Using fluid-mobile elements (Cl, Br, I, B, and Li) to trace fluids in convergent margins has been well established, but previous studies have often overlooked the forearc. Describing fluid loss in the forearc is difficult for several reasons including differences in pathways due to faulting, variability in the depth in which fluids are released, and compositional changes of the subducting slab. Seepage through the accretionary prism and incorporation into arc magmas are the primary outputs for fluids to leave the convergent margin; however, poor characterization of fluid-mobile element loss through the forearc has made it difficult to develop mass balance models and flux calculations. This study sampled subaerial forearc and volcanic arc springs along the Middle American Convergent Margin in Costa Rica to trace source fluids. Water samples were analyzed for stable isotopic compositions of Li, B, and Cl, and cation and anion concentrations. Concentrations of Cl (0.864-2420 mg/l), B (0.0081-40.172 mg/l), Li (0.000426-5.173 mg/l), Br (3.55-9421.99 µg/l), and I (0.651-2821.88 µg/l) varied greatly as a function of spring location with respect to the margin trench. Reliability in using Li, B, and Cl isotopes as fluid source tracers has been established due to limited isotopic fractionation resulting from incompatibilities with secondary mineral formation and host lithology interactions. δ^{7}Li, δ^{11}B, and δ^{37}Cl values range from -2.4 ‰ to 27.3 ‰ (n = 32), -12.0 ‰ to 30.9 ‰ (n = 29), and -1.7 ‰ to 0.7 ‰ (n = 29), respectively. Isotopic compositions and concentration data support hypotheses that springs nearest to the trench reflect shallow sources (sediments and sedimentary pore-fluids), while those at the volcanic arc show trace representations of deeper fluid sources (altered oceanic crust, serpentinites, and mantle). Isotopic variabilities in springs on the Nicoya Peninsula, closest to the trench, result from either interaction between fluids and the host lithology, differences in fluid pathways due to faulting, or a combination of both. Limited data also supports along-arc geochemical differences between springs normal to oceanic crust created at the East Pacific Rise, Cocos-Nazca Spreading Center, and Cocos Ridge.