OWNER: Beechwood Development Corp. # 1 DRILLER: Sydnor Hydrodynamics, Inc.

COUNTY: Hanover (Poindexters)

VDMR: 1878 WWCR: 104

TOTAL DEPTH: 640'

GEOLOGIC LOG

Depth	in	fee	t
T			_

COLUMBIA	GROUP	(0-50')
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0-10	Sand -	yellowish-brown, clayey; very fine- to medium-grained,
		fairly well-sorted, angular to subangular; trace of feld-
		spar: limonitic

10-20	Sand - light brownish-gray, slightly to moderately clayey, 10%
	granule gravel; medium- to very coarse-grained, moderately
	sorted, subrounded; moderately feldspathic

20-30	Sand -	yellowi:	sh-brown,	modera	tely	clayey	5-10%	fine-grained
		gravel;	medium-g	rained,	mode	erately	sorted;	slightly
		feldspa	thic					

30-40	TT .	with al	bout 25	% fine-grained	gravel
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40-50 "

CALVERT FORMATION (50-60')

50-60 Sand - medium-gray, clayey; fine-grained, well-sorted, angular; traces of muscovite, feldspar and shell material

MATTAPONI FORMATION (60-120')

60-70	Sand -	light-gray,	clean;	fine- to	medi	um-grained,	, well-sort	ed,
		subangular;	traces	of magne	etite,	feldspar,	muscovite,	black
		phosphatic n	materia	l, and sh	nell fi	ragments		

70-80	TI .	very slightly clayey

80-90 " slightly clayey

90-100 "

100-110 Sand - grayish-brown, moderately clayey; fine- to medium-grained, fairly well-sorted, angular; traces of shell and black, carbono-phosphatic material

110-120 Clay - brownish-gray, moderately sandy; sand is quartzose, poorly sorted; trace of shell fragments

PATUXENT FORMATION (120-170')

120-130 Gravel and Sand - grayish-brown, moderately clayey: gravel (60-70%) is fine-grained (2-10mm), angular (broken rounds?) to sub-rounded quartz, blue-gray quartzite and some chert sand

OWNER:	Beechwood	Development	Corp.	#	1

11

340-350

#1878 Continued 120-130 Gravel and Sand - (30-40%) is fine- to coarse-grained, poorly sorted, poorly rounded; sediment is slightly feldspathic, with traces of phosphorite and glauconite 130-140 70% sand, 30% gravel 140-150 60% gravel, 40% sand 150-160 Sand - white, clean, 20% fine, lithic gravel (2-10 mm); mediumto very coarse-grained, moderately sorted, subrounded; moderately feldspathic; traces of glauconite, garnet, pyrite 160-170 5% granule gravel PETERSBURG GRANITE (170-640') 170-180 Granite - pink; quartz, microcline and biotite 180-190 with trace of epidote 190-200 with vein quartz 200-210 with trace of epidote 210-220 220-230 11 230-240 240-250 Hornblende Gneiss - dark gray, coarse-grained; hornblende, pink and white feldspar, quartz, biotite, trace of pyrite 250-260 260-270 270-280 with some granite chips 280-290 290-300 11 300-310 Granite - pale-pink, coarse-grained; quartz, feldspar, biotite, 310-320 muscovite and hornblende 320-330 mostly white granite 330-340 very pink granite

11

with trace of pyrite

OWNER:	Beechwood Deve	elopment Cor	p. #	1			#1	878
350-360	Granite -	pale pink, covite and	coars	se-grained;	quartz,	feldspar,	biotite,	mus-
360-370	11.	covice and	HOTH	orende				
370-380	II							
380-390	II							
390-400	tt							
400-410	· · · · · · · · · · · · · · · · · · ·							
410-420	II							
420-430	U							
430-440	TI,							
440-450	11							
450-460	u.							
460-470	ĬĪ.							
470-480	п							
480-490	п			with incre	ase of h	ornblende		
490-500	'n							
500-510	п							
510-520	n							
520-530	<u>n</u>							
530-540	u.							
540-550	ार							
550-560	· iii							
560-570	ार							
570-580	п							
580-590	ार							
590-600	п							
600-610	п							
610-620	u							
620-630	н			with bioti	te-gneis	s fragment	S	
630-640	u			u				

OWNER: Beechwood Development Corp. # 1

#1878

GEOLOGIC SUMMARY

Rock Unit		<u>Age</u>
Columbia Group		Pleistocene
Calvert Formation		Miocene
Mattaponi Formation		Palocene-Late Cretaceous
Patuxent Formation		Early Cretaceous
Petersburg Granite		Paleozoic (?)
	Columbia Group Calvert Formation Mattaponi Formation Patuxent Formation	Calvert Formation Mattaponi Formation Patuxent Formation

Virginia Division of Mineral Resources R. Teifke and T. Gathright, Geologists September 13, 1967 R. H. Teifke 3/3/1972

Beechwood Development Corp. # 1 OWNER: DRILLER: Sydnor Hydrodynamics, Inc.

COUNTY: Hanover (Poindexters)

VDMR: 1878 104 WWCR:

6401 TOTAL DEPTH:

ELEV. : 185'

YELLOW TAVERN QUADRANGLE

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP (0-50')

0-10 Sand - yellowish-brown, clayey; very fine- to medium-grained, fairly well-sorted, angular to subangular; trace of feldspar; limonitic

10-20 Sand - light brownish-gray, slightly to moderately clayey, 10% granule gravel; medium- to very coarse-grained, moderately sorted, subrounded; moderately feldspathic

20-30 Sand - yellowish-brown, moderately clayey, 5-10% fine-grained gravel; medium-grained, moderately sorted; slightly feldspathic

30 - 40with about 25% fine-grained gravel

40-50

CALVERT FORMATION

50-60 Sand - medium-gray, clayey; fine-grained, well-sorted, angular; traces of muscovite, feldspar and shell material

60-70 Sand - light-gray, clean; fine- to medium-grained, well-sorted, subangular; traces of magnetite, feldspar, muscovite, black phosphatic material, and shell fragments

70-80 very slightly clayey

80-90 slightly clayey

90-100

Sand - grayish-brown, moderately clayey; fine- to medium-grained, 100-110 fairly well-sorted, angular; traces of shell and black, carbono-phosphatic material

110-120 Clay - brownish-gray, moderately sandy; sand is quartzose, poorly sorted; trace of shell fragments : diatom accous.

Mattaponi Formation (120-127')

PATUXENT FORMATION (127-170') Top of formation defined on basis of other information. Gravel:

Gravel and Sand Agrayish-brown, moderately clayey: gravel (60-70%) 120-130 is fine-grained (2-10mm), angular (broken rounds?) to subrounded quartz, blue-gray quartzite and some chert sand

E100 = 185'

OWNER: Beechwood Development Corp. # 1

#1878

	OWINDIA. DCC	CIII	Development corp.	11 1	112010
	(Continued)	Cwanni	cand 9 (20 40)	e) is fine to see	under the second
	3.00			unded; sediment is	arse-grained, poorly s slightly feldspathic, aconite
Kptx	130-140		и	70% sand, 30% gr	ravel
Kptu	140-150		н	60% gravel, 40%	sand
Kpty	150-160	Sand -	to very coarse-gr	ained, moderately	rel (2-10 mm); medium- sorted, subrounded; lauconite, garnet, pyrite
Kptx	160-170		n .	5% granule grave	1
	PETERSBURG	GRANITE	(170-640')		
	170-180	Granit	e - pink; quartz, ı	microcline and bio	otite
	180-190		п	with trace of ep	idote
	190-200		п	with vein quartz	,
	200-210		n .	with trace of ep	pidote
	210-220		tī.	Tr.	
	220-230		tt.		
	230-240		п		
	240-250	Hornbl			ned; hornblende, pink e, trace of pyrite
	250-260		п		
	260-270		11		
	270-280		II	with some granit	ce chips
	280-290		tr .	TR.	
	290-300		п	ir.	
	300-310		tt.	п	
	310-320	Granit	e - pale-pink, coa muscovite and hor		z, feldspar, biotite,
	320-330		II	mostly white gra	anite
	330-340		II	very pink granit	ce
	340-350		tr.	п	with trace of pyrite

OWNER:	Beechwood Development Co	rp. #	# 1				#1	878
350-360					quartz,	feldspar,	biotite,	mus-
360-370	covite and	nori	nblende					
370-380	н							
380-390	и							
390-400	ii .							
400-410	· ·							
410-420	TI .							
420-430	m *							
430-440	tt							
440-450	п							
450-460	11							
460-470	u							
470-480	n.							
480-490	10.		with	incre	ase of h	ornblende		
490-500	tr.							
500-510	п							
510-520	U							
520-530	ii ii							
530-540	и							
540-550	TC.							
550-560	II .							
560-570	II.	, 1		-				
570-580	tt							
580-590	II							
590-600	III					:+0		
600-610	n n							
610-620	п							
620-630	"		with	bioti	te-gneis	s fragment	S	
630-640	п		11					

OWNER: Beechwood Development Corp. # 1

#1878

GEOLOGIC SUMMARY

Rock Unit

0 - 5050-60 120

127 120 170 170-640

Columbia Group Calvert Formation 120 60-120 127 Mattaponi Formation Patuxent Formation Petersburg Granite

Age

Pleistocene post-Miocene Miocene Palocene-Late Cretaceous Early Cretaceous Paleozoic (?)

Virginia Division of Mineral Resources R. Teifke and T. Gathright, Geologists September 13, 1967 R. H. Teifke 3/3/1972 R. H. Teifke