

**Table 18.** Tritium and noble gas concentrations in ground-water samples collected from the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005, and analyzed by the Lawrence Livermore National Laboratory.

[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. "FP" following a site area name in the first column indicates "flowpath." cm<sup>3</sup>STP/g, cubic centimeter of gas at standard temperature and pressure per gram of water; GAMA, Ground-Water Ambient Monitoring and Assessment; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; ns, no sample; pCi/L, picocuries per liter; QPC, Uplands; SAM, South American; SOL, Solano; USGS, U.S. Geological Survey; YOL, Yolo; —, not detected]

GAMA sample identification number	Tritium	Helium-3 / helium-4 (pCi/L)	Helium-4 atom ratio	Neon	Argon	Krypton	Xenon
<b>USGS parameter code</b>	<b>07000</b>	<b>61040</b>	<b>85561</b>	<b>61046</b>	<b>85563</b>	<b>85565</b>	<b>85567</b>
			x 10 <sup>-6</sup>	x 10 <sup>-6</sup>	x 10 <sup>-7</sup>	x 10 <sup>-4</sup>	x 10 <sup>-8</sup>
<b>Threshold</b>	<b>20,000</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
<b>Threshold type</b>	<b>MCL-US</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
<b>Grid wells</b>							
NAM-01	11.5	0.55	0.61	2.55	3.89	8.57	1.15
NAM-02	5.5	0.47	1.82	2.11	3.57	7.93	1.05
NAM-05	—	0.42	1.83	1.93	3.16	7.04	0.99
NAM-06	—	0.59	1.74	2.24	3.68	8.32	1.18
NAM-08	21.6	1.30	0.10	3.14	4.24	8.85	1.15
QPC-02	2.1	0.25	1.32	2.46	3.43	7.52	1.02
QPC-05	17.0	1.12	0.28	2.21	3.65	8.35	1.15
QPC-06	1.2	1.30	0.05	1.90	3.12	7.10	0.96
QPC-07	1.4	0.24	2.15	2.01	3.26	7.26	1.02
QPC-08	1.2	0.15	10.13	1.90	3.21	7.26	1.02
QPC-09	—	0.97	0.12	2.48	3.51	7.61	1.03
SAM-02	2.2	1.28	0.08	2.72	4.05	8.91	1.17
SAM-03	11.2	2.04	0.04	1.92	3.59	8.53	1.17
SAM-07	9.1	2.12	0.06	2.42	3.59	7.85	1.06
SAM-11	ns	0.79	0.44	2.09	3.30	7.35	1.03
SOL-01	—	0.44	0.49	4.77	5.17	10.29	1.39
SOL-03	1.3	1.27	0.08	2.97	4.19	9.06	1.18
SOL-06	15.0	1.82	0.09	2.00	3.35	7.81	1.04
SUI-01	2.5	1.34	0.05	2.29	3.60	8.05	1.07
SUI-02	—	ns	ns	ns	ns	ns	ns
YOL-02	10.4	1.43	0.08	3.22	4.32	9.11	1.15
YOL-03	—	1.01	0.12	3.45	4.40	9.12	1.21
YOL-04	13.0	1.47	0.09	3.53	4.32	9.24	1.22
YOL-06	ns	1.15	0.08	2.65	3.92	8.59	1.18

**Table 18.** Tritium and noble gas concentrations in ground-water samples collected from the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005, and analyzed by the Lawrence Livermore National Laboratory—Continued.

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GAMA sample identifica- tion number	Tritium	Helium-3 /he- lium-4	Helium-4	Neon	Argon	Krypton	Xenon
<b>USGS parameter code</b>	<b>07000</b>	<b>61040</b>	<b>85561</b>	<b>61046</b>	<b>85563</b>	<b>85565</b>	<b>85567</b>
	(pCi/L)	atom ratio			cm <sup>3</sup> STP/g		
		x 10 <sup>-6</sup>	x 10 <sup>-6</sup>	x 10 <sup>-7</sup>	x 10 <sup>-4</sup>	x 10 <sup>-8</sup>	x 10 <sup>-8</sup>
<b>Threshold</b>	<b>20,000</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
<b>Threshold type</b>	<b>MCL-US</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
YOL-08	ns	0.40	0.66	3.09	4.43	9.84	1.36
YOL-09	ns	1.58	0.05	2.27	3.86	8.90	1.24
YOL-13	ns	1.66	0.07	2.82	3.79	8.11	1.04
YOL-14	ns	ns	ns	ns	ns	ns	ns
<b>Nongrid wells</b>							
QPCFP-01	1.8	0.43	1.15	2.18	3.39	7.71	1.01
QPCFP-02	—	0.52	0.32	2.06	3.22	7.13	0.96
QPCFP-03	1.0	0.41	1.55	2.04	3.31	7.43	1.04
QPCFP-04	—	0.46	0.52	1.96	3.23	7.38	0.97
NAMFP-05	—	ns	ns	ns	ns	ns	ns
NAMFP-06	—	0.40	6.83	2.97	8.90	8.21	1.30
NAMFP-07	—	0.23	0.98	2.91	4.15	9.18	1.25
NAMFP-08	—	0.32	1.07	2.66	3.97	8.75	1.18
NAMFP-09	—	0.43	16.10	5.88	6.39	11.98	1.45
NAMFP-10	ns	0.64	2.05	2.28	3.64	8.14	1.10
YOLFP-12	—	0.95	0.12	3.09	4.32	9.36	1.20
YOLFP-13	13.6	1.70	0.08	3.17	4.22	8.96	1.15
YOLFP-14	ns	1.71	0.07	3.05	4.26	9.32	1.20
YOLFP-15	11.4	1.49	0.07	3.10	4.23	8.87	1.14
NAMFP-16	9.2	0.55	0.36	2.11	3.45	7.64	1.06