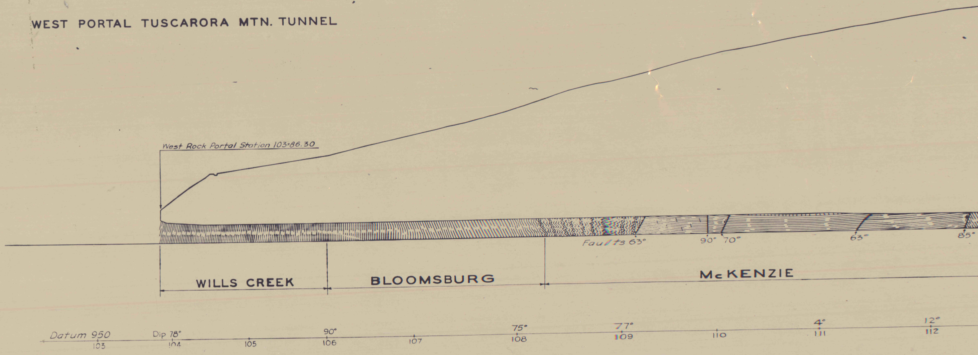
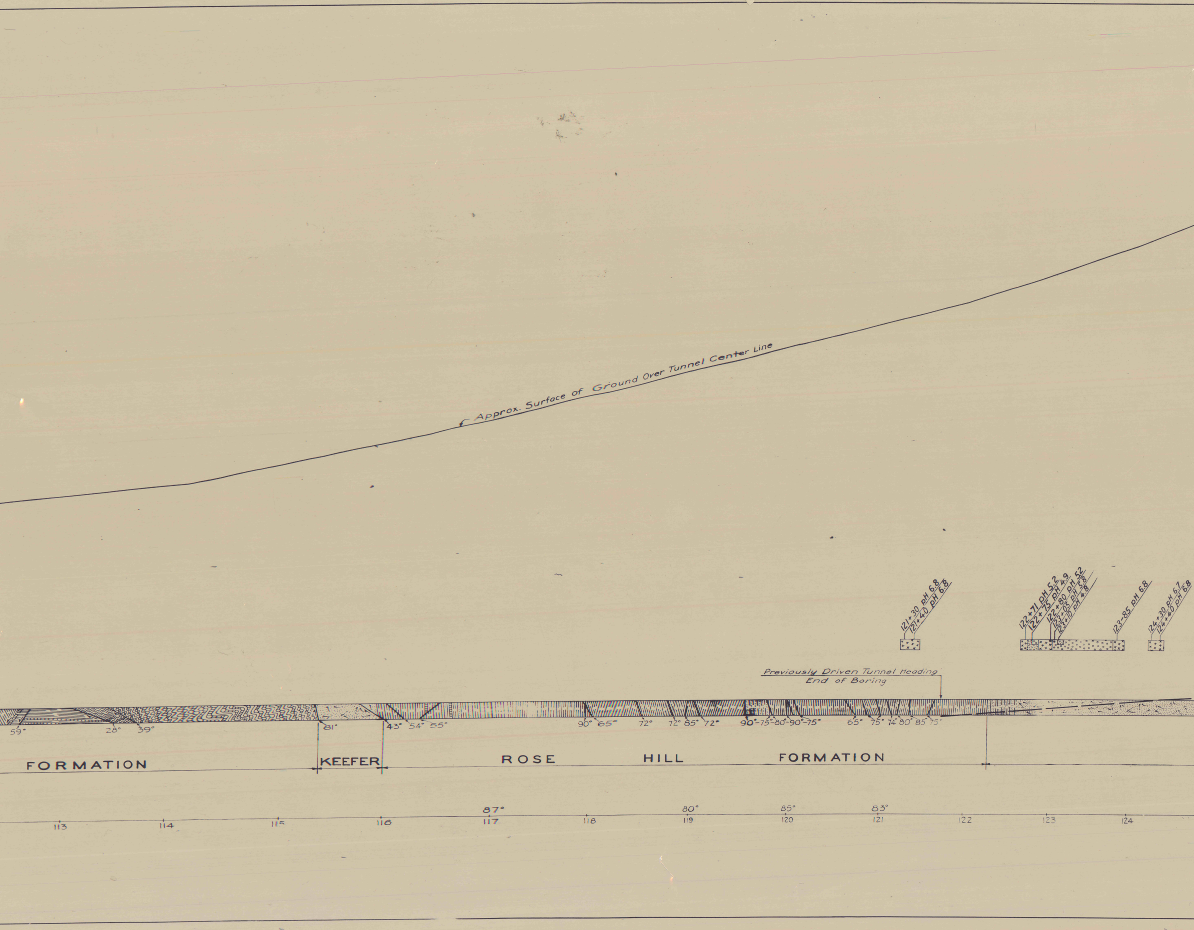

WEST PORTAL TUSCARORA MTN. TUNNEL
West Rock Portal Station 103+86.30
Faults 63°
90°
70°
63°
85°
WILLS CREEK
BLOOMSBURG
McKENZIE
Datum 950
103
Dip 78°
104
105
90°
106
107
75°
108
77°
109
110
4°
111
12°
112

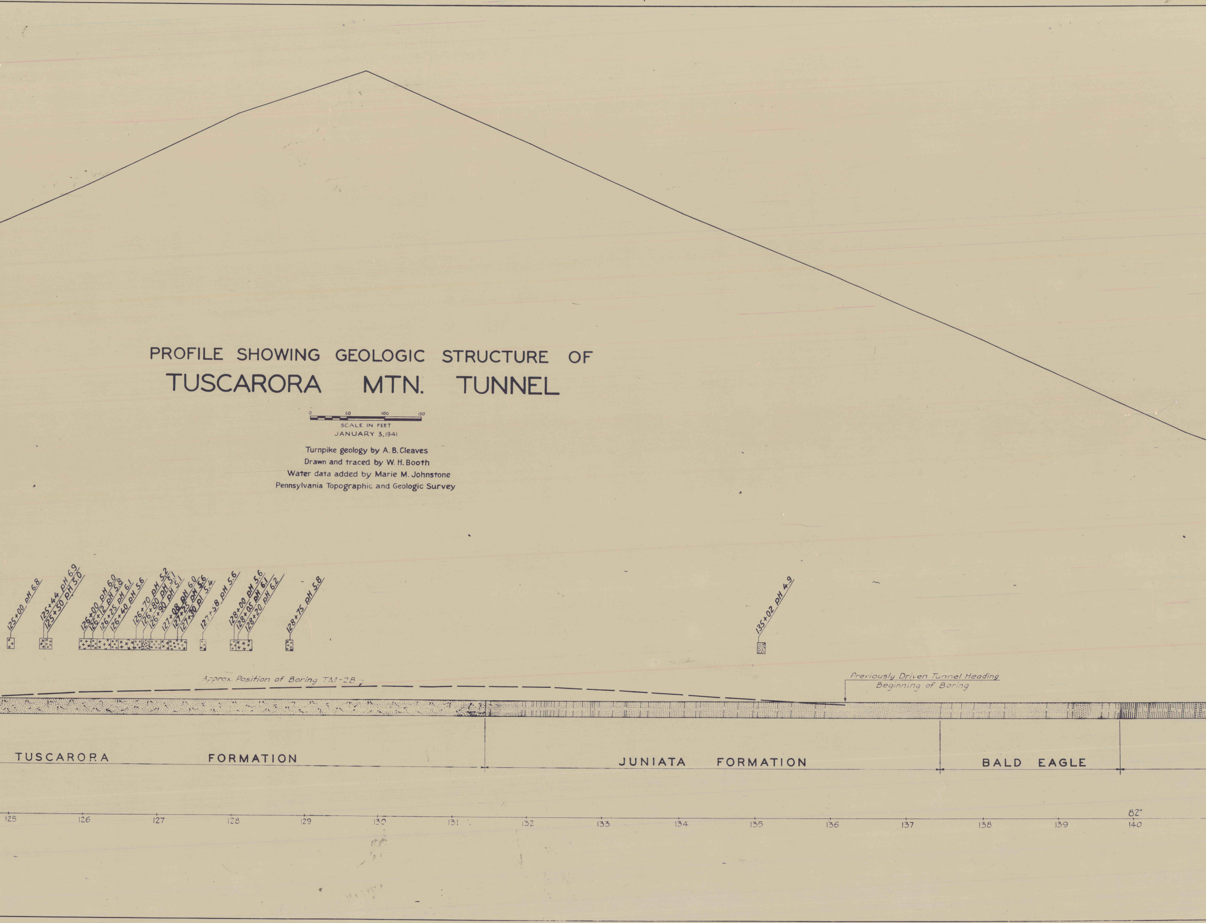

Approx. Surface of Ground Over Tunnel Center Line
121+30 pH 6.8
121+40 pH 6.8
122+71 pH 5.2
122+75 pH 4.9
122+80 pH 5.2
123+05 pH 5.8
123+10 pH 4.8
123-85 pH 6.8
124+30 pH 6.7
124+40 pH 6.8
Previously Driven Tunnel Heading
End of Boring
59°
28°
39°
81°
43°
54°
55°
90°
65°
72°
72°
85°
72°
90°-75°-80°-90°-75°
65°
75°
74°
80°
85°
75°
FORMATION
KEEFER
ROSE HILL FORMATION
87°
80°
85°
83°
113
114
115
116
117
118
119
120
121
122
123
124

PROFILE SHOWING GEOLOGIC STRUCTURE OF
TUSCARORA MTN. TUNNEL

SCALE IN FEET

JANUARY 3, 1941

Turnpike geology by A. B. Cleaves
Drawn and traced by W. H. Booth
Water data added by Marie M. Johnstone
Pennsylvania Topographic and Geologic Survey


0
50
100
150
125+00 pH 6.8
125+44 pH 6.9
125+50 pH 5.0
126+00 pH 6.0
126+12 pH 5.8
126+25 pH 6.1
126+40 pH 5.6
126+70 pH 5.2
126+80 pH 5.1
126+90 pH 5.1
127+08 pH 6.0
127+25 pH 5.6
127+30 pH 5.4
127+58 pH 5.6
128+00 pH 5.6
128+05 pH 6.1
128+20 pH 6.2
128+75 pH 5.8
135+02 pH 4.9
Approx. Position of Boring TM-2B
Previously Driven Tunnel Heading
Beginning of Boring
TUSCARORA FORMATION
JUNIATA FORMATION
BALD EAGLE
82°
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140

LEGEND

▨ *pH 5.0 and minus*

∘ *pH 5.0 to 6.0*

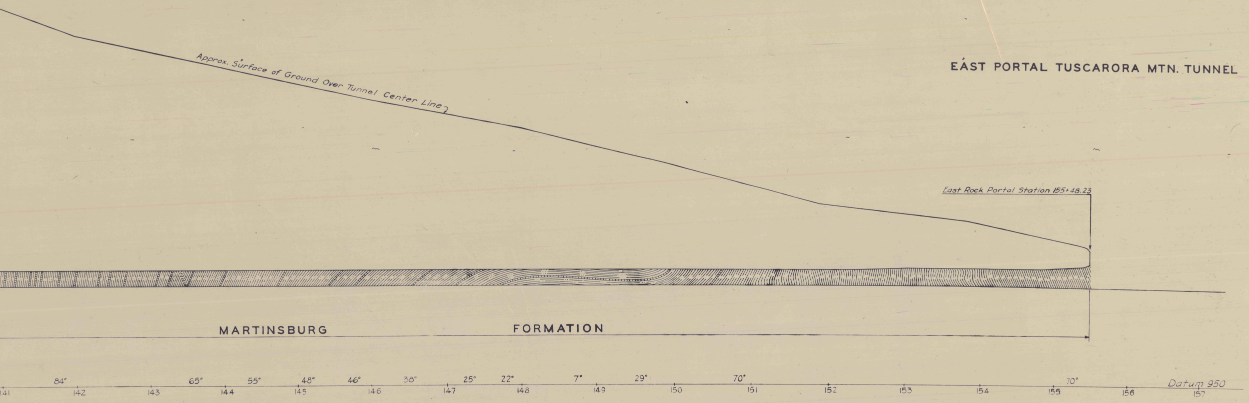
✕ *pH 6.0 to 7.0*

NOTE:
A pH value of 7.0 indicates neutrality.
A pH value of less than 7.0 indicates acidity.
A pH value of more than 7.0 indicates alkalinity.

The relative activity indicated by the pH value is shown by the following:

pH Value	Relative Acidity	pH Value	Relative Alkalinity
3.0	10.000	7.0	0
4.0	1.000	8.0	10
5.0	100	9.0	100
6.0	10	10.0	1.000
7.0	0	11.0	10.000

EAST PORTAL TUSCARORA MTN. TUNNEL


Approx. Surface of Ground Over Tunnel Center Line
East Rock Portal Station 155+48.23
MARTINSBURG FORMATION
84°
65°
55°
48°
46°
38°
25°
22°
7°
29°
70°
70°
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
Datum 950