

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W# 4015
C# 169

MAILING ADDRESS:

Box 3667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

OFFICE ADDRESS:

McCormick Road
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: Chesapeake Corporation Mailing Address: West Point, Virginia

TENANT: (Mag. St. Well #2) Mailing Address: _____

DRILLER: Layne Atlantic Co. Mailing Address: Norfolk, Virginia

WELL LOCATION: County King William Approx. _____ ^{feet}/_{miles} _____ (direction) of _____

West Point; Magnolia Street and _____ ^{feet}/_{miles} _____ (direction) of _____

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

DATE STARTED: April 19, 1973 DATE COMPLETED: July 27- 1973

TYPE OF DRILL RIG USED: _____ TOTAL DEPTH 1305 feet

WATER LEVEL: Stands 91' feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method _____

Drawdown 206' feet

Rate 1506 gal. per min.

Duration _____ hrs., _____ min.

HOLE SIZE: 20 inches from 0 to 600 feet

10 inches from 600 to 1305 feet

_____ inches from _____ to _____ feet

* SCREEN SIZE: _____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

WATER ZONES: from _____ to _____ feet

from _____ to _____ feet

from _____ to _____ feet

CASE SIZE: 20 inches from 0 to 600 feet

10 inches from 525 to 1280 feet

_____ inches from _____ to _____ feet

WATER: Color _____ Taste _____

Odor _____ Temp. _____ °F

GROUTING: Method _____

Material cement Depth 600 feet

WELL TO SUPPLY: (check one) Home _____

Farm _____ Town _____ School _____

Industry _____ Other _____

PUMP: Type _____

Capacity 1500 gal. per min

Depth of intake 400' feet

WATER ANALYSIS AVAILABLE: Yes _____ No _____

DRILL CUTTINGS SAVED: Yes _____ 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.)

REMARKS: * 9 #7 screens, 10"; depths 938-953, 960-970, 986-996, 1066-1076, 1106-1116,

1135-1145, 1185-1195, 1204-1214, 1260-1275.

Logs - E, gamma, caliper

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

INTERVAL SHEET

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Well Repository No.: W- 4015
 C- 169

Date rec'd: 12/12/73 Date Processed: 8/29/73

Sample Interval: from 75' to: 1279'

PROPERTY: Chesapeake Corp.
 (Magnolia St. Well #2)

Number of samples: 25

COMPANY: Layne - Atlantic Co.

Total Depth: 1305'

COUNTY: King William (West Point)

Oil or Gas: Water: X Exploratory:

From-To	From-To	From-To	From-To	From-To
75-83	976-1006	-	0-8	731-762
-	1006-1037	-	8-15	762-793
-	1037-1067	-	15-26	793-825
157-189	-	-	26-36	825-852
-	1097-1129	-	36-75	852-883
338-370	1129-1161	-	75-87	883-914
370-400	1161-1191	-	87-133	914-945
-	1191-1222	-	133-157	945-976
-	1222-1253	-	157-189	976-1006
460-489	1253-1279	-	189-217	1006-1037
489-520	-	-	249-310	1037-1067
520-550	-	-	310-338	1067-1093
-	-	-	338-370	1093-1129
611-640	-	-	370-400	1129-1161
-	-	-	400-430	1161-1191
671-701	-	-	430-460	1191-1222
701-731	-	-	460-489	1222-1253
731-762	-	-	489-520	1253-1279
762-793	-	-	520-550	1279-1305
-	-	-	550-581	-
825-852	-	-	587-611	-
-	-	-	611-640	-
883 914	-	-	640-671	-
914-945	-	-	671-701	-
945-976	-	-	701-731	-
-	Both washed and unwashed samples.	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

OWNER: Corp. Magnolia #3
DRILLER: Layne Atlantic
COUNTY: King William

W# 4015
C# 169
Total Depth: 1305'
Quad:
Elev:

Depth
(feet)

Well Log

0-8 Clay - Moderate yellow orange (10yr 6/4); abundant clay in clasts; sparse silt; sparse sand; medium to coarse; sub-angular; poor sorting; Quartz; rare Glauconite.

8-15 Clay - As Above.

15-26 Sand - Yellowish gray (5y 7/2); sparse clay; sparse silt; moderate sand clasts; fine to medium, subangular, well sorted; Quartz; rare Glauconite.

26-36 Sand - Pale yellow brown (10yr 5/2); very sparse clay; sparse silt; moderate sand clasts; fine to coarse, sub-angular, moderately well sorted; Quartz; Glauconite; mica; iron.

36-75 No Sample.

75-87 Sand - Yellowish gray (5y 7/2); As Above, Except: medium to very coarse; 1% Glauconite.

87-133 Clay - Light olive gray (5y 6/1); abundant clay clasts; very sparse silt; moderately sparse sand; medium to very coarse, subangular, poor sorting; Quartz; 15% shell fragments - Mollusks, Nuculana, Mulina.

133-157 No Sample.

157-189 Sand - "Salt and Pepper"; granule sized shell fragments; Glauconite; ~~medium to very coarse~~ medium to very coarse; clay pellets; ~~in roughly equal portions~~ sparse silt.

189-217 Sand - Dark greenish gray (5GY 4/1); moderate clay in clasts; moderate silt; ~~subangular~~ 50% Glauconite and 50% medium to very coarse, subangular, poorly sorted; Quartz; 25% small shell fragments.

217-249 No Sample.

249-310 Sand - Greenish black (5GY 2/1); sparse clay in clasts; moderate silt; ~~subangular~~ 85% Glauconite; 15% Quartz; ~~sand above~~ 5% shell fragments; Forams, Nodosaria; Echinoderm spines; shark teeth.

OWNER: Corp. Magnolia #3

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Total Depth: 1305'

Depth
(feet)

- 310-338 Sand-"Salt and Pepper"; sparse sand clasts; ~~sand~~ 40+%
Glaucinite; 60+% Quartz ~~as above~~; some Granules; some
shell fragments; shark teeth; Dentalium (Molusk).
- 338-370 Sand - Light olive gray (5y 6/1); moderate silt; moderate
sand clasts; medium to very coarse, subangular, some
granules, moderate sorting; Quartz; 10% Glaucinite;
feldspar; mica.
- 370-400 Sand - As Above, Except: medium to granule, some pebbles;
sparse clay in clasts; poor sorting.
- 400-430 Sand - As Above.
- 430-460 Sand - As Above, Except: no pebbles; some feldspar; garnet.
- 460-489 Sand - Light olive gray (5y 5/2); moderate silt; moderate
sand clasts; very fine to very coarse, subangular, some
granules, poor sorting; Quartz; 15% Glaucinite; feldspar.
- 489-520 Sand - Moderate yellowish brown (10yr 5/4); abundant clay;
fine to very coarse, subangular, poor sorting; Quartz;
15% Glaucinite; wood fragments; feldspar.
- 520-550 Sand - Light olive gray (5y 5/2); abundant clay in grains,
pellets and clasts; medium to very coarse, angular, few
granules; 10% Glaucinite; feldspar; mica; iron.
- 550-581 Sand - Yellowish gray (5y 7/2); sparse clay; sparse silt;
medium to granule, subangular, some pebbles, poor sorting;
Quartz; 7% Glaucinite; Garnet; Foram; Nodosaria.
- 581-587 No Sample.
- 587-611 Sand - As Above, Except: granules increasing in %; 1% Glaucinite.
- 611-640 Sand - As Above, Except: abundant silt; very fine to
pebble.
- 640-671 Sand - Pale yellowish brown (10yr 6/2); as above, except:
medium to granule, few pebbles; iron.
- 671-701 Sand - As Above, except: some pebbles (5mm).

OWNER: Corp. Magnolia #3

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Total Depth: 1305'

Depth
(feet)

- 701-731 Sand - As Above, Except: moderate sand clasts; iron; few pebbles, to 10mm.
- 731-762 Sand - As Above, Except: 10% pebbles; sparse garnet; iron.
- 762-793 Sand - As Above, Except: sparse clay in "sand" clasts; no pebbles; 1% glauconite; iron.
- 793-825 Sand - As Above, Except: 10% iron-stained grains; some iron.
- 825-852 Sand - Pale yellowish brown (10yr 6/2); sparse clay; moderate sand clasts; fine to granule, sub-angular, few pebbles, poorly sorted; quartz; 1% glauconite; 1% iron stained grains; garnet chips; feldspar; mica.
- 852-883 Clay - Moderate brown (5yr 4/4); abundant clay in clasts - white, red, brown; moderate sand; fine to granule, subangular, poorly sorted; quartz; 1% glauconite.
- 883-914 Sand - "Salt and Pepper", above color and yellow, brown; As Above, Except: abundant clay in various colored clasts.
- 914-945 Sand - Light brown (5yr 5/4); moderate clay; some in clasts; rest As Above, Except: few pebbles; root debris.
- 945-976 Sand - Pale yellowish brown (10yr 6/2); As Above, Except: sparse clay, in pellets and clasts; very fine to granule.
- 976-1006 Sand - As Above, Except: (6/4); iron; garnet chips.
- 1006-10 Sand - Light brown; As Above, Except: moderate sand clasts; medium to granule; feldspar; iron; garnet.
- 1037-1067 Sand - As Above, Except: medium to granule, some pebbles; feldspar.
- 1067-1093 Sand - Pale yellowish brown (10yr 6/2); sparse clay; in clasts - few with heavy concentration of glauconite; medium to granule, subangular, few pebbles; iron stains; mica.
- 1093-1129 Sand - As Above, Except: abundant clay in clasts, pellets and grains; 1% glauconite.

OWNER: Corp. Magnolia #3

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Total Depth: 1305'

Depth
(feet)

1129-1161 Sand - As Above, Except: sparse clay; feldspar; sparse glauconite.

1161-1191 Sand - As Above, Except: 3% 15mm+ pebbles.

1191-1222 Sand - As Above, Except: very sparse clay; garnet; mica; iron stains; few pebbles.

1222-1253 Sand - As Above, Except: sparse clay; sparse silt; few pebbles.

1253-1279 Sand - Medium gray (N5); moderate clay; fine to pebble, subangular to subrounded, poor sorting; feldspar; mica and garnet rare.

1279-1305 Sand - Light brown (5yr 5/4); moderate clay; moderate silt; medium to granule, some pebbles, poor sorting; quartz; 1% glauconite; feldspar.

Logged by: J. K. Polzin

March 1980