W#: 2922
C#: 193

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
B[illegible]3667
C[illegible]ottesville, VA 22903

DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Lummus Company #1 Mailing Address: 1515 Broad St. Bloomfield, NJ.

TENANT: ICI Chemical Co. Mailing Address: Hopewell, Va.

DRILLER: Layne Drilling Corp. Mailing Address: Rt. 2, Box 2294 Va. Beach, Va.

WELL LOCATION: County Chesterfield Approx. 1 ~~feet~~ miles northwest (direction) of Bermuda Hundred and .3 ~~feet~~ miles south (direction) of James River

(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.)

DATE STARTED: 5/26/70 DATE COMPLETED: 7/5/70

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 302 feet

WATER LEVEL: Stands 27 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Pump

Drawdown 3'5" feet

Rate 425 gal. per min.

Duration 24 hrs., _____ min.

WATER ZONES: from 50 to 72 feet

from _____ to _____ feet

from _____ to _____ feet

WATER: Color clear Taste _____

Odor none Temp. _____ °F

WELL TO SUPPLY: (check one) Home _____

Farm _____ Town _____ School _____

Industry X Other _____

WATER ANALYSIS AVAILABLE: Yes _____ No X

DRILL CUTTINGS SAVED: 20 Yes X No _____

HOLE SIZE: 12 inches from 0 to 48 feet

8 inches from 48 to 75 feet

6 inches from 75 to 302 feet

SCREEN SIZE: 8 inches from 57 to 73 feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

CASE SIZE: 8 inches from 0 to 57 feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

GROUTING: Method pressurized

Material _____ Depth _____ feet

PUMP: Type _____

Capacity _____ gal. per min

Depth of intake _____ feet

(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.)

REMARKS: 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.

(LOG OF WELL) OVER

LOG

FURNISHED BY: Layne Drilling Corp. DATE: July 5, 1979

DEPTH (feet) FROM	DEPTH (feet) TO	TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
0	18	Red brown silt	
18	47	Yellow brown sand & gravel	
47	50	Clay white & gray	
50	80	Yellow brown sand & rock	
80	102	Gray sand & gravel	
102	120	Clayey sand & gravel	
120	140	Sand & gravel	
140	225	Silty sand & gravel	
225	232	Sandy clay	
232	250	Silt & gravel	
250	254	Sandy clay	
254	302	Clayey sand	

(Use additional forms if necessary)

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

INTERVAL SHEET

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Well Repository No: W#: 2922
C#: 193

Date rec'd: Date Processed: 8/26/70

Sample Interval: from: 50 /to: 290'

PROPERTY: Lummus Co. (Ob. #1)
(ICI America)

Number of samples: 20

COMPANY: Layne Drilling Corp.

Total Depth: 302'

COUNTY: Chesterfield (Bermuda Hundred)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
-	-	-	-
NO - SAMPLES	240 - 250	-	-
-	250 - 260	-	-
-	260 - 270	-	-
-	270 - 280	-	-
50 - 60	280 - 290	-	-
60 - 70	-	-	-
80 - 90	-	-	-
-	-	-	-
100 - 110	-	-	-
102 -	-	-	-
-	-	-	-
110 - 120	-	-	-
-	-	-	-
130 - 140	-	-	-
140 - 150	-	-	-
150 - 160	-	-	-
160 - 170	-	-	-
170 - 180	-	-	-
180 - 190	-	-	-
-	-	-	-
200 - 210	-	-	-
210 - 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 (feet)	
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.

Depth (feet)	
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 subangular; moderately well sorted; quartz; feldspar.
210-220	As above except 20% granules.
220-230	Granules — off white; some very coarse grains, 10% pebbles; subangular 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