

Appendix F

Downhole Camera Survey Logs

DOWNHOLE VIDEO SURVEY LOGS

WELL 2

45': end of casing
50': large hole (2"-3" diam.)
55'-56': moist walls
55'-56': solution cavities
60'-62'; 71'-73': solution cavities
78.5'-89.5': solution cavities, almost
honeycomb
64'-80': more moisture
62'-68.5': fractures
80': smaller holes
89.5'-120': smooth walls
120'-124': few small holes
125': water flowing down wall
142.6': water table
160': honeycomb (zone of few feet)
280'-282': cave
292'-295': big holes
346.5': total depth

WELL 3

42': end of casing
42': wet walls
43.2', 55.2': large hole
58': walls dry
64'-66': solution along bedding
planes
65.8': wet walls
74': large hole
78'-88': almost honeycomb
85': water flowing down wall
105'-131': series of holes and solution
along bedding planes
136': water table
141'-145': small holes
145'-147', 149'-150', 152'-155': solution
along bedding
157'-187': series of solution along bedding
planes, small holes and solution channels
187'-189': large solution channels
191'-216': series of solution along bedding
planes, solution cavities, and numerous
holes
216'-226': series of solution cavities and
high angle fractures
227'-239': series of solution cavities, high
angle fractures and solution along bedding
planes
267'-273': holes, solution channels
277'-278': cave
285': cavelike solution channels
290', 293': solution caves
294' - bottom : many small holes
305.1': obstruction in bottom, piece of
wood with two nails

WELL 4

2.4': end of casing (cement)
2.4'-5': holes and solution along bedding planes
10': roots
10'-49': smooth walls, few holes and solution along bedding planes
20': moist walls
49': approximately 2" diameter solution cavity
50'-55'; 58'-61': many solution cavities
60': wallered out hole
61', 63', 67': large solution cavity
67'-80': many solution cavities
80'-160': smooth, few holes
127.5': water table
160'-167': honeycomb
175': almost honeycomb
250': bottom with rocks

WELL 16

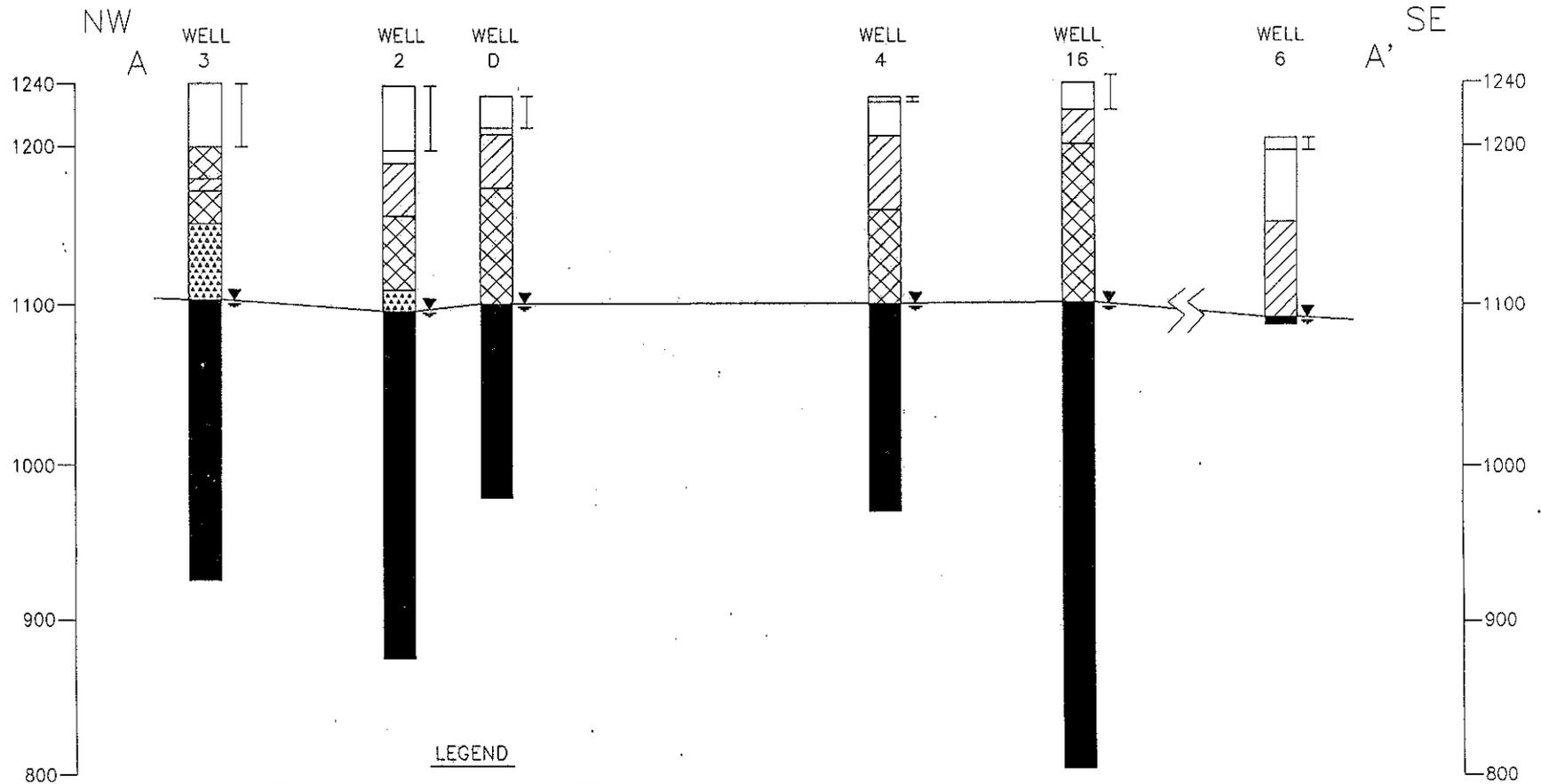
21': depth of casing
21': moist walls
25'-100': many solution cavities and fractures
44': wet walls
100'-117': many small fractures
117': large fracture
131': many large fractures
140': water table, still many fractures and solution channels, occasional cavernous porosity
280': honeycomb porosity
300': porosity decreasing
350'-360': solution along bedding planes
360'-367': more bedding solution, solution channels and enlarged fractures
372': solution of bedding planes
380': hole
390'-400': honeycomb
395': pipe or something in hole
416'-420': very large vertical fracture
420'-425': honeycomb (small holes)
431.2': light in mud at bottom of hole
pipe or metal piece in bottom

WELL 6

7.3': end of casing
10'-12': solution cavities
18.5'-67': honeycomb
50': moist walls
67'-70': fractures
108': water table
115': blocked by rock lodged in hole

WELL D

21': end of casing
25': moist walls
33'-36', 38'-40': solution cavities, otherwise few holes
60': wet walls
133': water table
175'-180': large cavities
261': rocks in bottom



LEGEND

- | | | | |
|--|---------------------------------------|--|----------------|
| | CASING | | WET WALLS |
| | DRY WALLS | | RUNNING WATER |
| | MOIST WALLS | | SATURATED ZONE |
| | 7500 FOOT BREAK
IN LINE OF SECTION | | |

WELLS PROJECTED PERPENDICULARLY ONTO LINE OF SECTION.
 DATA COLLECTED FROM DOWNHOLE TV SURVEYS TAKEN 12/92.
 WIDTH OF WELL EXAGGERATED (25X) FOR CLARITY.



FIGURE F-1
 SCHEMATIC CROSS SECTION
 OF WATER ZONES
 OBSERVED IN DOWNHOLE
 CAMERA SURVEY

MARCH 1993

CSSA GROUNDWATER EVALUATION