

Lithologic Log of Well PB-1552

Lat 26°54'43", long 80°15'20"
Sec. 16, T. 41 S., R. 41 E.

Description	Thick- ness (feet)	Depth, feet below land surface
Road fill.	3	0 - 3
Sand, dusky-brown (5 YR 2/2); quartzose, medium to very fine, moderately sorted, subangular to subrounded; about 1 percent carbonates; 20 to 25 percent organic mud, clay and silt size.	2	3 - 5
Sand, dark-yellowish-brown (10 YR 4/2); quartzose as above; 20 to 25 percent micritic mud; about 3 to 5 percent organic fragments; 5 to 10 percent detrital carbonates and shell fragments; <u>Chione</u> , <u>Tellina</u> .	5	5 - 10
Sand, dark-yellowish-brown (10 YR 4/2); quartzose, medium to very fine, moderately sorted, subrounded to rounded; about 1 percent heavy minerals, fine to very fine, subrounded to rounded; about 1 percent detrital carbonates; about 5 to 10 percent mud, clay and silt size.	4	10 - 14
Sand as in 10 to 14 feet.	3	14 - 17
Sand as in 10 to 14 feet.	3	17 - 20
Sand as in 10 to 14 feet.	4	20 - 24
Sand, light-olive-gray (5 Y 5/2); as above; 1 to 3 percent mud, clay and silt size.	3	24 - 27
Sand as in 24 to 27 feet.		27 - 30
Sand, light-gray (N 7) to yellowish-gray (5 Y 7/2); quartzose, medium to very fine, moderately sorted, subangular to subrounded; 1 to 3 percent heavy minerals, fine to very fine, moderately sorted, subangular to rounded; 3 to 5 percent detrital carbonates and shell fragments, <u>Chione</u> , <u>Cardita</u> , other bivalves.	4	30 - 34
Sand, light-gray (N 7) to yellowish-gray (5 Y 8/1); quartzose, medium to very fine, moderately sorted, angular to subrounded; 1 to 3 percent heavy minerals as above; 30 to 35 percent detrital carbonates and shell fragments, <u>Chione</u> , <u>Ostrea</u> , <u>Cardita</u> , <u>Limopsis</u> , <u>Donat</u> , <u>Cerithium</u> , <u>Crepidula</u> , <u>Prunum</u> , <u>Olivella</u> , <u>Philippia</u> , <u>Chlamys</u> .	3	34 - 37

Lithologic Log of Well PB-1552--Continued

Description	Thick- ness (feet)	Depth, feet below land surface
Sand, olive-gray (5 Y 4/1); detrital carbonates and shell fragments; 25 to 30 percent quartzose, very fine, well sorted, angular to subrounded 5 to 10 percent heavy minerals and phosphates, fine to very fine, well sorted, subangular to rounded; about 5 percent micrite.	3	77 - 80
Sand, light-olive-gray (5 Y 6/1); as above.	4	80 - 84
Sand, light-olive-gray (5 Y 6/1); quartzose, fine to very fine, well sorted, angular to subrounded; 5 to 10 percent heavy minerals and phosphate as above; 35 to 40 percent detrital carbonates and shell fragments, <u>Terebra</u> .	3	84 - 87
Sand as in 84 to 87 feet.	3	87 - 90
Sand, olive-gray (5 Y 4/1); quartzose, fine to very fine, angular to subrounded, well sorted; 5 to 10 percent heavy minerals and phosphates, fine to very fine, moderately sorted, subrounded to rounded; 35 to 40 percent detrital carbonates and shell fragments.	4	90 - 94
Sand as in 90 to 94 feet.	3	94 - 97
Sand, olive-gray (5 Y 4/1) to medium-dark-gray (N 4); quartzose, medium to very fine, moderately sorted, angular to subrounded; 3 to 5 percent heavy minerals, fine to very fine, well sorted, subrounded to rounded; 20 to 25 percent detrital carbonates and phosphates, very coarse to very fine; 20 to 25 percent shells and shell fragments, <u>Turritella</u> , <u>Chione</u> , echinoid plates, <u>Crucibulum</u> , <u>Tellina</u> , <u>Anadora</u> .		97 - 100
Sand, olive-gray (5 Y 4/1); as above; interbedded with about 20 percent fossiliferous limestone, light-olive gray (5 Y 6/1), packed biosparite, bivalves; 15 to 20 percent quartz, medium to very fine, subangular to subrounded; poorly cemented; very porous.	4	100 - 104
Sand, light-olive-gray (5 Y 6/1); quartzose, medium to very fine, moderately sorted, subangular to subrounded; 5 to 10 percent heavy minerals and phosphates, medium to very fine, moderately sorted, subrounded to rounded; 35 to 40 percent detrital carbonates and shell fragments; interbedded with about 10 percent limestone, packed biosparite; 20 percent quartz, medium to very fine, subangular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, subrounded to rounded; poorly cemented; very porous.	3	104 - 107

Lithologic Log of Well PB-1552--Continued

Description	Thick- ness (feet)	Depth, feet below land surface
Sand, interbedded with about 10 percent limestone as above.	3	107 - 110
Sand, light-olive-gray (5 Y 6/1); quartzose, fine to very fine, well sorted, subangular to subrounded; 5 to 10 percent heavy minerals and phosphates, fine to very fine, well sorted, subrounded to rounded; 30 to 35 percent detrital carbonates and shell fragments; lost circulation at 113 feet.		110 - 114
Marl, yellowish-gray (5 Y 8/1); clay and micrite; impermeable.	3	114 - 117
Sand, light-olive-gray (5 Y 6/1); quartzose, medium to very fine, moderately sorted, angular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, well sorted, subangular to subrounded; 25 to 30 percent detrital carbonates and shell fragments, abundant bivalve fragments; interbedded with about 20 percent marl as above.	3	117 - 120
Sand, yellowish-gray (5 Y 8/1); detrital carbonates and shell fragments, bivalve fragments; 35 to 40 percent quartzose, fine to very fine, well sorted, angular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, well sorted, subrounded to rounded; interbedded with about 10 percent limestone, packed biosparite; 10 percent quartz, fine to very fine, subangular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, subrounded to rounded; poorly cemented; very porous, moldic.	4	120 - 124
Sand; as above; quartzose, medium to very fine, moderately sorted, angular to subrounded; interbedded with 20 percent limestone, light-olive-gray (5 Y 6/1); sandy, sparse biosparite; 20 to 25 percent quartz, medium to very fine, subangular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, subrounded to rounded; poorly cemented; very porous, moldic.	3	124 - 127
Sand, very light gray (N 8) to yellowish-gray (5 Y 8/1); quartzose, medium to silt size, moderately sorted, angular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, well sorted, subrounded to rounded; 15 to 20 percent detrital carbonates and shell fragments.	3	127 - 130
Sand as in 127 to 130 feet.	4	130 - 134

Lithologic Log of Well PB-1552--Continued

Description	Thick- ness (feet)	Depth, feet below land surface
Sand, very light gray (N 8) to yellowish-gray (5 Y 8/1); quartzose, fine to very fine, well sorted, subangular to subrounded; 1 to 3 percent detrital carbonates, coarse to very fine; 1 to 3 percent heavy minerals and phosphates, fine to very fine, well sorted, subrounded to rounded; 5 to 10 percent sandstone nodules, micritic matrix; very poorly cemented.	3	134 - 137
Sand as in 134 to 137 feet.	3	137 - 140
Sand as in 134 to 137 feet; quartzose, medium to very fine.	4	140 - 144
Clayey sand, light-olive-gray (5 Y 5/2); quartzose, fine to very fine, well sorted, subangular to subrounded; 3 to 5 percent heavy minerals and phosphates as above; 1 to 3 percent detrital carbonates; 15 to 20 percent marl, micrite, clay and silt.	3	144 - 147
Clayey sand as in 144 to 147 feet.	3	147 - 150
Clayey sand as in 144 to 147 feet; 20 to 25 percent clay and silt.	4	150 - 154
Clayey sand, light-olive-gray (5 Y 5/2); quartzose, fine to very fine, well sorted, angular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, well sorted, subrounded to rounded; 1 to 3 percent detrital carbonates; 25 to 30 percent clay and silt.	3	154 - 157
Sandy clay, grayish-olive (10 Y 4/2); clay and silt; 35 to 40 percent quartzose as above; 3 to 5 percent heavy minerals and phosphates as above; 1 to 3 percent detrital carbonates.	3	157 - 160
Sandy clay, pale-olive (10 Y 6/2) to light-olive-gray (5 Y 5/2); clay and silt; 30 to 35 percent quartzose as above; 5 to 10 percent heavy minerals and phosphates as above; 3 to 5 percent detrital carbonates.	4	160 - 164
Sandy clay, light-olive-gray (5 Y 5/2); as above.	3	164 - 167
Sandy clay as above.	3	167 - 170

Lithologic Log of Well PB-1552--Continued

Description	Thick- ness (feet)	Depth, feet below land surface
Sand, light-olive-gray (5 Y 6/1) to yellowish-gray (5 Y 8/1); as above; 3 to 5 percent heavy minerals.		37 - 40
Sand; as above; about 1 to 3 percent rock fragments.	4	40 - 44
Sand; as above; 35 to 40 percent detrital carbonates and shell fragments, <u>Busycon</u> .	3	44 - 47
Sand, olive-gray (5 Y 4/1); quartzose, medium to very fine, moderately sorted, angular to subrounded; 5 to 10 percent heavy minerals and phosphates, fine to very fine, moderately sorted, subangular to rounded; 30 to 35 percent detrital carbonates and shell fragments.	3	47 - 50
Sand as in 47 to 50 feet.	4	50 - 54
Sand, olive-gray (5 Y 4/1); quartzose, fine to very fine, well sorted, subangular to subrounded; 5 to 10 percent heavy minerals and phosphates, fine to very fine, well sorted, subangular to rounded; 35 to 40 percent detrital carbonates and shell fragments.	3	54 - 57
Sand; as above; interbedded with 10 percent limestone and claystone, light-olive-gray (5 Y 5/2); micrite and clay.	3	57 - 60
Sand, olive-gray (5 Y 4/1); quartzose, fine to very fine, well sorted, angular to subrounded; 3 to 5 percent heavy minerals and phosphates, fine to very fine, well sorted, subangular to rounded; 35 to 40 percent detrital carbonates and shell fragments.	4	60 - 64
Sand, light-olive-gray (5 Y 5/2); as above.	3	64 - 67
Sand as in 64 to 67 feet.	3	67 - 70
Sand, light-olive-gray (5 Y 6/1); as above; quartzose, medium to very fine, angular to subrounded.	4	70 - 74
Sand, light-olive-gray (5 Y 6/1); quartzose, fine to very fine, well sorted, angular to subrounded; 5 to 10 percent heavy minerals and phosphates, fine to very fine, well sorted, subangular to rounded; 1 to 3 percent micrite; 35 to 40 percent detrital carbonates and shell fragments.	3	74 - 77

Recorded by R. Kane

U.S. DEPT. OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
GROUND WATER SITE INVENTORY
SITE SCHEDULE

Date 7-18-86

Check One English Metric Units

GENERAL SITE DATA (0)

Site Ident No 2654430801520.02 RG Number R=0 Transaction T=(A) D M V
 Site-Type 2=C D H I M P T (W) Data 3=(C) U L M Reporting Agency 4=USGS
 Project No. 5=4598-44200 District 6=12 State 7=12 County Palm Beach 8=099
 Latitude 9=26:54.43 Longitude 10=80:15:20 Lat-Long Accuracy 11=(S) F T M
 Local Number 12=PB1552 Land Net Loc. 13=N W N W N W S 16=T 41 S R 41 E
 Location Map 14=W Palm Beach 2NE Scale 15=1:24000
 Altitude 16=21' Method of Measurement 17=A L (M) Accuracy 18=Topo
 Topo Setting 19=D C E (O) H K L O P S T U V W Hydrologic Unit (OWDC) 20=03090202
 Date of First Construction/Completion 21=07/17/1986 Use of Site 23=(O) M P R S T U W X Z
 Use of Water 24=A B C D E F H I M N P R S T (U) Y Z
 Secondary Water Use 25= Tertiary Use of Water 26= Depth of Hole 27=170' Depth of Well 28=100' Source of Depth Data 29=6
 Water Level 30= Date Measured 31= Source 33=
 Method of Measurement 34=A C E G H L M R S T V Z
 Site Status 37=D F G H (O) P R S T V X Z
 Source of Geohydrologic Data 36= Pump Used 35= Measuring Point 266 Measuring Point Date 267=

OWNER IDENTIFICATION (1)

R=158 T=(A) D M Date of Ownership 159# 07/17/1986
 Name: Last 161=USGS First 162= Middle Initial 163=

OTHER SITE IDENTIFICATION NUMBERS (1)

R=189 T=A D M Ident 190# Assigner 191#
 Ident 190# Assigner 191#

SITE VISIT DATA (1)

R=186 T=A D M Date of Visit 187# Name of Person 188#

FIELD WATER QUALITY MEASUREMENTS (1)

R=192 T=A D M Date 193# Geohydrologic Unit 195#
 Temperature 196# 00010 Degrees C 197#
 Conductance 196# 00095 μ Mhos 197#
 Other (STORET) Parameter 196# Value 197#
 Other (STORET) Parameter 196# Value 197#

Suite #1

FOOT NOTES:

① Source of Data Codes:
S D O A R L G Z
 reporting driller, owner, other gov't, other logs, geologist, other agency reported.

WELL CONSTRUCTION DATA (1)

R = 58 * T = **A** D M * add, delete, modify Entry No 59 # * Date of Construction Completion 60 = 07/17/98 * month day year Source of Const. Data 64 = * * *

Name of Contractor/Driller 63 = **Duel Tube** *

Method of Construction 65 = A B C D H J P R T V W **Z** *
 air rotary, bored, cable, dug, hydraulic, jetted, air-per, reverse, trenching, driven, drive, wash, other
 or augered tool rotary cushion rotary

Finish 66 = C F G H Ø P **S** T W X Z * Type of Seal 67 = B C **G** Z *
 porous, gravel w, gravel, horizontal, open, perforated, screen, sand point, walled, open, other
 concrete, perl, screen, gallery, end, or slotted, other hole, other grout

Bottom of Seal 68 = **80'** * Method of Development 69 = A B C J N **P** S Z * Number of Hours in Development 70 = * * *
 air lift, bailed, compressed, jetted, none, other, surged, other pump, air pump

Special Treatment During Development 71 = C D E F H M Z *
 chemicals, dry ice, explosives, defloculent, hydrofracturing, mechanical, other

DIMENSIONS OF THE HOLE CONSTRUCTED (2)

R = 72 * T = **A** D M * add, delete, modify Construction Entry No 59 # * * *

Top of Hole Segment Below LSD
 73 # **0'** *
 73 # *
 73 # *
 73 # *
 73 # *

Bottom of Hole Segment below LSD
 74 = **170'** *
 74 = *
 74 = *
 74 = *
 74 = *

Diameter of Hole Segment
 75 = **6"** *
 75 = *
 75 = *
 75 = *
 75 = *

New Card for Each Hole Segment Same R, T & Field 5 9

CASING SCHEDULE (2)

R = 76 * T = **A** D M * add, delete, modify Construction Entry No 59 # * * *

Top of Casing Segment Below LSD
 77 # **0'** *
 77 # *
 77 # *
 77 # *
 77 # *

Bottom of Casing Segment Below LSD
 78 = **100'** *
 78 = *
 78 = *
 78 = *
 78 = *

Diameter of Casing Segment
 79 # **2"** *
 79 # *
 79 # *
 79 # *
 79 # *

Casing Material 80 = **P** *
 80 = *
 80 = *
 80 = *
 80 = *

Thickness of Casing
 81 = *
 81 = *
 81 = *
 81 = *
 81 = *

New Card for Each Casing With Same R, T & Field 5 9

OPENINGS SCHEDULE (2)

R = 82 * T = **A** D M * add, delete, modify Construction Entry No 59 # * * *

Top of Section Below LSD 83 # **90'** *
 Bottom of Section Below LSD 84 = **100'** *
 Type of Openings 85 = **5** *
 Type of Material 86 = **P** *
 Diameter of Open Section 87 = **2 1/4"** *
 Width of Opening 88 = **100'** *
 Length of Opening 89 = **1/4"** *

(Openings Data)
 83 # *
 84 = *
 85 = *
 86 = *
 87 = *
 88 = *
 89 = *

(Openings Data)
 83 # *
 84 = *
 85 = *
 86 = *
 87 = *
 88 = *
 89 = *

New Card for Each Open Section With Same R, T and Field 5 9

FOOT NOTES:

1 Source of Data Codes:

S D Ø A R L G Z
 reporting, driller, owner, other gov't, logs, geologist, other agency, reported.

5 Casing Material Codes

B C G I M P R S T U W Z
 brick, concrete, galv, wrought, other, PVC or, rock or, steel, tile, coated, wood, other iron, iron, metal, plastic, stone, steel

6 Type of Openings Codes

F L M P R S T W X Z
 fracture, louvered, mesh, perforated, wire, screen, sand, walled, open, other shuttered, or slotted, wound, unknown, point, hole

7 Type of Material Codes for Open Sections

B C G I M P R S T Z
 brass or, concrete, galv, wrought, other, PVC or, stainless, steel, tile, other bronze, iron, iron, metal, plastic, steel

PRODUCTION DATA (1)

R = 134 146 * T = A D M * Entry No 147 # Date 148 = / / *
flowing, pumped add, delete, modify month day year

Discharge: 150 = * Source of Data 151 = *
1

Method of Measurement 152 = B C E F M O P R T U V W Z *
bailer, current, estimated, flume, totaling, orifice, pitot-tube, reported, trajectory, venturi, volumetric, weir, other
meter, meter, meter

Production Level 153 = * Static Level 154 = * Source of Data 155 = * Specific Capacity 272 = *
airline, calibrated, estimated, pressure, calibrated, geophysical, manometer, reported, steel, electric, calibrated, other
airline gage pressure gage logs tape tape electric tape

Method of Measurement 156 = A C E G H L M R S T V Z * Pumping Period 157 = *
airline, calibrated, estimated, pressure, calibrated, geophysical, manometer, reported, steel, electric, calibrated, other
airline gage pressure gage logs tape tape electric tape

LIFT DATA (1)

R = 42 * T = A D M * Type of Lift 43 # A B C J P R S T U Z * Entry No 254 # *
add, delete, modify air, bucket, centrifugal, jet, piston, rotary, submersible, turbine, unknown, other

Pump Intake Setting 44 = * Type of Power 45 = D E G H L N W Z *
diesel, electric, gasoline, hand, LP gas, natural, windmill, other gas

Date 38 = / / * Horsepower 46 = *
month day year

MAJOR PUMP DATA (2)

R = 47 * T = A D M * Type of Lift 43 # * Lift Entry No 254 # * Manufacturer of Pump 48 = *
add, delete, modify

Serial No of Pump 49 = * Name of Power Company 50 = *
 Power Company Account No 51 = * Power Meter No 52 = * Pump Rating 53 = *
 Person or Company Who Maintains the Pump 54 = * Additional Lift 255 = * Rated Pump Capacity 268 = *

STANDBY POWER DATA (2)

(See LIFT DATA for codes of fields 43 and 56 below)

R = 55 * T = A D M * Type of Lift 43 # * Type of Power 56 = * Horsepower 57 = * Lift Entry No 254 # *
add, delete, modify

AVAILABLE LOG DATA (1)

R = 198 * T = A D M * New Card for Each Log Type Same R & T

Type of Log 199 # A * 199 # F * 199 # G * 199 # *	Begin Depth 200 = 0 . * 200 = 0 . * 200 = 0 . * 200 = . * *	End Depth 201 = 170' . * 201 = 170' . * 201 = 170' . * 201 = . * *	Source of Data 202 = G * 202 = G * 202 = G * 202 = *
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WATER QUALITY DATA COLLECTION (1)

R = 114 * T = A D M * Begin Year 115 # * End Year 116 = * Source Agency 117 = *
add, delete, modify

Frequency of Collection 3 118 = * Network Site 257 = * Type of Analyses 4 120 = *

WATER LEVEL DATA COLLECTION (1)

R = 121 * T = A D M * Begin Year 122 # * End Year 123 = * Source Agency 124 = *
add, delete, modify

Frequency of Collection 3 125 = * Network Site 258 = *

WATER PUMPAGE/WITHDRAWAL DATA COLLECTION (1)

R = 127 * T = A D M * Begin Year 128 # * End Year 129 = * Source Agency 130 = *
add, delete, modify

Frequency of Collection 3 131 = * Network Site 259 = * Method of Collection 133 = C E M U Z *
calculated, estimated, metered, unknown, other

OTHER DATA AVAILABLE (1)

R = 180 * T = A D M * Type of Data 181 # * Loc 182 = C D Z * Format 261 = F M P Z *
add, delete, modify cooperator, district, other files, machine, published, other available

New Card Same R & T Type of Data 181 # * Loc 182 = C D Z * Format 261 = F M P Z *
cooperator, district, other files, machine, published, other available

FOOT NOTES:

① Source of Data Codes:

S D O A R L G Z
reporting, driller, owner, other gov't, other logs, geologist, other agency

③ Frequency of Collection Codes

A B C D F I M O Q S W Z
annual, bi-monthly, continuous, daily, semi-monthly, intermittent, monthly, one time, quarter, semi-weekly, other only annual annual

② Type of Log Codes

A B C D E F G H I J K L M N O P Q
time, collar, caliper, driller's, electric, fluid, geologist, magnetic, induction, gamma, dipmeter, laterlog, microlog, neutron, later, photo, radio-active
conduct ray

S T U V Z
sonic, temp, gamma, fluid, other gamma velocity

④ Type of Quality Analyses Codes

A B C D E F G H J K L M Z
physical, common, trace, pesticides, nutrients, sanitary, codes, codes, codes, codes, all or, other chemical elements B&D B&E B&F D&E C,D&E most

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

R = 90 * T = A D M * Entry No 256 # Depth to Top 91 = Depth to Bottom 92 = *

Unit Identifier 93 = Lithology 96 = Lithologic Modifier 97 = *

AQUIFER DATA (2)

R = 94 * T = A D M * Geohydrologic Unit Entry No 256 # *

Date 95 # / / Water Level 126 = % Water Contributed 132 = *

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

R = 90 * T = A D M * Entry No 256 # Depth to Top 91 = Depth to Bottom 92 = *

Unit Identifier 93 = Lithology 96 = Lithologic Modifier 97 = *

AQUIFER DATA (2)

R = 94 * T = A D M * Geohydrologic Unit Entry No 256 # *

Date 95 # / / Water Level 126 = % Water Contributed 132 = *

PERTINENT REMARKS

R = 183 * T = A * 185 = \ *

add

New Card Same R&T 185 = \ *

185 = \ *

NOTES:

