Page 1		VDMR Well No.:	Well No. 1057		
Date 6/16/64		Sample Interval	: from 0 to 27	72	
PROP: Charles Ruttkay  COMP: Ange		Total depth 272			
		OilGasWater_X_Exploratory			
2-2-162-16	rfax (Alexandria)	Cuttings X	CoreOther		
	NO: W-1057		Р		
From-To	From-To	From-To	From-To	From-To	
<b>—</b>	0 -10	- No	washed samples	×=-	
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-	80 - 90		-	-	
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-	110 - 120 120 - 130	-	-		
	130 - 140	-	. <u>-</u> '	: <del>-</del> 2	
-	140 - 150	-	-	-	
<u>.</u>	150 - 160	_	_	_	
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OWNER: Ruttkay, Charles S.

DRILLER: J. S. Ange

COUNTY: Fairfax (Alexandria)

VDMR #1057 WWCR #671 TOTAL DEPTH: 272

## GEOLOGIC LOG

0-10	Clay - brownish yellow, sandy, poorly sorted, angular to subangular sand, very micaceous, finely divided muscovite.
10-20	Sand - yellowish brown, poorly sorted, angular to subangular, very friable, iron-stained, small amount granules, very argillaceous, intensely weathered, micaceous (abundant muscovite and considerable biotite in various stages of decomposition), many discrete grains of various iron oxides some as pseudomorphs (limonite, hematite, and magnetite after pyrite).
20-30	Sand - yellowish brown, very coarse grained, poorly sorted, angular to subangular, quartz is iron-stained, intensely weathered and friable, abundant small gravel (granules) and muscovite (mostly as micaceous aggregates), small amounts of iron oxides including many pseudomorphs after pyrite, slightly argillaceous.
30-40	As above.
40-50	Clay - reddish brown, trace of sand.
50-60	Clay - red, very ferruginous (much hematite), abundant, very coarse, subangular to subrounded subspheroidal grains of iron carbonate.
60-70	As above.
70-80	Clay - light brown, very ferruginous, very abundant, very coarse, subangular to subrounded, subspheroidal grains of iron (?) carbonate.
80-90	Clay - yellow brown and mottled grey, sandy, poorly sorted, angular quartz sand and abundant subrounded granules, ferruginous, traces of muscovite and hematite.
90-100	As above.
100-110	Clay - light brown, (grey, mottled brown under microscope), sandy, poorly sorted, angular quartz sand and coarse silt are abundant, abundant subrounded granules.

110-120	Sand - grey, mottled brown, very fine to very coarse grained, poorly sorted, angular to subangular, very argillaceous, ferruginous, slightly pyritic, small amount of soft black organic (?) matter, a few granules.
120-130	Clay - dark grey, sandy, poorly sorted, angular to subangular sand and some granules, bluish-red quartz, very abundant.
130-140	Sand - grey, medium to coarse grained, fairly well sorted, predominately quartz, slightly silty and argillaceous, arkosic.
140-150	Sand - grey, poorly sorted, predominately quartz, subangular to subrounded, small amount granules and small pebbles, slightly argillaceous, arkosic.
150-160	As above.
160-170	Sand - brown, poorly sorted, angular to subangular, very argillaceous, moderately arkosic, abundant light green clay.
170-180	Clay - greenish grey, moderately sandy and silty, slightly arkosic.
180-190	Sand - brown, very fine to fine grained, angular to subangular, with a smaller amount of coarse to very coarse sand (bimodal), slightly arkosic, very argillaceous, slightly silty.
190-200	Sand - brown, fine grained, subangular, arkosic, ferruginous, argillaceous, much light green clay, abundant fine grained hematite (and magnetite?).
200-210	Clay - brown, moderate amount angular, poorly sorted sand.
210-220	Sand - light brown, fine grained, fairly well sorted, angular to subangular, very arkosic, argillaceous, and ferruginous.
220-230	Clay - brown, mottled light green, moderately sandy, sand moderately hematitic and slightly arkosic.
230-240	As above.
240-250	As above.
250-260	Sand - brown, fine to medium grained, poorly sorted, subangular, moderately arkosic, slightly argillaceous.

260-270

Sand - light grey to white, medium grained, well sorted, subangular, very arkosic, abundant fine-grained magnetite.

## GEOLOGIC SUMMARY

ROCK UNIT

AGE

Potomac Group

Lower Cretaceous

Virginia Division of Mineral Resources Robert H. Teifke, Geologist November 4, 1964