INTERVAL SHEET

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Date rec'd: 4/14/67

PROP: Luttrellsville

COMP: Douglas & Dickinson

COUNTY: Richmond (Luttrellsville)

VDMR Well No: 1855

Sample Interval: from 0 to 790

Number of samples: 77

Total Depth: 790

Oil or Gas: Water: Exploratory:

From-	То	Fro	m–T	.'o	Fr	om–I	Го	From-To
0 - 10 - 21 - 31 - 41 -	10 21 31 41 52	315 326 336 347 357	-	326 336 347 357 368	631 643 653 664 674	- - - -	643 653 664 674 683	- - - -
52 - 63 - 73 - 84 - 94 -	63 73 84 94 105	368 378 389 399 410	- - - -	378 389 399 410 420	683 693 700 709 720	- - - -	693 700 709 720 730	- - - -
105 - 115 - 126 - 136 - 147 -	115 126 136 147 157	420 431 441 452 462	-	431 441 452 462 473	730 741 751 762 772	-	741 751 762 772 777	- - - -
157 - 168 - 178 - 189 - 199 -	168 178 189 199 210	473 483 494 504 515	-	483 494 504 515 525	777 787		787 790	- - - -
210 - 221 - 231 - 242 - 252 -	221 231 242 252 263	525 536 546 557 567	- - - -	536 546 557 567 578				- - - - -
263 - 273 - 284 - 294 - 305 - No was	273 284 294 305 315 shed sampl	578 588 600 610 621	-	588 600 610 621 631				 - - -

OWNER: Douglas & Dickinson (Luttrellsville)

DRILLER: Douglas & Dickinson, Inc. COUNTY: Richmond (Luttrellsville)

VDMR: 1855 WWCR: 66 TOTAL DEPTH: 790¹

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP (0-411)

0-10	Sand	- yellowish-brown,	slightly clayey; fine-	to coarse-grained,
		moderately sorted,	subrounded; slightly	feldspathic; trace
		of glauconite; trace	of pelecypod shell	

10-21

21-31

31-41 "

YORKTOWN FORMATION (41-105°)

41-52	Sand - gray, clean; medium- to very coarse-grained, moderately
	sorted, subrounded to well-rounded; slightly feldspathic;
	very slightly glauconitic and phosphatic (bone and shell
	fragments); about 5% pelecypod shell fragments

52-63

63-73

73-84

Sand - tan, trace of clay; fine-grained, well-sorted, angular to subangular; very small amounts of glauconite, phosphorite, muscovite, feldspar; about 2% shell fragments

94-105

CALVERT FORMATION (105-3361)

105-115 Clay - dark-gray with greenish cast, slightly sandy, 5% granule gravel, including a very few phosphate nodules; trace of glauconite; a few pelecypod shell fragments

OWNER:	Douglas &	Dickinson (Luttrells	ville)	#1855
115-126	Clay	(granules); sand is sorted, angular to	moderately sandy, slightly p fine- to medium-grained, t subrounded; traces of glaud pelecypod and gastropod sh	fairly well- conite and
126-136		п		
136-147		II .		
147-157		п		
157-168		п		
168-178		n .		
178-189		п	Turritella present	
189-199	Claý	fine- to very fine- and glauconite; pe	ay, moderately silty and san grained, well-sorted; trace lecypod shell fragments com noderately diatomaceous	of phosphorite
199-210		n .		
210-221		п		
221-231		п		
231-242	Sand	sorted, subrounde	ay, clayey; medium-grained d; small amount partially de glauconite; slightly diatoma	ecomposed
242-252	Clay	sand is fine- to ve phosphorite and gl	reenish cast, moderately si ry fine-grained, well-sorte auconite; a very few pelecypately diatomaceous	d; traces of
252-263		п		
263-273		11		
273-284		п		
284-294		11		

294-305

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#1855

305-315 Clay - light-gray with greenish cast, moderately silty and sandy; sand is very fine- to coarse-grained, rather poorly sorted; traces of phosphorite and glauconite; a very few pelecypod shell fragments; moderately diatomaceous 11 315-326 11 326-336 CHICKAHOMINY FORMATION (336-3781) 336-347 Sand - gray, moderately clayey; fine- to coarse-grained, rather poorly sorted, angular to subrounded; traces of phosphatic shell, glauconite, and carbonaceous material; 10% pelecypod shell fragments 347-357 357-368 clayey (diatomaceous clay) 11 368-378 11 NANJEMOY FORMATION (378-483°) 378-389 Limestone - light-gray, arenaceous; abundant medium-grained, quartz-glauconite sand, molluscan shells and shell fragments very abundant; some gastropods, bryozoans, foraminifers, and ostracods; cavernous, pyritic; limited replacement of allochthonous glauconite by sulfides Sand and Limestone - light-gray; sand (65%) is fine- to coarse-389-399 grained, moderately sorted, subangular to subrounded;

Sand and Limestone - light-gray; sand (65%) is fine- to coarsegrained, moderately sorted, subangular to subrounded; moderately glauconitic, trace of phosphorite; 35% arenaceous, cavernous, pyritic, and fossiliferous limestone (mostly pelecypods, some gastropods, bryozoans, echinoids, foraminifers); allochthonous, blackish-green, furrowed grains of glauconite, and rounded grains of goethite after glauconite

399-410 "

410-420

420-431	moderately sor	nish-brown, slightly clayey; medium-grained ted; glauconitic; abundant shell fragments ragments; stained quartz common	ł,
431-441	п		
441-452	п		
452-462	п	dark-gray, very glauconitic	
462-473	п	п	
473-483	п	п	
MATTAPON	I FORMATION (483-6311)		
483-494	coarse- to very	vnish-gray clay, 5% rounded quartz granules coarse-grained, moderately sorted; fresh, glauconite with subordinate rounded quartz	
494-504	n		
504-515	green clay); cos sorted; 70-80%	th greenish-cast, moderately clayey (palearse-to very coarse-grained, fairly well-fresh, autochthonous glauconite, 20-30%; a few shell fragments	
515-525	п		
525-536	п		
536-546	п		
546-557	п	clayey (clay is predominantly dark-gray subordinately pale-pink)	,
557-567	п	II .	
567-578	п	п	
578-588	п	п	
588-600	sorted; 50-70% quartz; trace of	ightly clayey; coarse-grained, moderately fresh glauconite, 30-50% rounded and stained feldspar; a few abraded pelecypod shells foraminifers (Nodosaria)	∍d

	-5-		
OWNER: Dougla	as & Dickinson (Luttrell	sville)	#1855
600-610 S	sorted; 50-70% fr quartz; trace of fo	htly clayey; coarse-grain esh glauconite, 30-50% r eldspar; a few abraded pe caminifers (Nodosaria)	ounded and stained
610-621	П	medium-gray, modera	tely clayey
621-631	П	u	
PATUXENT FO	RMATION (631-7901)		
631-643 S	to very coarse-gr subrounded quart	lightly clayey (yellow clarained, poorly sorted; 70 z, 25% glauconite, 5% felchorite, and shell fragme	% subangular to ldspar; traces of
643-653	II .		
653-664	TI .		
664-674	п		
674-683 S	to very coarse-gr	slightly clayey, a few gr rained, rather poorly sor quartz, with 5-10% glau e of muscovite	ted, subangular to

683-693

693-700

Sand - gray-brown, slightly clayey; fine- to coarse-grained, moderately sorted; 40% glauconite, 40-45% quartz, 5-10% feldspar; trace of shell fragments

700-709

709-720 Clay - greenish gray, mottled yellow, variably silty and micaceous, moderately sandy; sand is poorly sorted, glauconitic, slightly feldspathic

720-730

730-741

741-751 "

751-762

762-772

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#1855

772-777	Clay - greenish gray, mottled yellow, variably silty and micaceous, moderately sandy; sand is poorly sorted, glauconitic, slightly feldspathic
777-787	Sand - brown, trace of silt and clay; medium-grained, fairly well-sorted, subangular to subrounded; 10-20% fresh feldspar, 2-5% glauconite; traces of muscovite, garnet and shell fragments
787-790	п

GEOLOGIC SUMMARY

	Rock Unit	Age
0-41 ¹	Columbia Group	Pleistocene
41-105	Yorktown Formation	Late Miocene
105-3361	Calvert Formation	Middle Miocene
336-3781	Chickahominy Formation	Late Eocene
378-483°	Nanjemoy Formation	Middle Eocene
483-631°	Mattaponi Formation	Paleocene
631-790°	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources Robert H. Teifke, Geologist June 1, 1967