Table 3: Strontium concentrations and isotope data in rock

Age (Ma)	Rock unit (member, location)	Rock type	Sr (ppm, mean)	Sr (ppm, min)	Sr (ppm, max)	N	Reference
Tertiary	Verde	limestone	105	70	156	4	this work
Tertiary	Verde	chalk	657	363	951	2	this work
Tertiary	Verde	mudstone	919	227	2410	5	this work
Tertiary	Verde	evaporite	1050			1	this work
Tertiary	Verde	sandstone	119	98	148	3	this work
Tertiary	Verde	travertine	198	115	257	4	this work
Tertiary	Verde	basalt cobble cong	533			1	this work
Tertiary (2-6)	Verde	basalt	729	415	1480	4	this work
Tertiary (4-7)	Perkinsville	basalt	433			1	1989
Tertiary (10-15)	Hickey	basalt	1659	490	3220	13	Witke and others, 1989
Triassic	Chinle	calareous siltstone	350	260	440	2	USGS-NGDB
Triassic	Chinle	shale	443	330	550	6	USGS-NGDB
Triassic	Moenkopi	siltstone	103	68	120	3	USGS-NGDB
Permian	Kaibab	dolomite	88	34	120	38	USGS-NGDB
Permian	Kaibab	siliceous dolomite	79	49	110	14	USGS-NGDB
Permian	Kaibab	calcareous sandstone	45	6	120	6	USGS-NGDB
Permian	Kaibab	siliceous dolomite					
Permian	Toroweap	limestone	170	150	210	3	USGS-NGDB
Permian	Toroweap	dolomite, dolomitic sandstone	92	61	140	8	USGS-NGDB
Permian	Toroweap	siltstone	57	28	68	6	USGS-NGDB
Permian	Toroweap	gypsiferous siltstone	1300			1	USGS-NGDB
Permian	Toroweap	dolomite					

Table 3: Strontium concentrations and isotope data in rock

Age (Ma)	Rock unit (member, location)	Rock type	Sr (ppm, mean)	Sr (ppm, min)	Sr (ppm, max)	N	Reference
Permian	Coconino	dolomitic sandstone	65	42	95	3	USGS-NGDB
Permian	Coconino	sandstone	46	10	190	37	USGS-NGDB
Permian	Coconino	sandstone	39			1	this work
Permian	Coconino	sandstone					
Permian	Hermit (GC)	dolomitic siltstone	63	56	72	6	USGS-NGDB
Permian	Hermit (Prescott)	siltstone	324	236	456	2	this work
Permian	Hermit (GC)	calcareous siltstone					
Pennsylvanian	Supai (Wescogame, Manakacha GC)	limestone	150	100	180	4	USGS-NGDB
Pennsylvanian	Supai (Watahomigi GC)	calcareous sandstone	69	55	91	4	USGS-NGDB
Pennsylvanian	Supai (Esplanade GC)	sandstone	89	47	160	3	USGS-NGDB
Pennsylvanian	Schnebly Hill	sandstone	80			1	this work
Pennsylvanian	Supai	sandstone	69			1	this work
Pennsylvanian	Supai (Wescogame, Manakacha GC)	limestone					
Pennsylvanian	Supai (Watahomigi GC)	calcareous sandstone					
Pennsylvanian	Supai (Esplanade GC)	sandstone					
Mississippian	Redwall (Horseshoe Mesa GC)	limestone	79	70	97	4	USGS-NGDB
Mississippian	Redwall (Mooney Falls, Thunder Springs, Whitmore Wash GC)	dolomite	40	29	60	3	USGS-NGDB
Mississippian	Redwall (Prescott)	limestone	74	48	122	16	USGS-NGDB
Mississippian	Redwall (Prescott)	dolomite	33	20	54	7	USGS-NGDB
Mississippian	Redwall (Horseshoe Mesa GC)	limestone					
Mississippian	Redwall (Mooney Falls, Thunder Springs, Whitmore Wash GC)	dolomite					
Devonian	Martin	dolomite	74	54	89	9	USGS-NGDB

Table 3: Strontium concentrations and isotope data in rock

Age (Ma)	Rock unit (member, location)	Rock type	Sr (ppm, mean)	Sr (ppm, min)	Sr (ppm, max)	N	Reference
Devonian	Temple Butte	dolomite					
Devonian-Cambrian	Chino Valley	dolomitic mudstone	106	90	122	2	USGS-NGDB
Devonian-Cambrian	Chino Valley	dolomitic shale	662			1	USGS-NGDB
Cambrian	Muav	dolomite	116	50	200	24	USGS-NGDB
Cambrian	Muav	limestone	266	32	420	12	USGS-NGDB
Cambrian	Muav	limestone?	144	100	200	8	USGS-NGDB
Cambrian	Muav	siliceous dolomite					
Cambrian	Bright Angel	shale	247	150	480	32	USGS-NGDB
Cambrian	Bright Angel	shaly dolomite					
Cambrian	Tapeats	sandstone	103	11	190	32	USGS-NGDB

Abbreviations:
GC = Grand Canyon
N = number of samples

References:
Monroe, S.A., Antweiler, R.C., Hart, R.J., Taylor, H.E., Truini, M., Rihs, J.R., and Felger, T.J., 2005, Chemical characteristics of ground-water discharge along the South Rim of Grand Canyon in Grand Canyon National Park, Arizona, 2000-2001: U.S. Geological Suvery Scientific Investigations Report 2004-5146, 59 p.

USGS-NGDB - various USGS authors' data in National Geochemical Database (NGDB), U.S. Geological Survey (http://tin.er.usgs.gov/ngdb/rock/)

Witke, J.H., Smith, D., and Wooden, J.L., 1989, Origin of Sr, Nd, and Pb isotopic systematics in high-Sr basalts from central Arizona: Contributions to mineralogy and Petrology, v. 101, p. 57-68.

this work

$^{87}Sr/^{86}Sr$ (mean)	$^{87}Sr/^{86}Sr$ (min)	$^{87}Sr/^{86}Sr$ (max)	N	Reference
0.70932	0.70902	0.70973	4	this work
0.70935	0.70898	0.70973	2	this work
0.71068	0.70966	0.71206	5	this work
0.70926			1	this work
0.71145	0.71030	0.71356	3	this work
0.70829	0.70811	0.70848	4	this work
0.70557			1	this work
0.70433	0.70362	0.70508	4	this work
0.70440			1	Witke and others, 1989
0.70515	0.70467	0.70646	13	Witke and others, 1989
0.70918			1	Monroe and others, 2005
0.70829			1	Monroe and others, 2005

$^{87}Sr/^{86}Sr$ (mean)	$^{87}Sr/^{86}Sr$ (min)	$^{87}Sr/^{86}Sr$ (max)	N	Reference
0.71003			1	this work
0.71148	0.71122	0.71173	2	Monroe and others, 2005
0.72065	0.71947	0.72183	2	this work
0.71216			1	Monroe and others, 2005
0.72213			1	this work
0.71939			1	this work
0.70874	0.70871	0.70877	2	Monroe and others, 2005
0.71083			1	Monroe and others, 2005
0.71035			1	Monroe and others, 2005
0.70820			1	Monroe and others, 2005
0.70956	0.70902	0.71012	3	Monroe and others, 2005

$^{87}Sr/^{86}Sr$ (mean)	$^{87}Sr/^{86}Sr$ (min)	$^{87}Sr/^{86}Sr$ (max)	N	Reference
0.70879			1	Monroe and others, 2005
0.71014			1	Monroe and others, 2005
0.71018			1	Monroe and others, 2005