Table 15. Trace inorganic elements detected in ground-water samples collected in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005.

[All values reported in micrograms per liter dissolved. 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. An asterisk (*) in front of a number in the table indicates a concentration higher than the threshold. An "r" preceding an M dash indicates the result has a raised LRL (laboratory reporting level); "DD" following a site area name in the first column indicates "depth dependent." "FP" following a site area name in the first column indicates "flowpath." E, estimated value; GAMA, Ground-Water Ambient Monitoring and Assessment; HA-L, lifetime health advisory; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; NL, notification level; QC, quality control; QPC, Uplands; SAM, South American; SMCL, Secondary Maximum Contaminant Level; SOL, Solano; SUI, Suisun–Fairfield; USGS, U.S. Geological Survey; V, analyte was detected in both the environmental sample and the associated blanks, and is considered not detected; —, not detected; YOL, Yolo]

GAMA sample iden-tification number	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Fluoride	Iron	Lithium
USGS parameter code	01106	01095	01000	01005	01010	01020	01025	01030	01035	01040	00950	01046	01130
Reporting level	1.6	0.2	0.12	0.2	0.06	8	0.04	0.04	0.014	0.4	0.1	6	0.6
QC Censoring level	7.4	0.2	na	na	na	na	0.07	na	na	na	0.04	na	na
Threshold	1,000	6	10	1,000	4	1,000	5	50	na	1,300	2	300	na
Threshold type	MCL-CA	MCL-US	MCL-US	MCL-CA	MCL-US	NL	MCL-US	MCL-CA	na	SMCL	MCL-CA	SMCL	na
Grid wells													
NAM-01	1.7	—	*21.1	226.0	—	*1,530	—	—	0.078	0.5	E0.07	149	2.4
NAM-02	—	—	3.1	102.0	—	323	—	4.2	0.050	1.2	0.2	—	0.9
NAM-05	E1.3	E0.1	4.8	103.0	—	316	—	5.3	0.039	1.2	0.2	10	16.7
NAM-06	161.0	—	*16.9	66.6	—	196	V	2.5	0.160	2.8	0.2	101	—
NAM-08	E1.1	—	1.4	52.1	—	22	—	7.6	0.061	7.3	0.2	—	—
QPC-02	E1.0	—	1.6	58.8	—	379	—	2.7	0.063	1.2	0.1	E5	37.2
QPC-05	E1.2	—	2.7	33.5	—	E6	—	2.0	0.034	0.7	E0.07	—	—
QPC-06	E1.1	—	2.9	100.0	—	—	—	8.1	0.062	1.7	0.3	11	4.3
QPC-07	E1.3	—	1.6	47.1	—	*1,490	—	3.5	0.090	2.3	0.2	21	45.7
QPC-08	—	—	1.7	26.6	—	357	—	4.7	0.050	0.7	0.3	E5	17.6
QPC-09	E1.0	—	1.9	40.1	—	18	—	2.8	0.038	E0.3	0.2	—	1.9
SAM-02	E1.4	—	6.0	76.2	—	32	—	4.8	0.070	2.1	0.1	E5	0.7
SAM-03	2.1	—	4.3	111.0	—	95	—	—	0.086	E0.3	0.1	265	1.8
SAM-07	3.2	—	1.0	136.0	—	E7	—	5.0	0.088	7.5	E0.06	—	—
SAM-11	E1.1	—	4.0	47.8	—	21	—	7.2	0.051	0.5	E0.09	—	—
SOL-01	2.3	E0.1	6.4	41.6	—	986	—	—	0.029	E0.3	0.2	9	9.8
SOL-03	E1.1	—	2.9	89.2	—	97	—	16.0	0.064	4.7	0.2	—	30.5
SOL-06	2.6	—	3.3	169.0	—	*1,160	E0.03	—	0.140	6.0	0.2	*305	1.1

Table 15. Trace inorganic elements detected in ground-water samples collected in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005—Continued.

[All values reported in micrograms per liter dissolved. 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. An asterisk (*) in front of a number in the table indicates a concentration higher than the threshold. An "r" preceding an M dash indicates the result has a raised LRL (laboratory reporting level); "DD" following a site area name in the first column indicates "depth dependent." "FP" following a site area name in the first column indicates "flowpath." E, estimated value; GAMA, Ground-Water Ambient Monitoring and Assessment; HA-L, lifetime health advisory; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; NL, notification level; QC, quality control; QPC, Uplands; SAM, South American; SMCL, Secondary Maximum Contaminant Level; SOL, Solano; SUI, Suisun–Fairfield; USGS, U.S. Geological Survey; V, analyte was detected in both the environmental sample and the associated blanks, and is considered not detected; —, not detected; YOL, Yolo]

GAMA sample iden-tification number	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Fluoride	Iron	Lithium
USGS parameter code	01106	01095	01000	01005	01010	01020	01025	01030	01035	01040	00950	01046	01130
Reporting level	1.6	0.2	0.12	0.2	0.06	8	0.04	0.04	0.014	0.4	0.1	6	0.6
QC Censoring level	7.4	0.2	na	na	na	na	0.07	na	na	na	0.04	na	na
Threshold	1,000	6	10	1,000	4	1,000	5	50	na	1,300	2	300	na
Threshold type	MCL-CA	MCL-US	MCL-US	MCL-CA	MCL-US	NL	MCL-US	MCL-CA	na	SMCL	MCL-CA	SMCL	na
SUI-01	r—	—	1.8	289.0	—	750	E0.03	10.0	0.130	2.0	1.0	E4	45.2
SUI-02	—	—	1.7	*1,000.0	—	*5,420	—	—	0.040	E0.4	0.3	296	89.9
YOL-02	—	—	2.5	160.0	—	*1,060	—	46.0	0.168	4.3	0.5	E4	49.5
YOL-03	4.6	—	5.0	20.5	—	728	—	3.8	0.037	0.7	0.2	—	20.7
YOL-04	—	—	1.3	140.0	—	342	—	18.0	0.098	0.6	0.2	15	15.3
YOL-06	E0.9	—	4.9	109.0	—	*1,800	—	2.1	0.035	0.9	0.2	10	20.2
YOL-08	5.1	—	6.4	29.0	E0.03	*1,790	V	—	0.036	0.6	0.1	46	2.2
YOL-09	1.7	E0.1	*21.5	15.7	—	283	—	—	0.045	0.7	0.2	10	10.2
YOL-13	E0.8	—	0.7	109	—	*1,100	—	1.6	0.163	2.9	0.5	—	25.7
YOL-14	E1.0	—	5.7	731	—	941	—	—	0.163	1.4	E0.07	*413	1.4
Nongrid wells													
QPCFP-01	2.5	—	1.7	78.0	—	648	V	4.0	0.160	5.6	0.26	E6	35.3
QPCFP-02	1.8	—	2.3	46.9	—	58	V	12.0	0.762	1.1	0.32	—	8.2
QPCFP-03	E1.4	—	1.8	65.1	—	563	—	4.6	0.070	1.9	0.27	E4	29.5
QPCFP-04	E1.4	—	2.2	49.5	—	96	—	8.2	0.027	1.6	0.27	8	10.3
NAMFP-05	E1.1	—	*25.3	249.0	—	496	—	—	0.110	—	E0.06	66	1.2
NAMFP-06	r—	—	*78.1	80.2	—	985	V	—	0.094	—	0.15	223	0.8
NAMFP-07	2.7	—	*42.2	45.0	—	*2,200	V	—	E0.050	E0.2	0.15	69	1.5
NAMFP-08	r—	—	*16.9	284.0	—	*1,430	—	—	E0.040	0.4	0.12	254	3.5

Table 15. Trace inorganic elements detected in ground-water samples collected in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005—Continued.

[All values reported in micrograms per liter dissolved. 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. An asterisk (*) in front of a number in the table indicates a concentration higher than the threshold. An "r" preceding an M dash indicates the result has a raised LRL (laboratory reporting level); "DD" following a site area name in the first column indicates "depth dependent." "FP" following a site area name in the first column indicates "flowpath." E, estimated value; GAMA, Ground-Water Ambient Monitoring and Assessment; HA-L, lifetime health advisory; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; NL, notification level; QC, quality control; QPC, Uplands; SAM, South American; SMCL, Secondary Maximum Contaminant Level; SOL, Solano; SUI, Suisun–Fairfield; USGS, U.S. Geological Survey; V, analyte was detected in both the environmental sample and the associated blanks, and is considered not detected; —, not detected; YOL, Yolo]

GAMA sample identification number	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Fluoride	Iron	Lithium
USGS parameter code	01106	01095	01000	01005	01010	01020	01025	01030	01035	01040	00950	01046	01130
Reporting level	1.6	0.2	0.12	0.2	0.06	8	0.04	0.04	0.014	0.4	0.1	6	0.6
QC Censoring level	7.4	0.2	na	na	na	na	0.07	na	na	na	0.04	na	na
Threshold	1,000	6	10	1,000	4	1,000	5	50	na	1,300	2	300	na
Threshold type	MCL-CA	MCL-US	MCL-US	MCL-CA	MCL-US	NL	MCL-US	MCL-CA	na	SMCL	MCL-CA	SMCL	na
NAMFP-09	E1.5	—	*25.3	173.0	—	234	—	0.8	0.089	E0.3	E0.06	293	—
NAMFP-10	14.3	—	*46.5	79.0	—	98	—	—	0.068	—	E0.09	44	E0.3
YOLFP-12	3.6	E0.1	4.8	47.5	—	750	—	13.0	0.052	2.0	0.17	—	30.5
YOLFP-13	E1.2	—	3.7	180.0	—	532	—	38.0	0.131	1.3	0.33	—	54.1
YOLFP-14	—	—	1.0	119.0	—	193	—	24.0	0.089	3.1	0.21	—	16.7
YOLFP-15	E0.8	—	1.2	69.5	—	222	—	22.0	0.078	0.5	0.31	—	11.1
NAMFP-16	—	—	4.2	61.6	—	140	—	4.4	0.024	E0.3	0.21	7	0.8
Depth-dependent samples													
NAMDD-01	E1.6	V	4.6	74.6	—	105	—	—	0.089	0.9	V	—	1.1
NAMDD-02	1.7	V	4.2	70.5	—	109	E0.02	—	0.045	0.7	V	—	0.8
NAMDD-03	E1.3	V	4.2	69.1	—	137	—	—	0.045	1.4	V	—	1.0
NAMDD-04	2.4	V	4.3	64.3	—	161	—	2.1	0.056	1.7	V	—	1.0

Table 15. Trace inorganic elements detected in ground-water samples collected in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005—Continued.

[All values reported in micrograms per liter dissolved. 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. An asterisk (*) in front of a number in the table indicates a concentration higher than the threshold. An "r" preceding an M dash indicates the result has a raised LRL (laboratory reporting level); "DD" following a site area name in the first column indicates "depth dependent." "FP" following a site area name in the first column indicates "flowpath." E, estimated value; GAMA, Ground-Water Ambient Monitoring and Assessment; HA-L, lifetime health advisory; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; NL, notification level; QC, quality control; QPC, Uplands; SAM, South American; SMCL, Secondary Maximum Contaminant Level; SOL, Solano; SUI, Suisun–Fairfield; USGS, U.S. Geological Survey; V, analyte was detected in both the environmental sample and the associated blanks, and is considered not detected; —, not detected; YOL, Yolo]

GAMA sample in-dentification number	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tungsten	Uranium	Vanadium	Zinc
USGS parameter code	01056	71890	01060	01065	01145	01075	01080	01057	01155	22703	01085	01090
Reporting level	0.2	0.01	0.4	0.06	0.08	0.2	0.4	0.04	0.5	0.04	0.14	0.6
QC Censoring level	na	na	na	na	na	na	na	na	na	na	na	na
Threshold	50	2	40	100	50	100	4,000	2	na	30	50	2,000
Threshold type	SMCL	MCL-US	HA-L	MCL-CA	MCL-US	SMCL	HA-L	MCL-US	na	MCL-US	NL	HA-L
Grid wells												
NAM-01	145	—	4.6	1.38	r—	—	313	—	0.6	E0.03	3.1	1.2
NAM-02	—	—	0.7	1.49	1.5	—	371	E0.02	—	1.94	23.2	5.9
NAM-05	0.5	—	0.5	0.59	1.1	—	263	—	—	0.12	42.9	5.7
NAM-06	16.5	—	3.9	5.13	0.4	—	210	—	0.8	0.38	2.1	24.0
NAM-08	E0.1	—	0.4	0.68	—	—	321	—	—	1.00	26.6	23.3
QPC-02	0.6	—	0.6	0.74	—	—	305	—	—	0.37	8.6	8.9
QPC-05	—	—	1.4	0.52	—	—	162	—	—	0.20	14.7	2.9
QPC-06	1.1	—	—	0.62	E0.4	—	312	—	—	0.48	21.0	21.5
QPC-07	1.6	—	0.5	8.43	r—	r—	415	—	—	0.81	13.6	7.5
QPC-08	E0.1	—	0.9	1.36	0.5	—	180	—	—	0.04	21.3	4.1
QPC-09	1	—	1.8	0.77	E0.2	—	144	—	—	E0.04	17.4	3.4
SAM-02	7.8	—	0.8	0.61	—	—	313	—	—	1.80	24.6	5.3
SAM-03	*230	—	3.0	0.78	—	—	228	—	0.5	—	0.3	17.4
SAM-07	—	—	E0.2	2.00	0.5	—	632	—	—	6.26	9.5	6.5
SAM-11	—	—	1.2	1.07	E0.2	—	177	—	—	0.62	22.3	24.1
SOL-01	11.7	—	4.6	0.23	0.9	r—	169	—	—	1.66	5.6	E1.6
SOL-03	E0.1	—	0.9	0.39	3.0	—	556	—	—	2.02	12.7	9.4
SOL-06	*103	—	8.1	2.70	0.4	r—	350	—	—	—	0.6	40.5

Table 15. Trace inorganic elements detected in ground-water samples collected in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005—Continued.

[All values reported in micrograms per liter dissolved. 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. An asterisk (*) in front of a number in the table indicates a concentration higher than the threshold. An "r" preceding an M dash indicates the result has a raised LRL (laboratory reporting level); "DD" following a site area name in the first column indicates "depth dependent." "FP" following a site area name in the first column indicates "flowpath." E, estimated value; GAMA, Ground-Water Ambient Monitoring and Assessment; HA-L, lifetime health advisory; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; NL, notification level; QC, quality control; QPC, Uplands; SAM, South American; SMCL, Secondary Maximum Contaminant Level; SOL, Solano; SUI, Suisun–Fairfield; USGS, U.S. Geological Survey; V, analyte was detected in both the environmental sample and the associated blanks, and is considered not detected; —, not detected; YOL, Yolo]

GAMA indentification number	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tungsten	Uranium	Vanadium	Zinc
USGS parameter code	01056	71890	01060	01065	01145	01075	01080	01057	01155	22703	01085	01090
Reporting level	0.2	0.01	0.4	0.06	0.08	0.2	0.4	0.04	0.5	0.04	0.14	0.6
QC Censoring level	na	na	na	na	na	na	na	na	na	na	na	na
High threshold	50	2	40	100	50	100	4,000	2	na	30	50	2,000
Threshold type	SMCL	MCL-US	HA-L	MCL-CA	MCL-US	SMCL	HA-L	MCL-US	na	MCL-US	NL	HA-L
SUI-01	—	—	8.7	1.48	2.0	r—	1,250	—	—	7.56	6.3	58.9
SUI-02	21.8	—	1.4	0.51	r—	—	625	—	—	E0.02	1.4	3.3
YOL-02	—	—	1.3	3.73	4.2	—	792	—	—	3.10	10.5	5.8
YOL-03	0.4	—	1.9	1.43	2.1	—	269	—	—	0.66	16.6	0.7
YOL-04	1.3	—	E0.3	0.69	0.7	—	410	—	—	1.61	4.6	0.8
YOL-06	4.7	E0.006	2.9	0.11	0.7	—	425	—	—	0.79	8.0	11.5
YOL-08	*64.1	—	10.3	0.15	E0.4	r—	183	—	—	—	r—	2.0
YOL-09	2	—	1.1	0.42	—	—	92	—	—	0.04	14.5	5.2
YOL-13	E0.2	—	0.7	0.29	0.8	—	799	—	—	2.22	2.6	10.9
YOL-14	*501.0	—	3.8	1.08	—	—	1,070	—	—	—	—	4.0
Nongrid wells												
QPCFP-01	1.0	—	1.6	4.66	—	—	281	—	—	0.28	16.8	23.2
QPCFP-02	0.5	E0.005	0.8	1.89	E0.3	—	181	—	—	0.05	21.7	3.2
QPCFP-03	1.1	—	0.7	6.49	r—	r—	282	—	—	0.30	15.9	4.3
QPCFP-04	1.4	—	E0.3	0.76	E0.3	—	185	—	—	0.06	22.2	9.7
NAMFP-05	*120.0	—	5.5	2.79	1.1	r—	322	—	0.9	—	E0.1	0.7
NAMFP-06	*82.7	—	11.3	2.84	1.0	—	143	—	0.8	—	r—	1.4
NAMFP-07	*55.6	—	18.3	4.05	0.8	—	117	—	1.3	E0.03	0.4	E0.4

Table 15. Trace inorganic elements detected in ground-water samples collected in the Southern Sacramento Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study unit, California, 2005—Continued.

[All values reported in micrograms per liter dissolved. 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. An asterisk (*) in front of a number in the table indicates a concentration higher than the threshold. An "r" preceding an M dash indicates the result has a raised LRL (laboratory reporting level); "DD" following a site area name in the first column indicates "depth dependent." "FP" following a site area name in the first column indicates "flowpath." E, estimated value; GAMA, Ground-Water Ambient Monitoring and Assessment; HA-L, lifetime health advisory; MCL-CA, California Department of Health Services Maximum Contaminant Level; MCL-US, U.S. Environmental Protection Agency Maximum Contaminant Level; na, not available; NAM, North American; NL, notification level; QC, quality control; QPC, Uplands; SAM, South American; SMCL, Secondary Maximum Contaminant Level; SOL, Solano; SUI, Suisun–Fairfield; USGS, U.S. Geological Survey; V, analyte was detected in both the environmental sample and the associated blanks, and is considered not detected; —, not detected; YOL, Yolo]

GAMA sample indenti-fication number	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tungsten	Uranium	Vanadium	Zinc
USGS parameter code	01056	71890	01060	01065	01145	01075	01080	01057	01155	22703	01085	01090
Reporting level	0.2	0.01	0.4	0.06	0.08	0.2	0.4	0.04	0.5	0.04	0.14	0.6
QC Censoring level	na	na	na	na	na	na	na	na	na	na	na	na
Threshold	50	2	40	100	50	100	4,000	2	na	30	50	2,000
Threshold type	SMCL	MCL-US	HA-L	MCL-CA	MCL-US	SMCL	HA-L	MCL-US	na	MCL-US	NL	HA-L
NAMFP-08	*254.0	—	5.0	2.22	0.9	—	359	—	0.6	0.10	r—	2.0
NAMFP-09	*146.0	—	3.4	1.59	E0.3	—	218	—	1.0	E0.02	1.0	1.0
NAMFP-10	*156.0	—	3.1	1.30	—	—	218	—	—	0.14	2.5	0.8
YOLFP-12	—	—	2.1	0.98	1.0	—	332	—	—	1.08	22.9	5.4
YOLFP-13	—	—	1.5	2.48	3.4	—	680	—	—	2.72	13.3	4.9
YOLFP-14	—	—	0.5	1.50	1.2	—	455	—	—	1.45	3.8	2.0
YOLFP-15	E0.2	—	1.2	0.06	0.7	—	287	—	—	0.63	5.7	0.7
NAMFP-16	3.8	—	0.6	0.62	E0.4	—	170	—	—	0.36	38.3	E0.5
Depth-dependent samples												
NAMDD-01	8.6	—	0.6	0.94	E0.2	E0.1	172	—	—	0.30	37.8	140.0
NAMDD-02	3.7	—	0.7	0.74	E0.3	—	168	—	—	0.26	38.5	136.0
NAMDD-03	3.2	—	0.7	0.88	E0.3	—	173	—	—	0.16	37.6	93.0
NAMDD-04	4.2	—	0.7	1.06	E0.3	—	166	—	—	0.36	39.3	19.0