

Table 12. Species of inorganic arsenic, iron, and chromium in samples collected for the Southern Sierra Groundwater Ambient Monitoring and Assessment (GAMA) study, California, June 2006

[The five-digit number in parentheses below the constituent name is the U.S. Geological Survey parameter code used to uniquely identify a specific constituent or property. Analyses made by the U.S. Geological Survey Trace Metals Laboratory (laboratory entity code USGSTMCO). Samples from all fifty wells were analyzed for chromium; samples from the twenty-two slow and intermediate wells were analyzed for arsenic and iron; only wells with at least one detection are listed. Information about analytes given in [table 31](#). SOSA, Southern Sierra study unit grid well; SOSAFP, Southern Sierra study unit flow-path well; MCL-US, U.S. Environmental Protection Agency maximum contaminant level; MCL-CA, California Department of Public Health maximum contaminant level; SMCL-CA, California Department of Public Health secondary maximum contaminant level; MDL, method detection limit; V, analyte detected in sample and an associated blank thus data are not included in ground-water quality assessment; nc, not collected; µg/L, microgram per liter; —, not detected]

GAMA well identification number	Iron (µg/L) (01046)	Iron (II) (µg/L) (01047)	Arsenic (µg/L) (99033)	Arsenic (III) (µg/L) (99034)	Chromium (µg/L) (01030)	Chromium (VI) (µg/L) (01032)
Threshold type ¹	SMCL-CA	na	MCL-US	na	MCL-CA	na
Threshold level	300	na	10	na	50	na
[MDL]	2	2	0.5	1	1	1
Grid wells						
SOSA-02	nc	nc	nc	nc	2	—
SOSA-03	4	19	*11	—	1	—
SOSA-07	*872	854	*25	12	—	—
SOSA-10	223	215	V1.7	—	—	—
SOSA-11	nc	nc	nc	nc	2	2
SOSA-13	—	—	V1.6	—	6	5
SOSA-15	—	—	—	—	—	—
SOSA-22	2	—	—	—	—	—
SOSA-23	nc	nc	nc	nc	7	5
SOSA-25	nc	nc	nc	nc	4	5
SOSA-28	nc	nc	nc	nc	3	2
SOSA-32	nc	nc	nc	nc	2	—
SOSA-34	nc	nc	nc	nc	8	6
Number of detections					9	6
Detection frequency (percent)					26	17
Flow-path wells						
SOSAFP-01	—	—	V2.4	—	7	4
SOSAFP-02	*4,190	4,190	*23	7.7	—	—
SOSAFP-03	3	—	2.7	—	4	3
SOSAFP-04	—	—	V2.4	—	3	2
SOSAFP-05	—	—	2.6	—	2	1
SOSAFP-06	2	—	9.9	—	6	5
SOSAFP-07	nc	nc	nc	nc	2	—
SOSAFP-08	—	—	—	—	4	3
SOSAFP-09	—	—	3.4	—	3	3
SOSAFP-10	2	—	—	—	11	9
SOSAFP-11	3	—	3.1	—	2	2
SOSAFP-12	—	—	—	—	4	4
SOSAFP-13	14	—	V1.6	—	1	—
SOSAFP-14	nc	nc	nc	nc	2	—
SOSAFP-15	4	—	4.0	—	6	6

*Value above threshold level.

¹Maximum contaminant level thresholds are listed as MCL-US when the MCL-US and MCL-CA are identical, and as MCL-CA when the MCL-CA is lower than the MCL-US or no MCL-US exists.