

ISOTOPIC EVIDENCE FOR RESERVOIR AND FLOW PATH

SAMPLE	SITE	D/H	18O/16O	13C/12C	34S/32S	87Sr/86Sr
AM1	Burgett #1	-76	-9.9	-10.6	8.50	0.728344
AM2	Burgett #C	-76	-10.0	-8.6	8.55	0.725616
AM3	Burgett #6	-77	-10.8	n/a	8.34	0.727433
AM4	Americulture Fed	-70	-10.1	-10.0	8.84	0.728861

- Carbon isotopes are too low for water that has flowed through Paleozoic carbonate rocks (0 to +6)
- Sulfur isotopes show very little variation and suggest a single mineral source such as pyrite. The sulfur isotope ratio is too low for Paleozoic marine sulfate (+10 to +30) and is consistent with magmatic ratios (accessory pyrite in volcanics and intrusives).
- Strontium isotope ratios are too high for flow through Paleozoic carbonate rocks and mafic and intermediate volcanic rocks (<0.710) and indicates flow through rhyolite and granite of mid-Tertiary to Precambrian age.