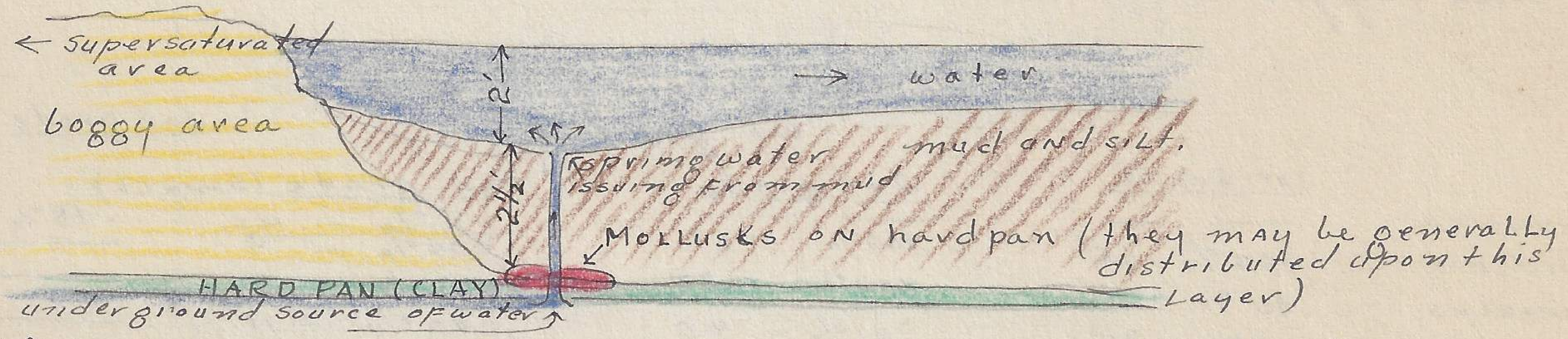
firm. With waders on, my first attempt was to collect a few snails that were exposed by the action of the bubbling ~~spring~~ water from the bottom of the spring. The proceedure was very risky, particularly so in being alone in a miry and boggy situation. I was already drawing about four feet of water when accidently I stepped in the center of area where water rose from bottom of spring. The hardpan 4½ feet below surface of spring averted the disasterous possibility of sinking out of site, or at least receiving a proper baptism. As it was I still had ~~a~~ 2 inches to spare before the wader would sink below. These 2 extra inches may have save me from receiving a soaking but would they allow sufficient leeway to work the muds below. As graphically pictured by my feet below, reconstructed this cross section of pond. My first knowledge of their presence was the crushing of shells as I stood upon the hard-



pan of clay. They appeared to be mainly confined to hard pan or possibly resting upon it. Could not determine whether shells were generally distributed upon this hard pan or were concentrated here as a result of the action of the underground water passing up through the mud and more or less keeping an open passage for the mollusca to find access by percolating down from mud above. I am of the opinion that this hardpan is widely distributed and the molluscs are generally distributed upon it. I determined snails on the hardpan here, only because it was the only place I could reach it while wading about the spring. Could this level be a former lake level or bottom of old stream channel that has since been covered or silted? The proceedure used to acquire samples of these snails ~~below~~ was to dig the tip of the toe of my wader into the hardpan below, then by carefully raising my foot drew the contents to the top of the mud whereupon ~~I fished around with a hand strainer until~~ little pay dirt remain upon my boot toe. By bring the strainer and snail dirt to surface of water