



## Mt. Angel Abbey

## EXPLANATION OF TYPE OF DRILLING &amp; WELL DIAMETERS

0 - 163' drilled with reverse rotary 32" diameter  
163 - 164' drilled with reverse rotary 18" diameter  
164 - 223' drilled with air rotary reamed with cable tool 16" dia.  
223 - 486' drilled with air rotary reamed with cable tool 12" dia.

## (5) CASING INSTALLED

16" from + 18 in. to 63'1" Gage .250  
16" from 63'1" to 84'8" Gage .375  
16" from 84'8" to 104'8" Gage .250  
16" from 104'8" to 124'2" Gage .375  
16" from 124'2" to 144'2" Gage .250  
16" from 144'2" to 164'1" Gage .375  
  
6" from +6" to 39' Gage .250 (for gravel feed)

## Mt. Angel Abbey

Material	From	To
Clay - brown soft	0	15
Gravel - 5"	15	35
Clay - brown soft	35	63
Gravel - 1"	63	68
Clay - brown hard & sticky	68	117
Clay - pink or red with white soft	117	121
Clay - gray & green soft	121	138
Clay - gray & green & white soft	138	160
Rock - gray basalt	160	163
Rock - dark basalt hard	163	172
Basalt - grey & brown weathered porous w/ crevices streaks of harder rock	172	183
Basalt - black medium hard	193	194
Basalt - dark soft	194	195
Basalt - black medium hard (somewhat porous)	195	196
Basalt - black hard	196	199
Basalt - colored porous soft	199	204
Basalt - weathered medium hard (crevices)	204	205
Basalt - black hard	205	217
Basalt - dark grey soft	217	218
Basalt - grey hard	218	232
Basalt - grey medium hard (somewhat porous)	232	236
Sandstone - black	236	240
Shale - grey hard	240	240 $\frac{1}{2}$
Basalt - black medium hard	240 $\frac{1}{2}$	243
Basalt - soft porous w/ crevices	243	247
Claystone - grey soft	247	253
Stone - green & grey shale like	253	260
Stone - white grey shale like	260	264
Stone - mixed shale like	264	268
Rock - lava like porous hard	268	269
Basalt - dark hard	269	284
Basalt - dark grey w/ crevices soft	284	291
Basalt - grey periodic crevices soft - hard	291	309
Basalt - dark grey to black hard w/ occasional soft spot	309	321
Rock - green porous soft igneous	321	329
Rock - black w/ green streaks hard	329	337
Rock - dark grey w/ green streaks hard	337	340
Rock - grey porous weathered hard	340	349
Basalt - dark grey hard	349	369
Basalt - black w/ occasional crevices	369	386
Basalt - black	386	395
Basalt - scoriaceous, black	395	405
Basalt - black soft; streaks of green shale	405	409
Basalt - scoriaceous, black, soft; H <sub>2</sub> O, approx 100 gpm more	409	446
Basalt - black, moderately hard	446	448
Basalt - black, moderately hard, broken; H <sub>2</sub> O approx. 100 gpm more	448	456
Basalt, black	456	486