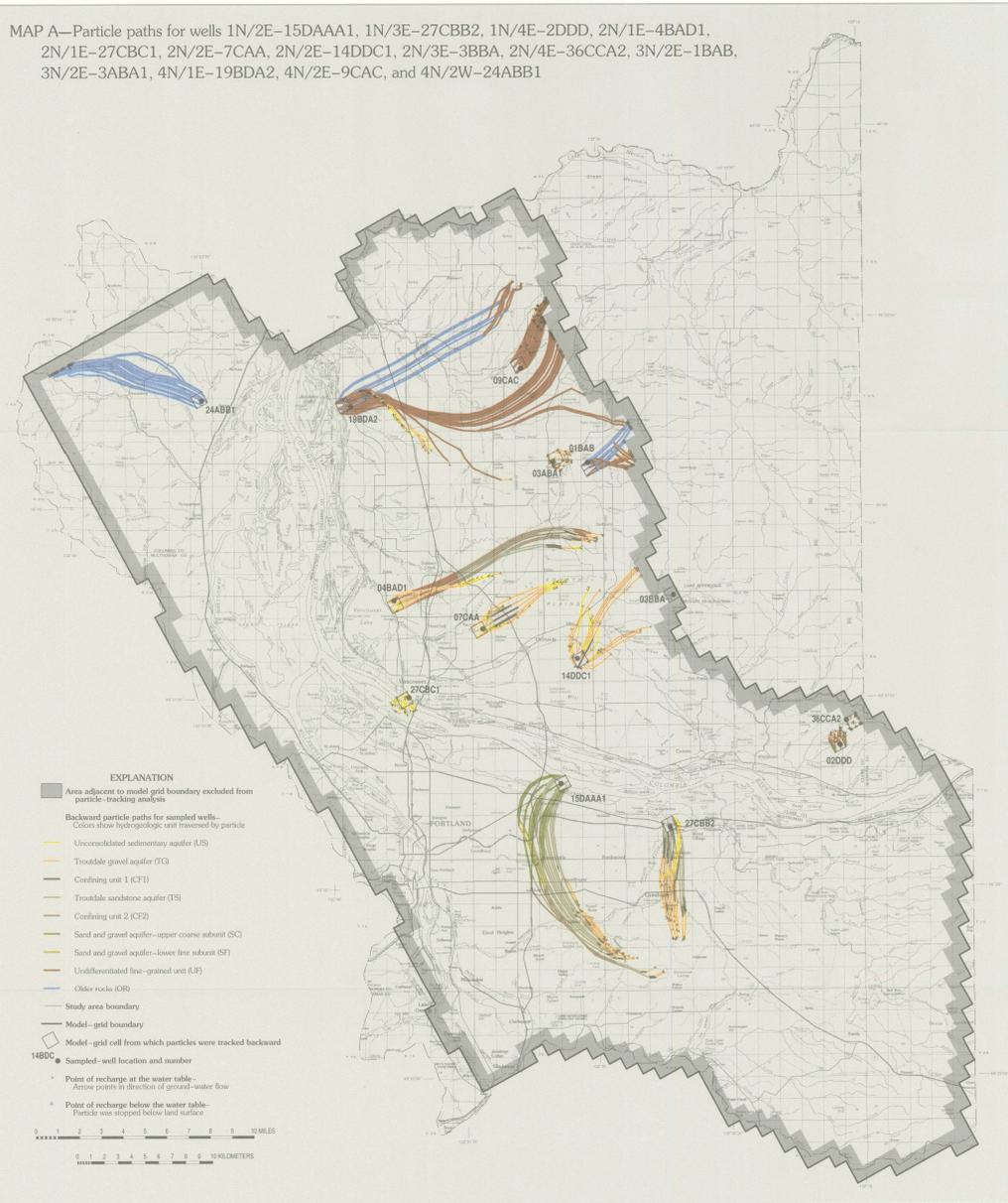
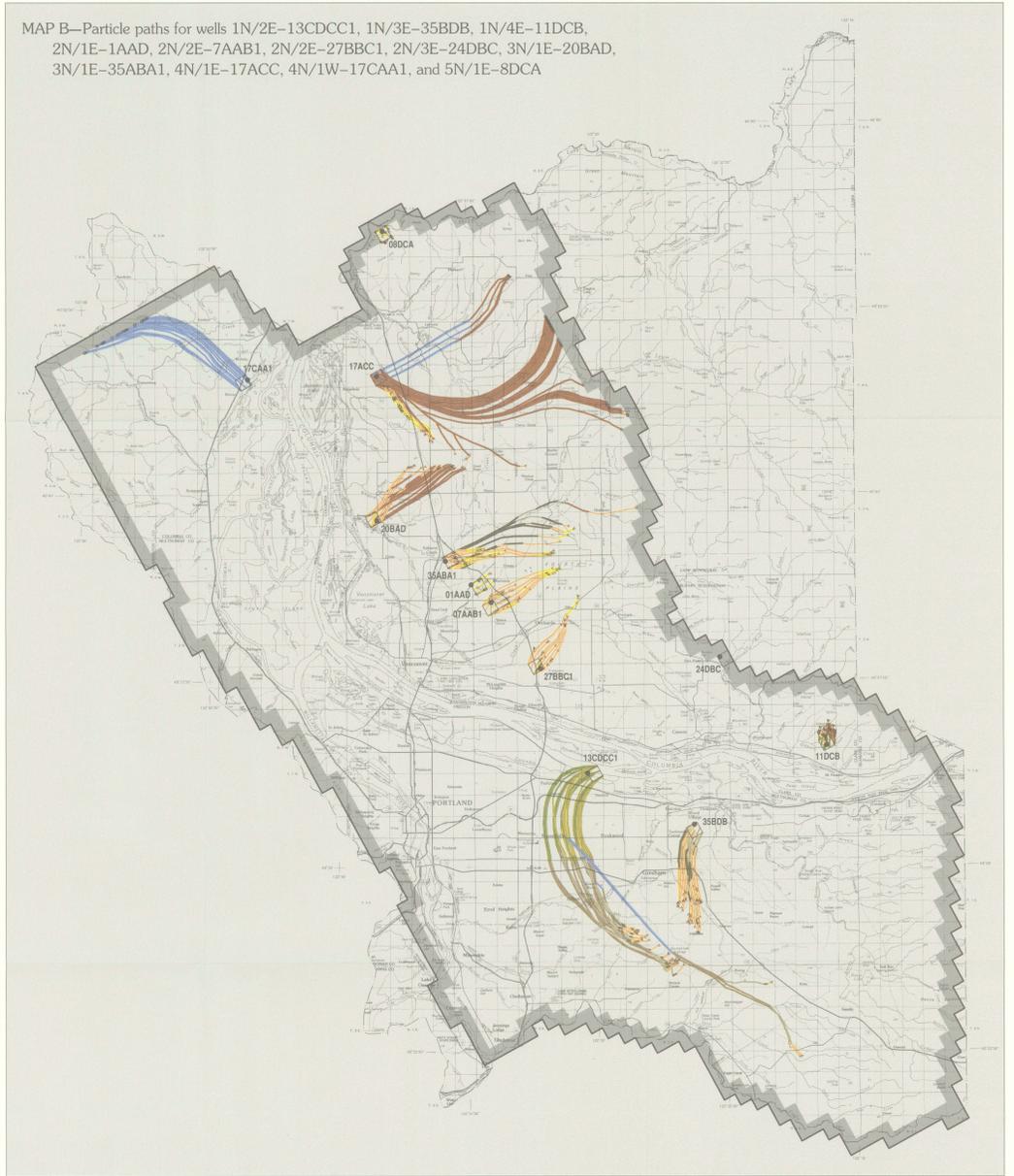


MAP A—Particle paths for wells 1N/2E-15DAAA1, 1N/3E-27CBB2, 1N/4E-2DDD, 2N/1E-4BAD1, 2N/1E-27CBC1, 2N/2E-7CAA, 2N/2E-14DDC1, 2N/3E-3BBA, 2N/4E-36CCA2, 3N/2E-1BAB, 3N/2E-3ABA1, 4N/1E-19BDA2, 4N/2E-9CAC, and 4N/2W-24ABB1



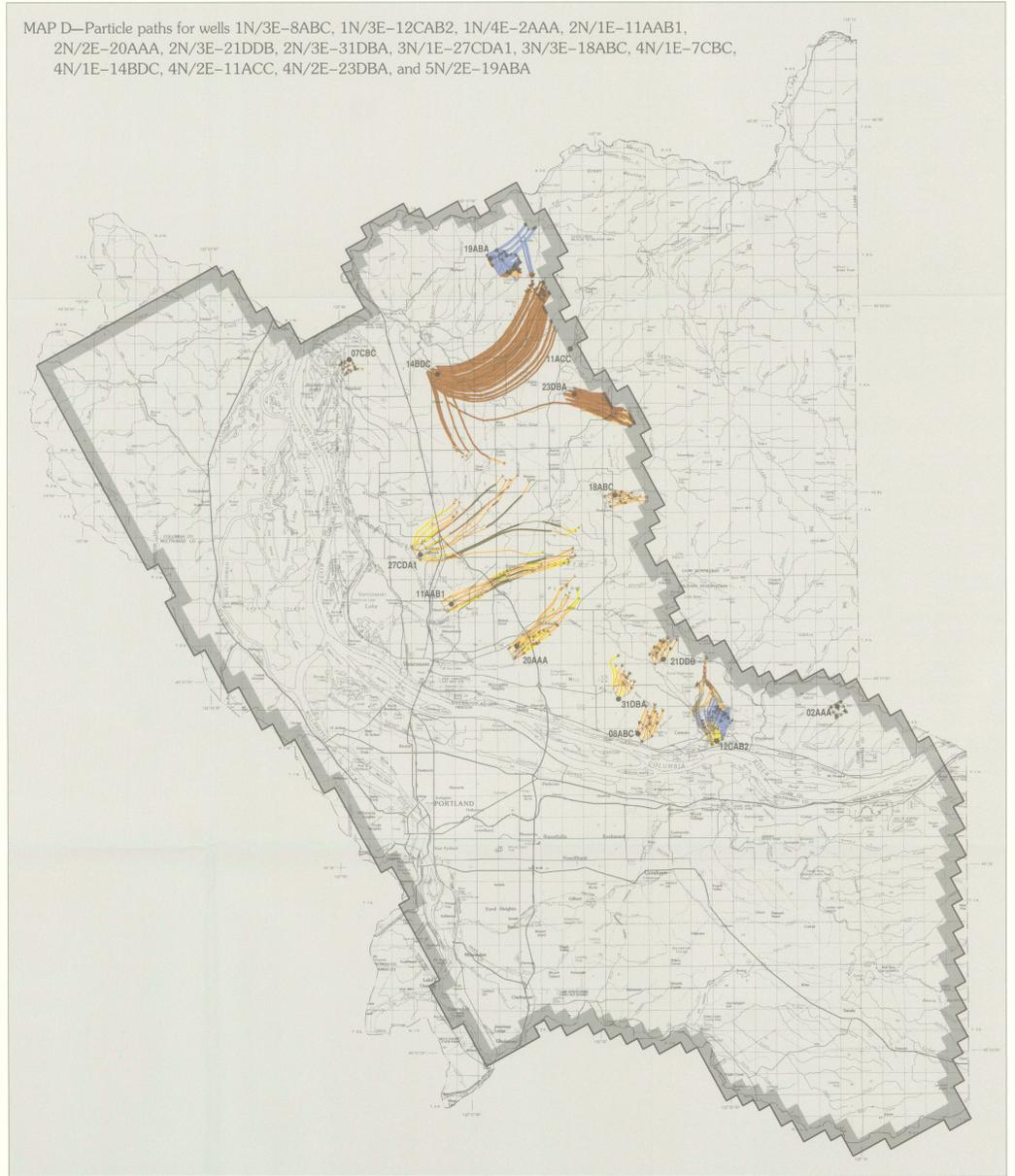
MAP B—Particle paths for wells 1N/2E-13DCC1, 1N/3E-35BDB, 1N/4E-11DCB, 2N/1E-1AAD, 2N/2E-7AAB1, 2N/2E-27BBC1, 2N/3E-24DBC, 3N/1E-20BAD, 3N/1E-35ABA1, 4N/1E-17ACC, 4N/1W-17CAA1, and 5N/1E-8DCA



MAP C—Particle paths for wells 1N/2E-34ABD1, 1N/3E-35ACAD1, 1N/4E-10ABD, 1N/4E-24BAA, 2N/1E-11BAC1, 2N/2E-33ADB, 2N/3E-25ABB, 2N/4E-33CAC, 3N/1E-8DCB1, 3N/2E-23CBC, 4N/1E-21DBC, 4N/2E-10CCB, 5N/1E-34ACD3, and 5N/2E-8ABA



MAP D—Particle paths for wells 1N/3E-8ABC, 1N/3E-12CAB2, 1N/4E-2AAA, 2N/1E-11AAB1, 2N/2E-20AAA, 2N/3E-21DDB, 2N/3E-31DBA, 3N/1E-27CDA1, 3N/3E-18ABC, 4N/1E-7CBC, 4N/1E-14BDC, 4N/2E-11ACC, 4N/2E-23DBA, and 5N/2E-19ABA



MAPS SHOWING PARTICLE PATHS RESULTING FROM BACKWARD PARTICLE TRACKING FOR SELECTED WELLS IN THE PORTLAND BASIN, OREGON AND WASHINGTON

By
Daniel T. Snyder