COMMONWEALTH OF VIRGINIA

MAILING ADDRESS:

Br 3667

DIVISION OF MINERAL RESOURCES

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

JAMES L. CALVER, COMMISSIONER

OFFICE ADDRESS: McCormick Road

W#:

C#:

2922

193

Cottesville, VA 22903 WATER WELL COMPLETION REPORT Charlottesville, Virginia 1515 Broad St. OWNER: Lummus Company #1 Mailing Address: Bloomfield, NJ. TENANT: ICI Chemical Co. Mailing Address: Hopewell, Va. Rt. 2, Box 2294 DRILLER: Layne Drilling Corp. Mailing Address: Va. Beach, Va. WELL LOCATION: County <u>Chesterfield</u> Approx. 1 miles <u>northwest</u> (direction) of ____and____3__ south (direction) of James River Bermuda Hundred (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.) DATE COMPLETED: 7/5/70 DATE STARTED: 5/26/70 TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 302 feet WATER LEVEL: Stands 27 feet below surface OR Jargers a Asia has NATURAL flow of_____gallons per minute. HOLE SIZE: 12 inches from 0 to 48 YIELD TEST: Method Pump _feet Drawdown 3'5" feet 8 inches from 48 to 75 feet Rate 425 gal. per min. 6_inches from 75_to 302_feet Duration 24 hrs., min. SCREEN SIZE: g inches from 57 to 73 feet WATER ZONES: from 50 to 72 feet _____inches from _____to ____feet ____inches from _____to____feet from_____to____feet CASE SIZE: 8 inches from 0 to 57 feet from ______feet WATER: Color_clear___Toste__ ____inches from____to____feet Odor none Temp. _____ °F _____inches from _____to____feet GROUTING: Method ____pressurized WELL TO SUPPLY: (check one) Home _____ Farm_____ Town____ School_____ Material _____ Depth _____ feet Industry___X__Other____ PUMP: Туре _____ WATER ANALYSIS AVAILABLE:Yes _____No _X__ Capacity_____gal per min DRILL CUTTINGS SAVED: Depth of intake ___ feet 20 Yes___X_ No____ (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS OFFICE EXPRESS COLLECT, SAMPLE BAGS ARE FURNISHED FREE OF CHARGE UPON REQUEST.) ARKS: Test hole to 302', set pit 12" casing from 0-48'. Reamed hole from 48' to 75'. Set 15' of 100 slot Johnson screen. Developed as 75' observation well.

FURNISHED BY: Layne Drilling Corp.

DATE: July 5, 1979

Red brown silt Yellow brown sand & gravel Clay white & gray	DEF (fe	PTH TIONE	TYPE OF ROCK OR SOIL PENET	TRATED REMARKS
18				r, etc.) (water, caving, shot, screen, sample, etc.
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Set 15' of 100 slot Johnson sergen. Developed as 75' observation well.		8' to 75'	from 0-48'. Feamed hole from 4	ARKS Test bole to 302', set pit 12' cesing
			l as 75' observation well.	Set 15' of 100 slot Johnson serenn. Developed
			(Use additional form	s if necessary)

VIRGINIA DIVISION OF MINERAL RESOURCES Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 1 Well Repository No: W#: 2922

Date rec'd: Date Processed: 8/26/70 Sample Interval: from: /to:296.

PROPERTY: Lummus Co. (Ob. #1) Number of samples: 20

(ICI America)

COMPANY: Layne Drilling Corp. Total Depth: 302'

COUNTY: Chesterfield (Bermuda Hundred) Oil or Gas: Water: Exploratory:

From	m-To	Fı	com	-To	From-To	From-	То
- NO	SAMPLES	240		250		-	
_		250 260		260 270	_		
-		270		280	-	-	
50 -		280	_	290	_	_	
50 -	70		-		_	_	
80 -			-		v 😾	-	
-			_		:	-	
100 -	110		-		_	-	
102 -			_		-	_	
-			-		<u> </u>		
110 -	120		_				
			_				
130 -	140		_		-	_	
1.40	150						
140 -			_			-	
150 -			_		-	-	
160 -			_		-	-	
170 -	180		_		_	-	
180 -	190	-	-		-	-	
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200 -	210		_			(E)	
210 -			=			-	
210 -	220		-		. -	-	
-	220		_		-	-	
223 -	230		_		_	_	

All intervals have both washed and unwashed samples.

OWNER: Lummus Co. Obs. #1

(ICI America)

DRILLER: Layne Drilling

COUNTY: Chesterfield (Hopewell)

W#: 2922

C#: 193

TOTAL DEPTH: 302'

QUAD.: Hopewell ELEV.: 29'

GEOLOGIC LOG

Depth (<u>feet</u>)	
0-50	No sample.
50-60	Gravel — multicolored; 10-14 mm.; subangular to rounded; well sorted; quartz; feldspar.
60-70	As above except 16-26 mm.
70-80	No sample.
80-90	Sand — off white; slightly clayey; coarse grained to granular, some medium grains, 10% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar.
90-100	No sample.
100-110	As (80-90) plus few flakes of muscovite.
102	Granules — off white; slightly clayey; moderate sand; coarse to very coarse grained, 15% pebbles; angular to subrounded; moderately sorted; quartz; feldspar; some muscovite; few flakes of biotite.
110-120	Sand — off white; moderate clay; medium grained to granular, 15% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; some garnet; muscovite.
120-130	No sample.
130-140	Gravel — white; 10% granules; 4-10 mm.; angular to subrounded; moderately well sorted; quartz; feldspar.
140-150	As above except 4-15 mm.
150-160	As above except few granules.
160-170	Granules — off white; slightly clayey; slightly sandy; coarse to very coarse grained, 10% pebbles; subangular to subrounded; moderately well sorted; quartz; feldspar.

-2-

W#: 2922

De	qe	th
fe	ee	t)

170-180	Gravel - off white; moderate clay; moderate sand; coarse grained
	to granular, 70% pebbles; subangular to subrounded; moderately
	sorted; quartz; feldspar; some muscovite.

- 180-190 Granules medium gray; moderate clay (clasts); slightly sandy; coarse to very coarse grained, 10% pebbles; angular to subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite.
- 190-200 No sample.
- 200-210 Gravel multicolored; few granules; 4-12 mm.; angular to sub-angular; moderately well sorted; quartz; feldspar.
- 210-220 As above except 20% granules.
- 220-230 Granules off white; some very coarse grains, 10% pebbles; sub-angular to subrounded; moderately well sorted; quartz; feldspar; few flakes of muscovite.
- 230-240 No sample.
- 240-250 As above except slightly clayey; 15% pebbles.
- 250-260 As above except moderate sand; coarse to very coarse grained, some pebbles.
- 260-270 As above plus few grains of garnet.
- 270-280 As above except no garnet.
- 280-290 As above.
- 290-302 No sample.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

Depth (feet)	Thickness (feet)	Rock Unit	Time Rock Unit
0-50	50	No Sample	
50-290	240	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES David A. Hubbard, Jr. Geologist December 14, 1978