

Table 3G. Isotopic constituents and radioactive parameters measured in ground-water samples in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005.

[The five digit USGS parameter code is used in the USGS’s computerized data system, the National Water Information System, to uniquely identify a specific constituent or property. CAS, Chemical Abstracts Service; GAMA, Ground-Water Ambient Monitoring and Assessment; LT-MDL, long-term method detection level; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; MRL, Minimum Reporting Level; na, not available; pCi/L, picocuries per liter; SSMDC, sample-specific minimum detectable concentration; USGS, U.S. Geological Survey]

Constituent	Detected in ground-water samples in this study	USGS parameter code	CAS number	Reporting level	Reporting level type	Threshold	Threshold type
Carbon-13/carbon-12, ratio per mil	yes	82081	na/ 7440-44-0	na	MRL	na	na
Carbon-14, percent modern	yes	49933	14762-75-5	na	MRL	na	na
Deuterium/protium, ratio per mil	yes	82082	7782-39-0/ 1333-74-0	na	MRL	na	na
Gross-alpha radioactivity, in pCi/L, 30-day count	yes	62639	12587-46-1	Sample-specific (see table 17)	SSMDC	15	MCL-US
Gross-alpha radioactivity, in pCi/L, 72-hour count	yes	62636	12587-46-1	Sample-specific (see table 17)	SSMDC	15	MCL-US
Gross-beta radioactivity, in pCi/L, 30-day count	yes	62645	12587-47-2	Sample-specific (see table 17)	SSMDC	50	MCL-CA
Gross-beta radioactivity, in pCi/L, 72-hour count	yes	62642	12587-47-2	Sample-specific (see table 17)	SSMDC	50	MCL-CA
Oxygen-18/oxygen-16, ratio per mil	yes	82085	na/ 7782-44-7	na	MRL	na	na
Radium-226, in pCi/L	yes	09511	13982-63-3	Sample-specific (see table 17)	SSMDC	15	MCL-US
Radium-228, in pCi/L	yes	81366	15262-20-1	Sample-specific (see table 17)	SSMDC	15	MCL-US
Radon-222, in pCi/L	yes	82303	14859-67-7	Sample-specific (see table 17)	SSMDC	na	na
Tritium, in pCi/L	yes	07000	10028-17-8	1	MRL	20,000	MCL-US

¹MCL-US for combined radium-226 and radium-228.