-810	angular grains; clay, olive-gray (5Y 3/2); some very fine to fine shell fragments; glauconitic Clay, olive-gray (5Y 3/2) to (5Y 4/1), to
10	640-650	Clay and shells; clay, olive-gray (5Y 3/2), with very pale-orange (10YR 8/2) streaks, soft, blocky to fissile; abundant pale-orange shells, <i>Turritella</i> sp., <i>Terebra</i> sp., <i>Arca</i> sp., <i>Tellina</i> sp., and others, some alteration to glauconite; trace pyrite and sand				dusky-yellowish-brown (10YR 2/2), soft to firm; some shell fragment; trace glauconitic shells; brown iron-stained clay; dense iron stone (bog iron), some pyritic growths on sand
10 10	650-660	Clay, olive-gray (5Y 3/2), soft, blocky, dense; decreasing shells, tan to pale-orange; some mica; trace silt		10	810-820	Clay, pale-yellowish-brown (10YR 6/2) to dark-yellowish-brown (10YR 2/2), firm, blocky, trace sand, pyrite and subround
	000-070	Clay, olive-gray (5Y 3/2) to light-olive-gray, soft, slightly fissile; some coarse shells; sand, fine to medium, subrounded, stained; some clear mica		10	820-830	silt; iron staining  Clay, dusky-yellowish-brown (10YR 2/2), firm, blocky, very iron stained; pyritic; trace olive-green clay at top of section, few fos-
10	670-680	Sand and clay; sand, fine to coarse, light- olive-gray (5Y 5/2) to olive-gray (5Y 3/2), subangular to subround, slight silica cementation; clay, olive-gray, soft; trace glauconite and silt; some light-gray chert;		10	830-840	sil fragments in green clay; some sand Clay, dusky-yellowish-brown (10 YR 2/2), firm, blocky, not sticky; very silty chang- ing to clayey silt; trace glauconitic silt;
10	600 600	pyrite; coarse 7-8 mm shell fragments, Arca sp. predominates, with few large Tur- nitella sp.; some very fine mica		_	250	some sand; abundant iron staining Clay, olive-gray (5Y 3/2), with light-olive-gray (5Y 5/2) streaks, soft, blocky to fissile,
10	680-690	Sand, medium to coarse, light-olive-gray (5Y 5/2), subround, silty, abundant clay, olive-gray, glauconitic; trace fossil frag- ments and clear biotite mica				dense in part; no fossils; black carbon- aceous (lignite) flakes, very fine, along bedding planes; sand, 10 percent or less,
10	690-700	Sand, medium becoming fine to very fine, light-olive-gray (5Y 5/2), subangular; trace light-olive-gray clay; trace ironstone (bog iron); some pelecypod shells				medium to very coarse, thin partings, poorly sorted; clay, some pyrite crystals disseminated throughout, mica flakes defining bedding, structure-compaction
10	700-710	Clay, olive-gray (5Y 3/2), soft, sticky, massive; shells with trace glauconite; sand, fine to coarse; trace iron stone (bog iron); micaceous			390	features visible with nonuniformity of sandy partings at high angles and discon- tinuous clay bedding Clay, olive-gray (5Y 3/2), with grayish-olive-
10	710-720	Clay, olive-gray (5Y 3/2) to (5Y 4/1), soft, sticky, not uniform; trace pyritic crystals on shells; sand, fine to medium; trace silt in clay; some ironstone (bog iron)	TONS			green (5GY 3/2) streaks, soft, fissile to subblocky, interbedded with abundant very pale-orange pelecypod and
10	720-730	Clay, olive-gray (5Y 3/2) to (5Y 4/1), very soft to soft, massive; sand, increasing fine to medium; trace pelecypod shells and glauconite; silty in part; mica	CORE DESCRIPTIONS			gastropod shells, Ostrea sp., Arca sp., Tur- ritella sp., among others; silty at bioclastic contacts; trace sand, fine to coarse, an- gular to subround, sand lenses are
10	730-740	Clay and sand, olive-gray (5Y 3/2) becoming light-olive-gray (5Y 5/2) at base; clay, soft to firm, blocky; sand, some fine to medium; some mica; trace glauconitic shell fragments	CORE		570	discontinous; structure shows differential compaction on lithologic contacts  Clay, olive-gray (5Y 3/2) to light-olive-gray (5Y 5/2), blocky to subblocky, massive; trace angular silt and black very fine car-
10	740-750	Sand, fine to medium, light-olive-gray (5Y 5/2), subround; decreasing very small shell fragments, little or no alteration				bonaceous (lignite) flakes; some pelecypod shells disseminated throughout, Astarte sp., Arca sp., with
10	750-760	Clay, olive-gray (5Y 3/2), trace grayish- orange-pink (5YR 7/2), bioclastic streaks, soft to slightly firm, fissile; pelecypod and gastropod shells; trace glauconite; sand, medium to coarse			685	fragments of others; micromicaceous structure; discontinuous compaction due to dewatering of clay  Clay, olive-black (5Y 2/1) "when dry," firm, blocky, uniform, massive, dense;
10	760- <b>77</b> 0	Sand, medium to coarse, light-olive-gray (5Y 5/2), subround; 20 percent or less of olive-gray clays and shell fragments; trace glauconite and mica		_		dolomitic in part; trace sand, medium to coarse, subround, with no discernible structure; some angular silt to very fine pyrite crystals; trace mica; lack of structure due to uniformity of core

#### **Margate City**

								Margate City
Well 170			Geographic code: 0116	1 :	5	100-105	Clay	
Owner or	r name: Ma	rgate City		33		105-140	•	reaks of clay
	: N392003		W743013	180		140-320		at 145-256 ft; sand streaks, 300-
	.ayne-N.Y.				-		320 ft	at 145-250 It, saile streaks, 500-
	cean City		Comp. date: 06/28/1955	19	7	320-339	Sand	
	et no. 36.13	3.899	Elevation: 8 ft	400	5	339-745		at 480-745 ft; shells
Permit no			Depth drilled: 810 ft	10		540-550	Sand streak	s, 550-640 ft; hard streak, 640-645 ft
From Cla	rk and othe	ers, 1968, p. 34	I, 48.	59	)	745-804		um to coarse; fine gravel
	s Depth	Litholo	Pgy	Ì			,	to toutou, time grave,
(ft)	(ft)			Well	208			Geographic code: 0116
Recent				Own	er or	name: Mai	gate City	
0	0-11	Fill and fine	sand			N391928		W743056
14	11-25	Sand		Drill	er: La	yne N.Y.		
	ay Formati					ean City		Comp. date: 06/29/1962
76	25-101	Sand and gr	ravel streaks	Atlas	Shee	t no. 36.23	.225	Elevation: 5 ft
	ey Sand:			Perm	it no.	36-318		Depth drilled: 804 ft
3	101-104	Clay, soft		Thick	kness	Depth	Litholo	<del>-</del>
41	104-145	Sand; clay st	treaks at 104-118 ft	(ft		(ft)		<b>a</b>
6	145-151	Clay		2		ò-2	Fill	
23	151-174	Sand; hard a	at 161-174 ft	23	3	2-25	Beach sand	
66	174-240		wood (lignite) at 216-240 ft	112	2	25-137	Sand, fine to	o coarse; gravel and clay streaks
33	240-273		l and clay streaks		i	137-142	Clay	- volume of the state of the st
	d Formati	on:		44	<b>,</b>	142-186		o coarse; gravel; clay streaks
37	273-310	Sand, gravel	l and clay streaks	554	ļ	186-740	Clav: sandv	at 186-258 ft, 320-393 ft, 490-574
30	310-340		gray; clay streaks				ft, and at	682-740 ft; tough at 393-486 ft
305	340-645 .	Clay; sandy	at 340-450 ft and 485-645 ft;				and 574-6	82 ft; sand streaks at 320-393 ft;
		hard at 36	iS-450 ft and 485-520 ft				shells at 5	29-574 ft and 682-740 ft; hard
4	645-649	Sand, hard						486-490 ft
21	649-670	Clay, tough		64	)	740-804		o coarse; medium gravel
55	670-725	Sand and cla	ay streaks				,	5, <u>5</u>
15	725-740	Clay		Well	437			Geographic code: 0116
63	740-803	Sand, mediu	im to coarse	Own	er or r	ame: U.S.	Geological S	
7	803-810	Clay, tough				N392017		W743002
W.II 171						assroots P	roduction	11713002
Well 171		. ~.	Geographic code: 0116			an City	10000011011	Comp. date: 05/17/1988
	name: Mai	rgate City	1717.00.0			t no. 36.13	899	Elevation: 5 ft
Location:			W743017			36-10548	.077	Depth drilled: 1,055 ft
	ayne-N.Y.		_				Firehouse no	2, Fremont Avenue
Quad.: O	•		Comp. date: 06/24/1958	<b>I</b>				2, Premont Avenue
	et no. 36.13	.898	Elevation: 5 ft			al log on p		
Permit no		•	Depth drilled: 800 ft			Depth	Litholo	gy
Thickness		Litholo	EV	(ft)		(ft)		
(ft)	(ft)	<b>-</b>		2		0-2	No sample	
17 13	0-17		and surf mud	3		2-5	Sand	
70	17-30 30-100	Mud and fin		5		5-10		ine to fine; shell fragments
12	100-112	Clay and gra	avel; clay at 65-100 ft	5		10-15		ick, interbedded; clay,
50	112-162	Sand and cla	iver accord					(5Y 4/2); muck, organic, dark-
88	162-250	Sandy clay	y streams	_   _				brown (10YR 5/6), foul odor
90	250-340	Sand, clay as	nd shells	5		15-20		ive-gray (5Y 4/2), soft, foul odor;
135	340-475	Clay					slightly sa	
45	475-520	Sand, shells	and clay	12	,	20-32		clay, olive-gray (5Y 4/2), foul
120	520-640	Clay	•				odor, sand	l, very fine; increasing clay at 32 ft
60	640-700	Sand and sh	ells	8	,	32-40	Clayey silty:	sand, olive-gray (SY 3/2); many
33	700-733	Clay						ts and organic matter, foul odor;
47	733-780		(water-bearing)				sand, fine	
20	780-800	Clay and san	nd streaks	8		40-48	Sandy clay,	olive-gray (5Y 3/2); sand, very fine
Well 207			C	2	;	48-50	Sand, coarse	to very coarse, subround;
	M	Cin-	Geographic code: 0116	1			shell fragi	
	name: Mar	gate City	31/742400	1		50-51	Clay, very ha	ard drilling; into zone of brown
Location:			W743100			_		indy muck
	ayne N.Y.		0 1 0 0 0 0 0 0 0	5		51-56	Peat, olive-t	prown (5Y 3/4), soft; sand
Quad.: O	•	226	Comp. date: 06/13/1963	1		56-57		avel, coarse to 4 mm, subangular
	et no. 36.23	.229	Elevation: 5 ft				to subrou	nd, mostly clear and white
Permit no		¥ !s4+	Depth drilled: 804 ft				quartz; tra	
Thickness	•	Litholo	<b>S</b> SY	6		57-63	Sand, coarse	e to very coarse, gray, some shells
(ft)	(ft)			1 40		<b></b>	Candan de	
20		17:00 ·		10	,	63-83	Sand and gr	avel, light-gray (N7); sand, very
20	0-20	Fill and rive	r mud	10	,	63-83	coarse; in	avel, light-gray (N7); sand, very terbedded with fine silty sand
20 80		Fill and rive	r mud	10	ļ	63-83	coarse; in	avel, light-gray (N7); sand, very terbedded with fine silty sand

WELL 437 U.S. GEOLOGICAL SURVEY

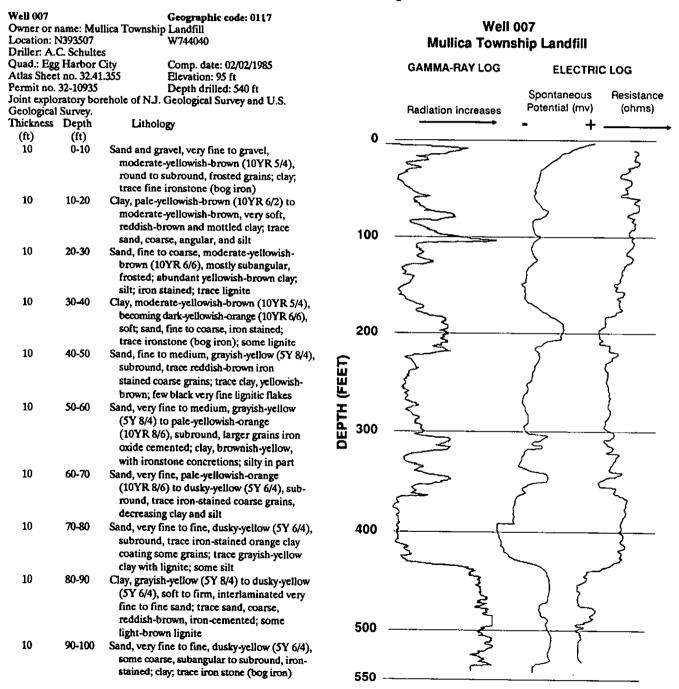


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Well 437 (e Thickness		Lithology			mica and shell fragments at 543-563 ft; blocky, stiff, very fine mica and carbon-
(ft) 50	(ft) 83-133	Sand, up to very coarse; light-gray (N7),	10	603-613	aceous material common, 563-603 ft Silty clay, olive-black (5Y 2/1), micaceous;
		interbedded with thin layers of dark-gray silt at 83-93 ft; grayish-yellow (5Y 7/4) at	10	613-623	shell fragments Silty clay, dusky-yellowish-brown (10YR 2/2);
		93-103 ft; dusky-yellow (5Y 6/4) at 103- 123 ft; interbedded with white and	_		clay, clumps, olive-black, darker than at 603-613 ft
		dark-gray silt at 103-110 ft; fine gravel, up to 3 mm at 110-123 ft; yellowish-brown	7	623-630	Silty clay, dusky-yellowish-brown (10YR 2/2); some mica
10	133-143	(10YR 6/4) at 123-133 ft Sand and gravel, multicolored, yellow, gray	Core 2	630-632	Clayey silt, olive-gray (5Y 3/2); some mica and very fine sand; many shell fragments
		and white; interbedded with thin layers of white, tan and gray silt to clayey silt; sand.	11	632-643	Silty clay, olive-gray (5Y 3/2); many shell fragments; some quartz pebbles
14	143-157	up to very coarse; gravel, up to 2 mm Sand, up to very coarse, yellowish-brown	10	643-653	Shelly sand, poorly sorted; shells, 5-125 mm, subangular; some silt; hard layer of an-
		(10YR 6/4); lignite, abundant at bottom of interval			gular quartz in mud, with some cementation at 645 ft
6	157-163	Sand and gravel, multicolored; gravel, to 4 mm; interbedded with white and tan silt	10	653-663	Shelly sand, well sorted; sand, medium, subangular, some silt
20	163-183	Sand and gravel, interbedded; sand, fine to medium, silty; gravel, up to 3 mm; lignite, abundant, pale-yellowish-gray (5Y 8/2)	10	663-673	Shells, fragments, large, 35 percent; sand, coarse; increasing silt and clay; some 1-2 mm quartz pebbles, subangular, poorly
15	183-198	Sand, medium to coarse, interbedded with silty sand, sandy clay and silt, white,	20	673-693	sorted Sand, coarse, poorly sorted; some silt;
		medium-gray, grayish-green (10GY 5/2) and dark-olive-gray (5Y 2/2); decreasing			20 percent shelly lenses; some subangular 2 mm quartz pebbles at 683-693 ft
25	198-223	lignite and gravel	10	693-703	Clay, dusky-brown (5YR 2/2); some interbedded silt and sand
20	176-223	Clayey sand to sandy clay, pale-gray (N7), pale-green, light-olive-gray (SY 6/1); lignite, common, up to 77 mm	20	703-723	Clay, dusky-brown (5YR 2/2), layered; sand, coarse to medium, subangular; 20 percent
40	223-263	Clayey sand to sandy clay, various shades of gray, and dark-organic-brown; abundant	20	723-743	shells; some silt Sand, medium, subangular, 20 percent
		lignite; some clay, dark-brown, stiff; sand, increasing at 233-243 ft; lots of silt and	50	743-793	shells; some silt Sand, coarse to medium, subangular;
20	263-283	clay, increasing sand at 243-263 ft Clay, olive-gray (5Y 4/1), stiff, locally silty;	20	793-813	20 percent shells Sand, medium; some clay, small pieces of
••		clayey silt, olive-gray (5Y 4/1), and very fine to fine sand at 273-283 ft	10	813-823	brown clay at 803-813 ft Clay, brown and green; shell fragments;
20 17	283-303 303-320	Silty clay, olive-gray (5Y 4/1), stiff, blocky; some very fine sand Clayey sand, olive-gray (5Y 4/1), stiff; sand,	10	823-833	some sand Clay and sand, equal amounts; clay, green, soft; sand, coarse to medium, subangular;
		very fine to fine; fine grained organic material; interbedded sand, up to coarse	10	833-843	shells Clay, olive-gray (5Y 4/1), soft, shelly, some
3	320-323	Sand, medium to very coarse, brown; many quartz grains, orangish and brownish			hard lumps; some sand, medium, less shelly
10	323-333	Silty sand, olive-gray (5Y 4/1); sand, very fine to fine, some coarse; clayey sand,	10	843-853	Clay, olive-gray (5Y 4/1), almost-new shells, soft with some hard lumps
12	333-345	olive-gray (5Y 4/1), soft Clayey sand, olive-gray (5Y 4/1), increasingly	Core 2	853-855	Clay, dusky-yellowish-brown (10 YR 2/2); some silt; very fossiliferous, <i>Pecten</i> sp. found at top of core barrel
10	345-355	clayey at 338-343 ft; sand, up to coarse Clayey sand, olive-gray (5Y 4/1), soft, stiff; sand, fine; large hard chunks at 353-355 ft	18	855-873	Clay, olive; shells; sand, poorly sorted; pebbles, up to 2 mm, subangular to angular; clay,
48	355-403	Clayey silt to clayey sand, olive-gray (5Y 4/1), stiff, blocky; sand, very fine; shell fragents	10	873-883	olive-gray (5Y 3/2), at 863-873 ft Clay; shells and coarse sand, which may have
		common at 363-403 ft; stiff to soft at 383-403 ft	20	883-903	fallen from above; hard layer at 882-883 ft Clay and shells, no large cuttings; hard layer
20	403-423	Clayey silt and clayey sand, olive-gray (5Y 4/1) to (5Y 4/2), hard to soft, blocky;	10	903-913	at 883-884 ft; decreased clay at 893-903 ft Clay and shells; some clay, dusky-blue-green
60	423-483	sand, very fine; trace mica; harder, 413-423 ft Clayey sand, olive-gray (5Y 4/1) to (5Y 4/2),			(5BG 3/2); fine sand and silt; some green quartz sand; decreasing clay content
		stiff; sand, very fine; soft to hard, blocky, some layers of small shell fragments, 443- 483 ft; sand, fine to medium, 473-483 ft	10	913-923	Shells; sand, fine, black and green, quartz, glauconitic, clayey; quartz grain edges are tinted green
35	483-518	Clayey sand, olive-gray (5Y 3/2); sand, fine to	10	923-933	Shells and sand; shells, fragments increasing
		medium, some coarse; increasing sand, many shell fragments at 493-518 ft; size of			in size; sand, fine to very fine, black, glauconitic; loose quartz grains increasing
		cuttings decreasing at 503-518 ft as op- posed to previous confining unit			in size; clay and glauconite clumps, dusky- yellow-green (5GY 5/2) to black
5	518-523	Clayey sand, olive-gray (5Y 3/2), stiff, large cuttings; sand, very fine; slower drilling	10	933-943	Shells and sand; sand, coarse, angular, quartz grain edges are tinted green; some clay,
80	523-603	Clayey sand, olive-gray (5Y 3/1), soft to stiff, large cuttings; sand, very fine; blocky, fine			green, glauconitic

#### Margate City

Well 437 (	cont)		1			1013 ft; darker green, clump of light-
Thickness	Depth	Lithology				green glauconitic silty sand at 1013-1033
(ft)	(ft)					ft; olive-gray (5Y 4/1) silty clay in small
20	943-963	Sand, medium, subangular, quartz grains				blocks with black glauconitic sand, some
		tinted green, glauconitic; some glauconitic				lignite at 1033-1043 ft
		sand, medium to fine, black; shell fragments		10	1043-1053	Sand and shells; sand, medium, glauconitic;
30	963-993	Sand, medium, slightly finer than at 943-963				silty clay, grayish-olive-green (5GY 3/2),
		ft; driller reported hard zone at 990 ft				lumpy, sand, fine, black, glauconitic
50	993-1043	Sand, medium to fine; silt; decreasing shell	Core	2	10	53-1055 Clay, olive-gray; bifurcated zones of
		fragments; increasing silt and clay at 1003-				medium to coarse fossiliferous sand

#### Mullica Township



#### Mullica Township

					Munica Township
10 10	100-110 110-120	Sand, very fine to fine, dusky-yellow (5Y 6/4), subround; trace clay and ironstone (bog iron) cementing; increasing clay; light-brown to iron-stained black lignite	10	250-260	Sand, fine to medium, trace coarse, light- olive-gray (5Y 5/2) changing to olive-gray (5Y 3/2) toward base, subangular; clay, in- creasingly abundant, olive-gray, soft,
10	120-130	Clay, dusky-yellow (5Y 6/4) to olive-gray (5Y 3/2), soft to firm, subblocky; silt; trace sand; slightly mottled Clay, olive-gray (5Y 3/2) with dusky-yellow			blocky, pyritic; trace yellowish-orange ironstone (bog iron); some brown to black lignite
10	130-140	(5Y 6/4), firm; trace pyrite crystals and silt; decreasing yellow clay; trace sand, fine to medium, subround Sand, fine to coarse, light-olive-gray (5Y 5/2),	10	260-270	Clay, olive-gray (5Y 3/2), very soft to soft, subblocky, massive; trace silt, angular, disseminated; sand; black phosphatic fossil debris; lignite
		subangular, trace reddish iron oxide stained clay coating coarse grains; iron oxide cement with secondary olive-gray to grayish-yellow iron-stained clay; 30 percent clay; trace silt and pyrite	10	270-280	Clay, olive-gray (5Y 3/2), soft, subblocky, massive, uniform, silty, lignitic; trace medium sand; some black phosphatic fossil debris and pellets; micaceous
10	140-150	Gravel, light-olive-gray (5Y 5/2) to grayish- olive (10Y 4/2); some sand, fine to coarse, subangular, some olive-gray clay; pyritic nodules and very fine crystals	10	280-290	Sand, fine to coarse, some gravel, light-olive- gray (5Y 5/2) to olive-gray (5Y 3/2) to (5Y 4/1), subround, subangular, very clayey, olive-gray, silt; lignite
10	150-160	Sand, fine to coarse, grayish-olive (10Y 4/2) to light-olive-brown (5Y 5/6); abundant gravel at top of section, subround; increasing olive-gray clay; light-brown lignite; trace silt	10	290-300	Clay, olive-gray (5Y 3/2) to (5Y 4/1), very soft to soft, subblocky, massive, dense; trace lignite, brown, very fine to fine; some fine phosphate-replaced fossil material; mica
10	160-170	Sand, fine to medium, light-olive-gray (5Y5/2) to light-olive-brown (10Y 4/2), subround; olive-gray clay and abundant very fine brown lignite; trace iron stained grains and pyrite	10	300-310	Clay, olive-gray (5Y 3/2), soft, subblocky to subfissile, massive, dense, very silty; sand, fine to very coarse, micaceous; trace lignite, light-brown to brown, very fine; trace phosphate replaced shell fragments
10	170-180	Sand, fine to very coarse, light-olive-gray (5Y 5/2) with light-olive-brown (10Y 4/2), subrounded, 40-50 percent iron staining coats sand; some gravel; abundant clay, olive-gray, fissile; brown lignite giving	10	310-320 320-330	Clay, olive-gray (5Y 3/2), soft, subblocky, massive; variable density due to increasing fine to coarse sand; some gravel; very silty; lignitic; micaceous Clay, olive-gray (5Y 3/2) to (5Y 4/1), soft,
10	180-190	sand and clay a brownish tint  Sand, fine to coarse, light-olive-brown  (10Y 4/2), subround to subangular, in-			subblocky, massive, uniform; silty sand; scattered phosphatic material in fine to medium pellets; angular grains; micaceous
		creasing clay, olive-gray, highly iron stained; brown lignite flakes; some iron stained black flakes; trace angular silt	10	330-340	Clay, olive-gray (5Y 3/2), very soft, dense, massive, uniform; trace euhedral pyrite crystals; silty, mica
10	190-200	Clay, olive-gray (5Y 3/2), soft, subblocky, sticky when wet, dense, uniform; rare an- gular silt; decreasing lignite; fine to medium sand at top of section, trace	10	340-350	Clay, olive-gray (5Y 3/2) to grayish-olive- green (5GY 3/2), very soft, sticky; silt; sand at base, grayish-olive-green, angular, disseminated; some pyrite; mica
10	200-210	pyrite coatings  Clay, olive-gray (5Y 3/2), soft, sticky, subblocky, uniform, massive appearance; some sand; trace disseminated silt, pyrite, mica and brown lignite	10	350-360	Sand, very fine to very coarse, with gravel, grayish-olive-green (5GY 3/2) to light-olive-gray (5Y 5/2), angular to subangular, subround medium to very coarse grains, finer grains have pyritic and brown argil-
10	210-220	Clay, olive-gray (5Y 3/2), soft, subblocky to blocky, massive, dense; abundant mica; in- creasingly sandy at base; trace brown to	10	360-370	laceous coatings, coarse grains are siliceous; abundant olive-gray clay; trace glauconitic silt and very finely crystalline pyrite Sand, very fine to fine, grayish-olive-green
10	220-230	dark-brown lignite  Sand, fine to medium, light-olive-gray (5Y 5/2) to olive-gray (5Y 3/2), subround; clay, olive-gray, soft, blocky to fissile; brown lignite flakes and coarser lignite; micaceous			(5GY 3/2), subround, brown argillaceous stain on most grains, anhedral pyritic coatings, micaceous, very silty, trace glauconitic silt
10	230-240	Clay, olive-gray (5Y 3/2) to (5Y 4/1), soft, sticky, blocky to subblocky, massive; sand, trace pyrite coating on grains and isolated euhedral, very fine crystalline pyrite; trace	10	370-380	Clay, grayish-olive-green (5GY 3/2), becoming olive-gray (5Y 3/2) at base, firm to very soft and sticky at base, silty, trace glauconite; some lignite and mica; very sandy at top with very fine sand
10	240-250	lignite and mica Sand, fine to medium, light-olive-gray (5Y 5/2) to olive-gray (5Y 4/1), subangular to sub- round, pyritic and gray argillaceous coating on grains; clay, olive-gray; abun- dant lignite; micaceous	10	380-390	Sand, very fine with 10 percent fine, light- olive-gray (5Y 5/2), round to subround, olive-brown argillaceous coatings, an- hedral pyritic growths on grain surfaces, 5 percent or less medium to very coarse sand; trace light-gray angular chert; lignitic; fine mica

### Mullica Township

Well 007		Photos
Thicknes		Lithology
(ft) 10	(ft) 390-400	Clay, olive-gray (5Y 3/2), soft, dense, sticky when wet; angular silt; fine sand; brown
10	400-410	lignite; mica Sand, fine to coarse, light-olive-gray (5Y 5/2), subangular to subround, pyritic, silica cement, brown argillaceous coating on
10	410-420	some grains, trace iron staining; some fine mica  Sand, very fine to fine, light-olive-gray (5Y 5/2) to light-gray (5Y 6/1), very silty, subangular; chert, fine to medium, gray to light-gray; trace gray clay; brown lignite;
10	420-430	clay, olive-gray (5Y 3/2) to (5Y 4/1), soft, dense; sand, abundant, very fine to fine, 70 percent pyrite coated and oxidized brown argillaceous streaked; trace gray
10	430-440	chert; increasing fine mica Sand, fine to coarse, light-olive-gray (5Y 5/2), subangular to subround, pyritic, micaceous, trace silica-cemented fine
10	440-450	sand; some gray chert; trace gray clay Clay, light-olive-gray (5Y 5/2), becoming dusky-brown (5YR 2/2), soft to firm, blocky, denser at base; trace silt; mica decreasing toward bottom; abundant
10	450-460	light-brown lignite in dusky-brown clay Clay, dusky-brown (5YR 2/2), firm, blocky, silty; trace orange iron stained sand; very fine to fine lignite; some mica
10	460-470	Clay, dusky-brown (5YR 2/2), firm, dense, trace iron staining; some sand, fine, orange to brownish-orange, iron-stained; lignitic; silty
10	470-480	Clay, dusky-brown (5YR 2/2), firm, blocky to subblocky; sand, very fine to fine, iron- stained; lignitic; pyritic
10	480-490	Clay, dusky-brown (5YR 2/2) to pale yellowish-brown (10YR 6/2), blocky, firm; trace silt; sand; shell fragments; abundant lignite
10	490-500	Clay, pale-yellowish-brown (10YR 6/2), firm, blocky; shells; very lignitic; some silt
10	500-510	Clay, pale-yellowish-brown (10YR 6/2), firm, blocky, increasingly silty and sandy at base; smaller shells; abundant light- brown lignite; trace clear mica
10	510-520	Clay, pale-yellowish-brown (10YR 6/2) to light-olive-brown (5Y 5/6), firm, blocky, silty; decreasing lignite; shells with trace alteration to glauconite; increasingly sandy toward base; micaceous
10	520-530	sand, predominently very fine, trace medium to coarse, light-olive-brown (5Y 5/6), changing to light-olive-gray (5Y 5/2), subangular to subround; very clayey, light-olive-brown; glauconitic; silty; abundant dark-brown to black lignite
10	530-540	Sand, fine to medium, light-olive-gray (5Y 5/2), subround, glauconitic; light-gray silt; olive-gray clay; fine black lignite; trace mica

	200	Clay, olive-gray (5Y 3/2), soft, blocky, sticky,
		massive, uniform; trace sand, very fine to
	1	fine in partings, subround; trace brown
		lignite and unaltered cream-colored
		pelecypod shells; scattered silt and mica
	350	Clay, alternating bands of olive-gray
		(5Y 3/2) and dusky-yellowish-brown
i		(10YR 2/2), subblocky to fissile, firm,
		dense streaks, trace glauconitic silt in olive-
ļ		gray clay, abundant lignite in brown clay,
Ş		iron oxide staining; mica; trace of fine to
CORE DESCRIPTIONS		coarse olive sand laminations in gray clays
ĔΙ	460	Clay, dusky-yellowish-brown (10YR 2/2),
5		soft, subblocky, dense, massive in ap-
Ö		pearance; very fine brown to dark-brown
買		lignitic flakes disseminated throughout
8		core; locally abundant mica flakes; trace
<u> </u>		very fine to fine sand laminations; color
ଥା		apparently due to organic and iron stain-
_		ing seen on the encrustations of ironstone
	500	(bog iron) on isolated shell fragments
	520	Clay, dusky-yellowish-brown (10 YR 2/2) to
		grayish-olive-green (5GY 3/2), colors seen both in bands and as mottling; firm,
		blocky, dense, massive, brown clays con-
		tain abundant brown to black lignitic
		flakes; iron staining and abundant fine
		mica flakes with silty streaks; trace phos-
		phatic fossil debris; olive-green clay
		contains fine to coarse sand laminations
		with glauconite; trace shells showing
	<u></u>	some alteration to glauconite

Well 008 Geographic code: 0117						
Owner or name: Atlantic Loading Company						
Location:		W744118				
Driller:						
Quad.: Eg	g Harbor (	City Comp. date: 09/1918				
	t no. 32.31					
Permit no.	52-19	Depth drilled: 950 ft				
Thickness	Depth	Lithology				
(ft)	(ft)	_				
1	0-1	Surface soil				
65	1-66	Sand, yellow, very fine at 7-20 ft; clay at				
		20-46 ft; less clay at 46-66 ft				
50	66-116	Sand, laminated red; clay, gray				
20	116-136	Sand, water-bearing; coarse, gray and yellow				
		at 116-121 ft; dark-red at 121-136 ft				
4	136-140	Clay, laminated gray; sand, yellow				
8	140-148	Sand, grayish-black				
20	148-168	Clay, grayish-black; quartz sand; sandstone				
32	168-200	Sand, water-bearing; dark-gray at 168-178 ft;				
		light-gray at 178-200 ft				
33	200-233	Sand, dark-gray to chocolate; clay				
37	233-270	Sand, black; sandy clay; little water in gravel				
		layer at 252 ft				
11	270-281	Sand, gray, clay, lignite; some water				
15	281-296	Clay, chocolate, or muck (silt)				
18	296-314	Sand, brown				
6	314-320	Clay, chocolate, or muck (silt)				
46	320-366	Sand, very fine, dark-gray, water-bearing				
68	366-434	Clay; tenacious, black at 366-375 ft; chocolate,				
		micaceous at 375-434 ft				
66	434-500	Sand, greenish; marly to sandy marl				
450	500-950	Clay, chocolate, light to dark, sometimes				
		giving a greenish cast to drilling wash				
		water, zone not reported in detail				

#### Pleasantville City

Well 088		Geographic code: 0117	Thickness	Depth	Lithology
Owner or i		Volfe	(ft)	(ft)	~
Location: l		W744257	` <b>ś</b>	<b>8-</b> 0	Berm
		rilling Company	1	8-9	Topsoil
Quad.: Ats		Comp. date: 06/25/1966	12	9-21	Sand, tan; yellow clay layers
Atlas Shee	t no. 32.31	.556 Elevation: 60 ft	14	21-35	Clay, gray, little iron ore (bog iron)
Permit no.	32-518	Depth drilled: 165 ft	13	35-48	Sand, tan; gray clay, iron ore (bog iron)
Thickness	Depth	Lithology	4	48-52	Clay, gray, hard
(ft)	(ft)	<del></del>	14	52-66	Sand, gray and tan
6	0-6	Topsoil	4	66-70	Clay, gray
28	6-34	Sand, tan; clay layer at 10-34 ft	42	70-112	Sand, gray, gravel at 70-93 ft
6	34-40	Sand, white	12	112-124	Clay, brown
2	40-42	Clay, gray and yellow	18	124-142	Sand, gray, clay layers; brown clay at 135-142 ft
12	42-54	Mud (silt), black	41	142-183	Sand, gray, gravel
6	54-60	Sand, gray	1	183-184	Clay, gray
6	60-66	Mud (silt), black		200 201	0.0), 6.0)
45	66-111	Sand; white at 66-100 ft; tan at 100-111 ft	Well 242		Geographic code: 0117
2	111-113	Mud (silt), black	Owner or	name: Dise	covery House
22	113-146	C. 4			W744047
33		Sand, gray; clay layers at 113-127 ft	Location:	11373700	W /44U4 /
6	146-152	Clay, blue			* * * * = * *
	146-152 152-164		Driller: A	C. Schulte	s
6	146-152	Clay, blue		C. Schulte sion	S Comp. date: 09/1978
6 12 1	146-152 152-164	Clay, blue Sand, brown	Driller: A. Quad.: At	C. Schulte sion et no. 32.31	S Comp. date: 09/1978 656 Elevation: 20 ft
6 12	146-152 152-164	Clay, blue Sand, brown	Driller: A. Quad.: At Atlas Shee Permit no	C. Schulte sion et no. 32.31 . 32-4810	s Comp. date: 09/1978 1.656 Elevation: 20 ft Depth drilled: 229 ft
6 12 1 Well 111	146-152 152-164 164-165	Clay, blue Sand, brown Clay, gray	Driller: A. Quad.: At Atlas Shee Permit no Thickness	C. Schulte sion et no. 32.31 . 32-4810 Depth	S Comp. date: 09/1978 656 Elevation: 20 ft
6 12 1 Well 111	146-152 152-164 164-165 name: Rus	Clay, blue Sand, brown Clay, gray  Geographic code: 0117	Driller: A. Quad.: At Atlas Shee Permit no	C. Schulte sion et no. 32.31 . 32-4810	s Comp. date: 09/1978 1.656 Elevation: 20 ft Depth drilled: 229 ft
6 12 1 Well 111 Owner or I Location: 1	146-152 152-164 164-165 name: Rus N393359	Clay, blue Sand, brown Clay, gray  Geographic code: 0117 sell Franceschini	Driller: A Quad.: At Atlas Shee Permit no Thickness (ft)	C. Schulte sion et no. 32.31 . 32-4810 Depth (ft)	Comp. date: 09/1978 L656 Elevation: 20 ft Depth drilled: 229 ft Lithology No record
6 12 1 Well 111 Owner or I Location: 1	146-152 152-164 164-165 name: Rus N393359 elmarva D	Clay, blue Sand, brown Clay, gray  Geographic code: 0117 sell Franceschini W744055 rilling Company	Driller: A. Quad.: At Atlas Shee Permit no Thickness (ft) 3	C. Schulte sion et no. 32.31 . 32-4810 Depth (ft) 0-3	Comp. date: 09/1978 L656 Elevation: 20 ft Depth drilled: 229 ft Lithology  No record Topsoil and brown sand
6 12 1 Well 111 Owner or I Location: I Driller: De	146-152 152-164 164-165 name: Rus N393359 elmarva D g Harbor (	Clay, blue Sand, brown Clay, gray  Geographic code: 0117 sell Franceschini W744055 rilling Company City Comp. date: 02/02/1967	Driller: A. Quad.: At Atlas Shee Permit no Thickness (ft) 3 7	C. Schulte sion et no. 32.31 . 32-4810 Depth (ft) 0-3 3-10	Comp. date: 09/1978 L656 Elevation: 20 ft Depth drilled: 229 ft Lithology No record
6 12 1 Well 111 Owner or I Location: I Driller: De Quad.: Egg	146-152 152-164 164-165 name: Rus N393359 elmarva D g Harbor ( et no. 32.41	Clay, blue Sand, brown Clay, gray  Geographic code: 0117 sell Franceschini W744055 rilling Company City Comp. date: 02/02/1967	Driller: A. Quad.: At Atlas Shee Permit no Thickness (ft) 3 7 4	C. Schulte sion et no. 32.31 . 32-4810 Depth (ft) 0-3 3-10 10-14	Comp. date: 09/1978  .656 Elevation: 20 ft Depth drilled: 229 ft Lithology  No record Topsoil and brown sand Clay Sand
6 12 1 Well 111 Owner or I Location: I Driller: De Quad.: Eg Atlas Shee	146-152 152-164 164-165 name: Rus N393359 elmarva D g Harbor ( et no. 32.41	Clay, blue Sand, brown Clay, gray  Geographic code: 0117 sell Franceschini W744055 rilling Company City Comp. date: 02/02/1967 .623 Elevation: 80 ft	Driller: A. Quad.: At Atlas Shee Permit no Thickness (ft) 3 7 4 35	C. Schulte sion et no. 32.31 .32-4810 Depth (ft) 0-3 3-10 10-14 14-49	Comp. date: 09/1978 Lithology  No record Topsoil and brown sand Clay Sand Clay, black; soft, 49-89 ft; some sand, 89-129 ft
6 12 1 Well 111 Owner or I Location: I Driller: De Quad.: Eg Atlas Shee	146-152 152-164 164-165 name: Rus N393359 elmarva D g Harbor ( et no. 32.41	Clay, blue Sand, brown Clay, gray  Geographic code: 0117 sell Franceschini W744055 rilling Company City Comp. date: 02/02/1967 .623 Elevation: 80 ft	Driller: A. Quad.: At Atlas Shee Permit no Thickness (ft) 3 7 4 35	C. Schulte sion et no. 32.31 .32-4810 Depth (ft) 0-3 3-10 10-14 14-49 49-149	Comp. date: 09/1978 Liss Comp. date: 09/1978 Liss Elevation: 20 ft Depth drilled: 229 ft Lithology  No record Topsoil and brown sand Clay Sand

## Northfield City

Well 310	Geographic code: 0118	7	173-180	Clay, dark
Owner or name: Atl	antic County Asylum	130	180-310	Sand, clayey sand and sandy clay, alternating,
Location: N392233	Location: N392233 W743220			brownish in shade; sand, fine to medium;
Driller: Uriah White	:			no microorganisms; very sandy clay at 280-
Quad.: Pleasantville			300 ft	
Atlas Sheet no. 36.13	Atlas Sheet no. 36.13.492 Elevation: 30 ft			Clay, nearly solid, containing diatoms and
Permit no. 56-76	Depth drilled: 715 ft			some sponge spicules thoughout; sand
From Woolman, 190	Woolman, 1900, p. 104.			and shells at 420-430 ft; diatoms very plen-
Thickness Depth	Lithology			tiful at 490-570 ft; comminuted shells at
(ft) (ft)	<del>-</del>			560-570 ft; loose rock described as
15 0-15	Loamy soil underlain by yellow gravel			boulders at 570 ft
158 15-173	Sand, fine to very coarse, yellowish; fine gravel; yellow sandy clay seams at 40-45	70	570-640	Sand, clayey; sandy clay; no diatoms or other microorganisms
	ft; very orange coarse sand at 140-160 ft;	75	640-715	Sand, water-bearing, decidedly coarse at bottom
	clay streaks at 161-173 ft		715	Clay

### **Pleasantville City**

Well 043 Geographic code: 0119		51	32-83	Sand, white; medium to fine at 32-80 ft;	
Owner or name: California Avenue					medium at 80-83 ft
Location: N392433 W742953			4	83-87	Clay, yellow and white
Driller: R	.W. Sunds	trom Engineering	27	87-114	Clay, yellow; yellow sand streaks
Quad.: Oceanville Comp. date: 07/30/1934			3	114-117	Sand, fine to medium, red
Atlas Sheet no. 36.13.371 Elevation: 10 ft			2	117-119	Sand, coarse to medium, brown
Permit no. 56-77 Depth drilled: 194 ft			1	119-120	Hardpan, brown
Located at California Ave. and Absecon Bay, Pleasantville, NJ.			4	120-124	Sand, coarse to medium, brown; red sand
Thickness	Depth	Lithology			streaks
(ft)	(ft)		2	124-126	Sand, gray
5	0-6	Sand, medium to fine, yellow, clayey	39	126-165	Clay, gray, sandy
10	6-16	Sand, medium, yellow	29	165-194	Sand, fine to medium, gray
1	16-17	Clay, white		200 27 1	Same, and to moralin, gray
15	17-32	Sand, coarse to medium, white; white and	1		
		yellow clay streaks at 24-26 ft			

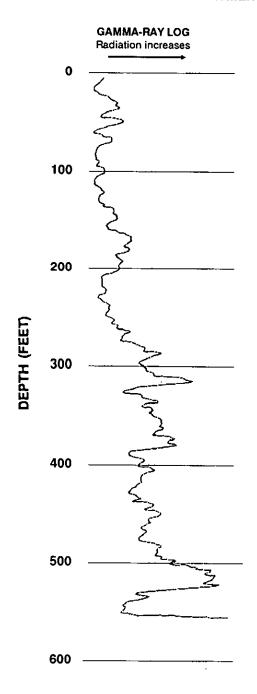
#### Pleasantville City

Well 114		Geographic code: 0119		00.04.0	Sample no. 2: same as sample at 65-65.9 ft
		ntic City Water Department	1.9	80-81.9	Sample no. 1: sand, fine, tan to orange, trace
Location: N Driller: Lay		W743047			medium; silt
Quad.: Plea	•	Comp. date: 10/26/1950			Sample no. 2: sand, medium to fine, orange to gray; trace silt and clay
Atlas Sheet		•	1.9	85-85.9	Sand, fine to medium, tan to orange; trace silt
Permit no.		Depth drilled: 680 ft	1.4	90-91.4	Sand, fine to medium, tan, trace coarse; trace
Thickness	Depth	Lithology			silt
(ft)	(ft)	_	1.3	95-96.3	Sand, medium to fine, orange to tan, trace
14	0-14	Sand and gravel			coarse; trace fine gravel and silt
18	14-32	Sand, yellow; clay	0.9	100-100.9	Sand, medium to fine, orange to pink, trace
14 23	32-46 46-69	Sand and gravel			coarse; trace fine gravel and silt
23 6	69-75	Clay, yellow, gravel Sand and gravel	0.9	110-110.9	Sand, fine to medium, tan to orange, trace
4	75-79	Clay			coarse; trace silt
25	79-104	Sand, coarse; gravel	1.4	120-121.4	Sand, medium to fine, orange, trace coarse;
39	104-143	Clay; blue at 104-124 ft		400 404 5	trace fine gravel and silt
	143-228	Sand and gravel; hard, clay at 165-212 ft	1.5	130-131.5	Sand, fine to medium, gray, trace silt. clay
83	228-311	Clay; black at 228-243 ft and 269-311 ft; hard	1.5	140 141 5	pockets
		streaks at 243-269 ft	1.5	150 151 5	Clay, hard, dark-gray, sandy; trace silt Sand, fine to medium, gray, clayey
	311-346	Sand, hard packed; clay	1.5		Clay, hard, gray; some fine sand
69	346-415	Clay, sand and shells	1.5		Sand, fine to medium, gray to brown; some
	415-515	Clay, black	1.0	1,01,12	clay lenses
41 30	515-556 556-586	Clay, sand, and shell streaks	1.5	180-181.5	Sand, fine, dark-brown, trace medium to
82	586-668	Clay, black			coarse sand and fine gravel; little to some
62 12	568-680	Sand, coarse; fine gravel Clay, tough			silt
12	000-000	Ciay, tough	1.5	190-191.5	Sand, fine to medium, dark-gray; little silt
Well 122		Geographic code: 0119	1.5		Sand, medium, dark-gray, little fine, trace
	name: Atla	ntic City Municipal Utilities Authority			coarse sand and fine gravel
Location:		W743113	0.8	212-212.8	Sand, fine, gray to brown, trace medium;
Driller: H.					little silt
Quad.: Plea	_	Comp. date: 07/16/1981	1.3	220-221.3	Sand, medium to fine, gray to brown, trace
Atlas Shee		•			coarse; trace silt
Permit no.		Depth drilled: 301 ft	1.5	230-231.5	Sand, fine, dark-gray to green, trace medium;
Thickness	Depth	Lithology			little silt
(ft)	(ft)	<b>~</b>	1.5		Same as sample at 230-231.5 ft
\$	0-5	Sand, coarse to fine; wood, bricks, metal, etc.	5.5		Sand, fine, dark-gray to green, silty; trace mica
2	5-7	Sand, fine to medium, tan to yellow, trace	1.5 1.5		Sand, fine, dark-gray; little to some silt
		coarse; fine gravel; silt	1.5	280-281	Sand, fine, dark-gray; some silt Sand, fine, dark-gray to green, silty
2	10-12	Clay, very stiff, light-tan; some fine sand;	1.5		Clay, hard, gray to green, silty; trace fine sand
		trace medium sand and silt	1.5	300-2015	Same as sample at 290-291.5 ft
2	15-17	Sand, medium to fine, tan to yellow, trace	1.0	200-2012	odino do dampio de 270-271.5 te
2	20-22	coarse; fine gravel; silt	Well 211		Geographic code: 0119
L	20-22	Sand, fine to medium, tan to yellow, trace coarse; little silt, fine gravel, and clay	Owner or	name: Atla	ntic City Water Department
2	25-27	Sand, fine to coarse, tan to yellow and black;	Location:		W743049
•	<i>ω-ει</i>	little silt; trace of fine gravel and clay	Driller. La	yne-N.Y.	
2	30-32	Sand, medium to fine, tan to yellow, trace	Quad.: Pic	asantville	Comp. date: 10/26/1950
<del>-</del>		coarse; fine gravel and silt	Atlas Shee	t no. 36.13.	283 Elevation: 10 ft
2	35-37	Same as sample at 30-32 ft	Permit no.	36-18	Depth drilled: 680 ft
2	40-42	Sand, medium to fine, tan to gray, trace	Thickness	Depth	Lithology
		coarse; fine gravel and silt	(ft)	(ft)	
2	45-47	Sand, fine to medium, red to pink, trace	14	0-14	Sand and gravel
		coarse; silt	18	14-32	Sand, yellow; clay
2	50-52	Clay, orange to yellow to gray, stiff, mottled;	14	32-46	Sand and gravel
		little fine sand; trace of silt	23	46-69	Clay, yellow; gravel
2	55-57	Sample no. 1: sand, fine to medium, orange	6	69-75	Sand and gravel
		to tan, trace coarse; little silt	4	75-79 70-104	Clay
		Sample no. 2: sand, fine to medium, tan to	25 39	79-104 104-143	Sand, coarse; gravel
		gray; trace silt	85		Clay; blue at 104-124 ft
2.9	60-62.9	Sand, medium to fine, tan-gray, trace coarse;	83	143-228 228-311	Sand and gravel; hard sand and clay, 165-212 ft
4.0	<i>(2.12.</i>	silt	35	311-346	Clay, black; hard streaks at 243-269 ft Sand, hard packed; clay
1.9	65-65.9	Sand, medium to fine, orange to brown,	240	346-586	Clay; sand and shells at 346-415 ft and 515-
•	70.72	trace coarse; silt	240	J-10-500	556 ft; black at 415-515 ft and 556-586 ft
2 2	70-72 75-77	Same as sample at 65-65.9 ft	82	586-668	Sand, coarse; fine gravel
4	13-11	Sample no. 1: clay, hard, gray to tan to orange; little fine sand	12	668-680	Clay, tough
		orange, more time salle			- w

Well 212		Geographic code: 0119				
Owner or name: Atlantic City Water Department						
Location: N392447 W743050						
	ayne-N.Y.					
	casantville	Comp. date: 08/27/1925				
	et no. 36.13					
Permit no	_	Depth drilled: 689 ft				
Thickness		Lithology				
(ft) 3	(ft) 0-3	Fill				
12	3-15	Gravel				
13	15-28	Clay; soft at 15-25 ft				
47	28-75	Sand, coarse, white; gravel at 44-65 ft				
12	75-87	Sand, yellow				
30	87-117	Gravel, yellow; sand at 87-108 ft				
72	117-189	Clay, sandy				
47	189-236	Sand, coarse, brown				
200	236-436	Clay, sandy; tough streaks at 254-275 ft and				
		297-317 ft; cobbles (gravel) at 338-417 ft;				
		hard at 417-436 ft				
21	436-458	Clay, hard-packed				
21	458-479	Clay, blue, sandy, tough streaks				
20	479-499	Mari, black; clay				
21	499-520	Clay, hard				
3	520-523	Mari				
4	523-527	Clay, black				
80	527-607	Clay, sandy; tough black clay at 545-567 ft				
76	607-683	Sand, coarse; gravel				
6	683-689	Gumbo (clay)				
Well 213		Geographic code: 0119				
Owner or	name: Atla	ntic City Water Department				
Location:		W743036				
	ayne-N.Y.					
	casantville	Comp. date: 12/31/1930				
	et no. 36.13					
Permit no	_	Depth drilled: 252 ft				
Thickness		Lithology				
(ft)	(ft)	5 1 1 <i>5</i> 1				
15	0-15	Sand and fill				
14 82	15-29	Clay, blue				
57	29-111 111-168	Sand, coarse; gravel at 62-111 ft				
4	168-172	Clay, soft and tough streaks				
48	172-220	Sand, fine				
32	220-252	Sand, dark, coarse; gravel Clay, sandy				
32	220-232	Clay, Salluy				
Well 375		Geographic code: 0119				
		ntic City Water Department				
Location: N392434 W743032						
Driller:		_				
_	easantville	Comp. date: 01/01/1925				
	et no. 36.13					
Permit no. 56-91 Depth drilled: 565 ft						

No lithologic log available.

# WELL 375 ATLANTIC CITY WATER DEPARTMENT



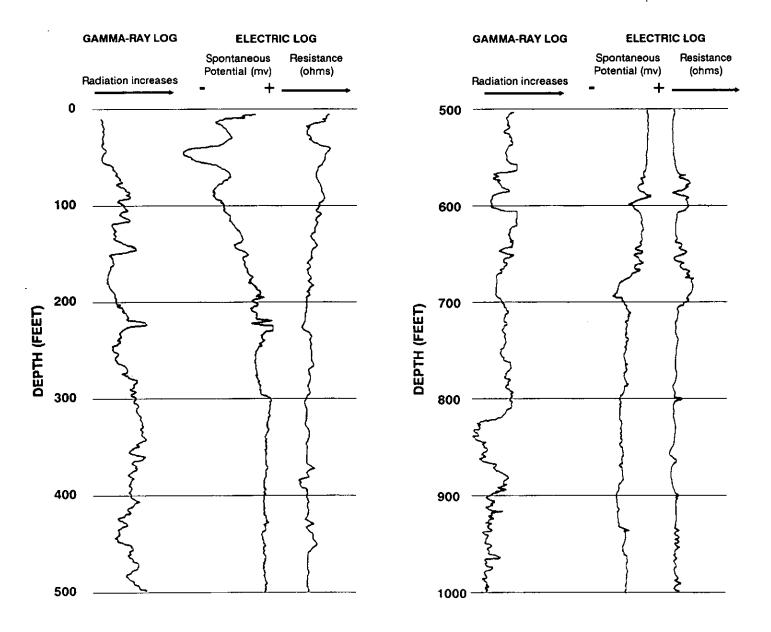
### **Port Republic City**

No wells included in this summary

### **Somers Point City**

Well 019			Geographic code: 0121	13	581-594	Clay, gray, solid, sandy, many shell fragment		
Owner or name: Jobs Point				15	594-609	Sand, fine, gray; sandy clay lumps		
Location: N391826			W743709	25	609-634	Clay, greenish-gray; mica; solid at 609-621 ft		
Driller: C.W. Lauman						silty at 621-634 ft		
			Comp. date: 09/23/1959	19	634-653	Clay, greenish-gray, sandy; shell fragments;		
Atlas Sheet no. 36.22.193 Elevation: 10 ft						very fine to fine sand, solid clay streaks,		
Permit no.			Depth drilled: 1,002 ft	ļ		mica at 644-653 ft		
U.S. Geole	ogical Surv	ey observatio	n well; from Clark and others,	18	653-671	Clay, greenish-gray, solid; sandy clay streaks		
1968, p. 33, 51; log by H.R. Anderson, U.S. Geological Survey.				27	671-698	Sand, medium to coarse		
Thickness	Depth	Lithole		16	698-714	Sand, gray, silty; some clay; mica; solid clay		
(ft)	(ft)		_			streaks at 705-714 ft		
Cape Ma	y Formatic	n:		83	714- <b>7</b> 97	Clay, solid; brownish-gray at 714-756 ft; gray		
8	0-8		um to coarse, gray, grit (angular);			some shells 756-797 ft		
little gravel			Piney Pol	Piney Point Formation:				
1	8-9		oog (lignite)	28	797-851			
16	9-25		um to coarse, gray, grit (angular);			fine sand, green at 825-851 ft; solid clay,		
		gravel				stratified at 841-851 ft		
8	25-33	Sand, fine t	o medium, multicolored; some	23	851-874	Clay, gray, solid; shell fragments; sandy clay,		
		clay				862-874 ft		
10	33-43	Clay, gray, s	solid	25	874-899	Clay, greenish-gray, solid; some shells; mica		
21	43-64		o medium, gray; some clay	1		at 874-885 ft; sandy clay at 885-899 ft		
10	64-74	Clay, fine, g		11	899-910	Clay, greenish-brown, sandy; sand, fine to		
9	74-83		ine to fine, multicolored, few			coarse; sandstone streaks		
			gular grains); gravel; some clay	21	910-931	Clay, greenish-brown, sandy; sand, medium;		
11	83-94		ine, gray, clayey; sandy clay	ŀ		solid clay streaks		
		streaks	, 6,,,	71	931-1002	Clay, greenish-gray, sandy; sand, fine to		
8	94-102		fine, gray, layered; some clay and	'-		coarse; clayey sand		
•				1		,,		
		solid sand	IV CIAV	1				
Cohanse	ev Sand:	solid san	dy clay	Well 401		Geographic code: 0121		
Cohanse 22			•	Well 401 Owner or	name: New	Geographic code: 0121		
22	102-124	Clay, gray,	sandy, fine	Owner or		Jersey Highway Authority		
22 10	102-124 124-134	Clay, gray, s Sand, fine,	sandy, fine light-gray; some mica	Owner or Location:	N391823	Jersey Highway Authority W743709		
22 10 7	102-124 124-134 134-141	Clay, gray, s Sand, fine, Sand, medi	sandy, fine light-gray; some mica um to coarse, gray	Owner or Location: Driller: A.	N391823 C. Schulte:	Jersey Highway Authority W743709 s		
22 10	102-124 124-134	Clay, gray, s Sand, fine, Sand, medi	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand,	Owner or Location: Driller: A. Quad.: Oc	N391823 C. Schulte:	y Jersey Highway Authority W743709 s Comp. date: 03/1963		
22 10 7 11	102-124 124-134 134-141 141-152	Clay, gray, s Sand, fine, Sand, medi Clay, solid; stratified	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand,	Owner or Location: Driller: A. Quad.: Oc Atlas Shee	N391823 C. Schultes ean City et no. 36.22	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft		
22 10 7	102-124 124-134 134-141	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine;	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft	Owner or Location: Driller: A. Quad.: Oc	N391823 C. Schultes ean City et no. 36.22	y Jersey Highway Authority W743709 s Comp. date: 03/1963		
22 10 7 11 41 8	102-124 124-134 134-141 141-152 152-193 193-201	Clay, gray, s Sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no.	N391823 C. Schultes ean City et no. 36.22 . 36-323	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft		
22 10 7 11	102-124 124-134 134-141 141-152	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi Sand, very	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft		
22 10 7 11 41 8 22 9	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi Sand, very Clay, gray,	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft)	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft)	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology		
22 10 7 11 41 8 22	102-124 124-134 134-141 141-152 152-193 193-201 201-223	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi Sand, very Clay, gray, Sand, fine to	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology Topsoil		
22 10 7 11 41 8 22 9	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, wery Clay, gray, Sand, fine Sand, very Sand, very Sand, very Sand, very	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular)	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft) 0-1 1-25	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology Topsoil Sand, gray		
22 10 7 11 41 8 22 9 19 10	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, wery Clay, gray, Sand, fine the Sand, very Sand, medi Sand, very Sand, medi Sand, medi	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft) 0-1	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology Topsoil		
22 10 7 11 41 8 22 9 19 10 9 Kirkwoo	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 od Formatie	Clay, gray, s Sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, wedi Sand, very Clay, gray, Sand, fine to Sand, very Sand, medi	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular)	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft) 0-1 1-25 25-60 60-78	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology Topsoil Sand, gray Sand and pebbles Sand, medium to coarse		
22 10 7 11 41 8 22 9 19 10 9 Kirkwoo	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 od Formatic 270-281	Clay, gray, s Sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi Sand, very Clay, gray, Sand, fine t Sand, very Sand, medi on: Sand, very	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular)	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35 18	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft) 0-1 1-25 25-60 60-78 78-83	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology Topsoil Sand, gray Sand and pebbles Sand, medium to coarse Sand, medium to coarse, brown		
22 10 7 11 41 8 22 9 19 10 9 Kirkwoo	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 od Formatie	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, wery Clay, gray, Sand, fine Sand, very Sand, medion:  Sand, very Sand, very Sand, very Sand, very Sand, very Sand, very Sand, very Sand, very Sand, very Sand, very	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular) fine, gray fine, gray	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft) 0-1 1-25 25-60 60-78	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology  Topsoil Sand, gray Sand and pebbles Sand, medium to coarse Sand, medium to coarse, brown Sand, fine, gray; gray clay at 84-104 ft; clay		
22 10 7 11 41 8 22 9 19 10 9 Kirkwoo	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 od Formatic 270-281 281-290	Clay, gray, s Sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi Sand, very Clay, gray, Sand, fine t Sand, very Sand, medi on: Sand, very Clay, gray, Clay, gray, Sand, fine t Sand, very Sand, medi on:	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand, gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular) fine, gray fine, gray fine, gray fine, greenish-gray, clayey; silty nks	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35 18 5	N391823 C. Schultes ean City et no. 36.22 . 36-323 Depth (ft) 0-1 1-25 25-60 60-78 78-83 83-140	y Jersey Highway Authority W743709  S Comp. date: 03/1963  282 Elevation: 5 ft Depth drilled: 197 ft  Lithology  Topsoil Sand, gray Sand and pebbles Sand, medium to coarse Sand, medium to coarse, brown Sand, fine, gray; gray clay at 84-104 ft; clay at 104-138 ft		
22 10 7 11 41 8 22 9 19 10 9 Kirkwoo	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 od Formatic 270-281	Clay, gray, sand, fine, Sand, mediclay, solid; stratified Sand, fine; Sand, medicand, very; Sand, the Sand, very;	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand,  gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular) fine, gray fine, gray fine, greenish-gray, clayey; silty aks gray at 290-328 ft; greenish-gray,	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35 18 5 57	N391823 C. Schultes ean City et no. 36.22 .36-323 Depth (ft) 0-1 1-25 25-60 60-78 78-83 83-140	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft Lithology  Topsoil Sand, gray Sand and pebbles Sand, medium to coarse Sand, medium to coarse, brown Sand, fine, gray; gray clay at 84-104 ft; clay at 104-138 ft Stones and pebbles (gravel); gray clay		
22 10 7 11 41 8 22 9 19 10 9 Kirkwoo	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 od Formatic 270-281 281-290	Clay, gray, sand, fine, Sand, mediclay, solid; stratified Sand, fine; Sand, mediclay, gray; Clay, gray; Sand, fine to Sand, very Sand, wery Sand, very Sand, very clay streating some should some should sand, solid; some should some should sand, solid; some should sand, solid; some should sand, solid; some should sand, solid; some should sand, solid; some should solid; sol	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand,  gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular) fine, gray fine, gray fine, greenish-gray, clayey; silty aks gray at 290-328 ft; greenish-gray, ells at 328-421 ft; brownish-gray,	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35 18 5 57	N391823 C. Schultes ean City et no. 36.22 .36-323 Depth (ft) 0-1 1-25 25-60 60-78 78-83 83-140 140-155 155-167	y Jersey Highway Authority W743709 s Comp. date: 03/1963 .282 Elevation: 5 ft Depth drilled: 197 ft  Lithology  Topsoil Sand, gray Sand and pebbles Sand, medium to coarse Sand, medium to coarse, brown Sand, fine, gray; gray clay at 84-104 ft; clay at 104-138 ft Stones and pebbles (gravel); gray clay Sand, fine; clay mix		
22 10 7 11 41 8 22 9 19 10 9 Kirkwood 11 9	102-124 124-134 134-141 141-152 152-193 193-201 201-223 223-232 232-251 251-261 261-270 20 Formatic 270-281 281-290	Clay, gray, sand, fine, Sand, medi Clay, solid; stratified Sand, fine; Sand, medi Sand, very Clay, gray, Sand, fine Sand, very Sand, wery Sand, very Sand, very Clay, solid; some she mica at 4	sandy, fine light-gray; some mica um to coarse, gray sandy clay and fine sand,  gray at 152-171 ft; black, 171-193 ft um, gray fine, gray; some clay; mica solid to medium, gray; sandy clay lumps fine to fine, gray, grit (angular) um to coarse, gray, grit (angular) fine, gray fine, gray fine, greenish-gray, clayey; silty aks gray at 290-328 ft; greenish-gray, ells at 328-421 ft; brownish-gray, 21-443 ft	Owner or Location: Driller: A. Quad.: Oc Atlas Shee Permit no. Thickness (ft) 1 24 35 18 5 57	N391823 C. Schultes ean City et no. 36.22 .36-323 Depth (ft) 0-1 1-25 25-60 60-78 78-83 83-140 140-155 155-167 167-177	V Jersey Highway Authority W743709  S Comp. date: 03/1963  L282 Elevation: 5 ft Depth drilled: 197 ft  Lithology  Topsoil Sand, gray Sand and pebbles Sand, medium to coarse Sand, medium to coarse, brown Sand, fine, gray; gray clay at 84-104 ft; clay at 104-138 ft Stones and pebbles (gravel); gray clay Sand, fine; clay mix Sand, fine, gray and black		
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WELL 019 JOBS POINT



## **Ventnor City**

Well 224 Geographic code: 0122			30	680-710	Sand, fine to medium; shells		
Owner or	name: City	of Ventnor	20	710-730	Clay, tough		
Location:	N392018	W742945	70	730-800	Sand, fine to coarse; medium gravel		
Driller: La	ayne-N.Y.		35	800-835	Clay, tough		
Quad.: At	lantic City	Comp. date: 05/03/1965			,, 0		
Atlas Shee	t no. 36.13	.975 Elevation: 9 ft	Well 312		Geographic code: 0122		
Permit no.	. 36-371	Depth drilled: 835 ft	Owner or	name: Ven	tnor Land Company		
Thickness Depth Lithology			Location: N392007 W742900				
(ft)	(ft)		Driller: Uriah White				
18	0-18	Fill	Quad.: Atl	lantic City	Comp. date: 1898		
12	18-30	Clay, sandy	Atlas Shee	Atlas Sheet no. 36.13.988 Elevation: 10 ft			
70	30-100	Beach sand, shells and clay streaks	Permit no. 56-78 Depth drilled: 813 ft				
265	100-365	Sand, fine to medium; gravel; clay streaks;	From Woolman, 1899, p. 76.				
		shells at 160-265 ft; lignite at 265-365 ft	Thickness	Depth	Lithology		
115	365-480	Clay, sandy	(ft)	(ft)	<del>-</del>		
50	480-530	Sand, fine to medium; shells; clay streaks	20	0-20	Ordinary beach sand		
20	530-650	Clay, sandy	10	20-30	Sand, gray, very slightly clayey; marine dia-		
152	650-802	Sand, fine to medium; shells at 650-732 ft;			toms; some faint oval transparent discs		
		clay streaks at 680-732 ft; gravel, 732-802			with sulcus (groove) lengthwise of center		
		ft	30	30-60	No record		
33	802-835	Clay, sandy	5	60-65	Sand, coarse, dark-gray; some clay; shell fragments, and a very small clam		
Well 225 Geographic code: 0122			5	65-70	No record		
Owner or	name: City	of Ventnor	10	70-80	Clay, very sandy, slightly yellowish; sand,		
Location:	N392030	W742852			medium to coarse; no fossils		
Driller: Layne-N.Y.			100	80-180	Sand, alternations of gray, white, brownish-		
Quad.: At	lantic City	Comp. date: 06/30/1965			yellow and decidedly orange-yellow		
Atlas Sheet no. 36.13.985 Elevation: 8 ft			5	180-185	Clay, brownish-gray, very sandy, coarse		
Permit no. 36-372 Depth drilled: 835 ft			10	185-195	Sand, coarse, brownish		
Thickness	Depth	Lithology	45	195-240	Sand, alternations of gray and slightly		
(ft)	(ft)		1		yellowish, and the shade of brown sugar		
105	0-105	Beach sand and shells	110	240-350	Clayey sand and sandy clay, alternations of		
35	105-140	Sand, fine; gravel; sandy clay streaks			dark-brown and slightly greenish; no fos-		
120	140-260	Sand, fine to medium; gravel; clay streaks;	1		sils		
		shells	300	350-650	Clay, diatom rich		
100	260-360	Sand, fine to coarse; gravel; shells; lignite;	50	650-700	Shells, mollusks in abundance; sandy		
		clay streaks	60	700-760	Sand, brownish-gray		
320	360-680	Clay; sandy, shells, some fine sand at 480-520	10	<i>760-77</i> 0	Gravel, fine; mollusks very plentiful		
		ft and 640-680 ft; tough at 360-480 ft and	43	770-813	Sand, coarse to fine, gray and brownish,		
		520-640 ft			water-bearing; very coarse at 770-780 ft		

## Weymouth Township

		Thickness	Depth	Lithology
Well 139 Geo	ographic code: 0123	(ft)	(ft)	
Owner or name: Albert Bailey	1	9	0-9	Sand, fine to coarse, orange
Location: N392518 W7	44706	36	9-45	Sand, grayish-orange; finer at 30-45 ft
Driller: Vance Skinner		46	45-91	Sand, grayish-orange, slightly clayey, very
Quad.: Dorothy Cor	mp. date: 05/03/1977			clayey at 55-70 ft
Atlas Sheet no. 35.15.128 Ele	vation: 60 ft	10	91-101	Sand, fine, clean
Permit no. 35-1519 Dej	pth drilled: 163 ft	29	101-130	Clay, gray streaks; sand, grayish-orange
	İ	20	130-150	Sand, grayish-orange, slighty clayey
	!	13	150-163	Clay, grayish

