Table 19. Summary of radioactive constituents and carbon isotopes for filtered ground-water samples collected for the Monterey Bay and Salinas Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study, California, July to October 2005.

[The five-digit number below the constituent name is the U.S. Geological Survey parameter code used to uniquely identify a specific constituent or property; MSMB, Monterey Bay study area well; MSMBFP, Monterey Bay study area flow-path well; MSMBMW, Monterey Bay study area monitoring well; MSPR, Paso Robles study area well; MSSC, Santa Cruz study area well; MSSV, Salinas Valley study area well; MCL-CA, California Department of Health Services maximum contaminant level; MCL-US, U.S. environmental Protection Agency maximum contaminant level; Delta, notation, in per mil, of the differences in the carbon-13/carbon-12 ratio relative to University of Chicago Peedee Formation Standard; E, estimated value; na, not available; nc, sample not collected; pCi/L, picocuries per liter; SSMDC, sample specific minimum detectable concentration; *, value exceeds regulatory threshold; <, less than]

GAMA identification no.	Alpha radioactivity, 72-hour count pCi/L) (62636)				Alpha radioactivity, 30-day count (pCi/L) (62639)				Beta radioactivity, 72-hour count (pCi/L) (62642)			
	Result	Critical value	1-sigma combined uncertainty	SSMDC	Result	Critical value	1-sigma combined uncertainty	SSMDC	Result	Critical value	1-sigma combined uncertainty	SSMDC
Threshold type	MCL-US[1]	na	na	na	MCL-US[1]	na	na	na	MCL-CA	na	na	na
Threshold	15	na	na	na	15	na	na	na	50	na	na	na
MSMB-04	<2.9	1.3	0.75	2.9	<2.1	0.82	0.55	2.1	18.6	1.1	2.1	2.3
MSMB-09	E0.5	0.4	0.32	1.0	<1.3	0.52	0.37	1.3	E1.8	0.77	0.53	1.6
MSMB-12	<1.7	0.7	0.55	1.7	E1.1	0.81	0.61	1.9	4.9	1.1	0.94	2.4
MSMB-18	<2.5	1.0	0.55	2.5	<1.5	0.65	0.40	1.5	E3.1	1.8	1.20	3.7
MSMB-20	E1.5	0.7	0.57	1.5	E2.5	0.43	0.60	1.1	E2.4	1.1	0.74	2.2
MSMB-22	E2.3	0.8	0.74	1.9	E2.4	0.74	0.79	1.7	E3.8	1.1	0.80	2.2
MSMB-29	E13.4	2.5	3.00	5.6	E8.2	1.40	1.80	3.4	9.3	1.2	1.30	2.5
MSMB-30	E4.5	1.2	1.10	2.6	E2.0	1.10	0.87	2.5	E4.8	1.4	1.10	3.0
MSMB-33	E1.4	0.7	0.57	1.7	<2.0	0.89	0.70	2.0	E1.8	1.1	0.72	2.2
MSMB-35	<3.7	1.6	1.10	3.7	<4.0	1.80	1.10	4.0	<4.9	2.4	1.5	4.9
MSMB-37	E2.8	0.8	0.80	1.8	E2.5	0.87	0.88	2.0	E2.3	1.3	0.88	2.6
MSMB-40	E4.5	0.7	0.92	1.7	E3.2	0.70	0.77	1.6	E3.7	0.9	0.75	1.9
MSMB-44	11.2	1.6	2.20	3.8	14.1	2.00	2.80	4.6	6.0	1.3	1.0	2.6
MSMB-45	E2.5	0.5	0.89	1.7	E0.8	0.45	0.35	1.1	E4.7	1.2	1.00	2.6
MSMB-47	E5.8	1.2	1.60	3.1	E1.5	0.90	0.72	2.1	E4.1	1.9	1.40	3.9
MSMBFP-02	9.1	1.5	1.80	3.5	E5.9	1.60	1.50	3.6	4.7	1.0	0.80	2.0
MSMBFP-03	E6.1	1.8	1.60	4.2	E3.3	1.50	1.20	3.4	7.1	1.0	1.00	2.1
MSMBMW-01	E4.4	0.8	0.91	1.7	5.2	0.59	0.95	1.4	6.6	1.2	1.10	2.5
MSMBMW-02	4.4	0.6	0.82	1.4	E3.1	0.53	0.68	1.3	4.4	0.9	0.78	1.9
MSMBMW-03	E2.5	0.5	0.60	1.2	E1.8	0.52	0.52	1.2	E2.3	1	0.69	2.0
MSPR-01	E4.1	0.8	1.00	1.8	E3.4	0.92	0.91	2.1	<3.3	1.6	0.95	3.3
MSPR-08	12.7	1.1	2.00	2.7	11.3	0.91	1.70	2.1	1.7	1.8	1.20	3.7
MSPR-10	*17.4	1.4	2.80	3.5	*16.3	1.80	2.80	4.1	6.6	1.5	1.20	3.2
MSSC-04	E1.7	1.1	0.97	2.5	<1.9	0.82	0.55	1.9	E2.7	1.2	0.80	2.4
MSSC-06	<1.5	0.6	0.40	1.5	<1.8	0.77	0.41	1.8	8.5	1.1	1.20	2.2
MSSC-07	E1.1	0.7	0.51	1.6	<2.9	1.10	0.70	2.9	6.3	0.9	0.90	1.9
MSSC-08	E3.2	1.3	1.20	3.2	<1.0	0.45	0.26	1.0	7.6	1.2	1.30	2.6
MSSV-01	E5.4	1.2	1.60	3.0	E3.2	0.93	1.00	2.4	21.2	1.4	2.40	2.8
MSSV-02	E1.1	0.4	0.44	1.0	<1.7	0.77	0.47	1.7	E1.7	0.9	0.58	1.8
MSSV-03	5.1	0.7	1.00	1.6	E3.2	0.73	0.86	1.8	E2.0	1.4	0.92	2.9
MSSV-07	E0.5	0.5	0.35	1.1	E0.7	0.53	0.40	1.2	E1.9	0.8	0.58	1.7
MSSV-11	E3.1	0.7	1.00	2.0	E2.3	0.47	0.51	1.1	E3.6	1.3	0.97	2.8
MSSV-18	E4.7	0.7	1.10	1.7	E3.3	0.65	0.77	1.6	E2.8	1	0.75	2.1
MSSV-19	4.2	0.6	0.81	1.4	E2.5	1.10	1.00	2.5	3.7	1.1	0.83	2.3

[1]Combined Radium-226 plus Radium-228.

[2]Proposed MCL-US.

Table 19. Summary of radioactive constituents and carbon isotopes for filtered ground-water samples collected for the Monterey Bay and Salinas Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study, California, July to October 2005—Continued.

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GAMA identification no.	Beta radioactivity, 30-day count (pCi/L) (62645)				Radium-226 (pCi/L) (09511)			
	Result	Critical value	1-sigma combined uncertainty	SSMDC	Result	Critical value	1-sigma combined uncertainty	SSMDC
Threshold type	MCL-CA	na	na	na	MCL-US[1]	na	na	na
Threshold	50	na	na	na	[1]5	na	na	na
MSMB-04	20.8	0.83	2.20	1.7	E0.075	0.014	0.016	0.034
MSMB-09	E1.8	0.91	0.62	1.9	E0.059	0.017	0.013	0.036
MSMB-12	E4.8	1.3	0.98	2.6	0.255	0.013	0.024	0.031
MSMB-18	E1.8	0.65	0.45	1.3	E0.047	0.015	0.012	0.033
MSMB-20	E3.0	1.1	0.81	2.4	<0.034	0.015	0.010	0.034
MSMB-22	4.1	0.99	0.77	2.0	0.058	0.01	0.011	0.024
MSMB-29	15.9	1.3	1.90	2.6	E0.040	0.015	0.013	0.035
MSMB-30	5.5	0.75	0.78	1.5	0.326	0.017	0.022	0.036
MSMB-33	E2.8	1.2	0.80	2.4	E0.075	0.019	0.017	0.044
MSMB-35	<5.0	2.5	1.60	5.0	0.111	0.016	0.017	0.037
MSMB-37	E2.5	1.4	0.89	2.8	0.075	0.013	0.013	0.029
MSMB-40	5.8	0.91	0.87	1.9	0.092	0.011	0.014	0.027
MSMB-44	16.4	1.2	1.90	2.5	0.071	0.014	0.012	0.03
MSMB-45	3.4	0.62	0.54	1.3	0.072	0.013	0.013	0.03
MSMB-47	E3.6	1.2	0.88	2.6	0.103	0.009	0.015	0.024
MSMBFP-02	12.5	0.97	1.50	2.0	E0.066	0.017	0.014	0.037
MSMBFP-03	5.5	1.2	0.97	2.5	0.212	0.017	0.018	0.036
MSMBMW-01	6.7	1.1	1.00	2.2	nc			
MSMBMW-02	5.2	0.91	0.83	1.9	nc			
MSMBMW-03	E3.2	0.98	0.72	2.0	nc			
MSPR-01	<3.2	1.6	1.00	3.2	0.284	0.010	0.017	0.021
MSPR-08	9.7	1.3	1.40	2.6	0.230	0.012	0.021	0.029
MSPR-10	14.8	2.7	2.40	5.4	0.155	0.011	0.013	0.023
MSSC-04	E3.6	1.2	0.88	2.5	0.097	0.014	0.014	0.031
MSSC-06	8.1	1.2	1.20	2.5	E0.020	0.013	0.009	0.029
MSSC-07	7.0	1.6	1.30	3.3	0.169	0.014	0.014	0.029
MSSC-08	4.9	0.81	0.74	1.7	E0.028	0.019	0.013	0.042
MSSV-01	21.4	1.1	2.40	2.3	0.372	0.012	0.025	0.028
MSSV-02	E1.8	0.84	0.58	1.7	0.061	0.012	0.011	0.027
MSSV-03	E3.9	1.3	0.94	2.6	0.576	0.016	0.036	0.037
MSSV-07	E2.0	0.73	0.52	1.5	0.083	0.011	0.012	0.025
MSSV-11	3.8	0.65	0.60	1.3	0.141	0.017	0.016	0.036
MSSV-18	5.0	1.2	0.95	2.4	0.169	0.013	0.015	0.028
MSSV-19	3.9	1.1	0.80	2.2	0.127	0.011	0.014	0.025

[1]Combined Radium-226 plus Radium-228.

[2]Proposed MCL-US.

Table 19. Summary of radioactive constituents and carbon isotopes for filtered ground-water samples collected for the Monterey Bay and Salinas Valley Ground-Water Ambient Monitoring and Assessment (GAMA) study, California, July to October 2005—Continued.

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GAMA identification No.	Radium-228 (pCi/L) (81366)				Radon-222 (pCi/L) (82303)	Radon-222 2-sigma combined uncertainty (pCi/L) (76002)	Delta carbon-13 (per mil)	Carbon-14 (percent modern) (49933)	Carbon-14 counting error, water, filtered, percent modern (49934)
	Result	Critical value	1-sigma combined uncertainty	SSMDC	Result	Result	Result	Result	Result
Threshold type	MCL-US[1]	na	na	na	MCL-US[2]	na	na	na	na
Threshold	[1]5	na	na	na	300	na	na	na	na
MSMB-04	E0.37	0.25	0.12	0.53	*300	21	–15.50	5.7	0.1
MSMB-09	E0.41	0.21	0.09	0.45	210	19	–14.60	73.0	0.4
MSMB-12	<0.61	0.28	0.12	0.61	*1,450	36	–14.13	6.3	0.2
MSMB-18	<0.70	0.33	0.14	0.70	*360	20	–15.10	55.9	0.3
MSMB-20	<0.67	0.31	0.12	0.67	*480	23	–16.80	76.8	0.4
MSMB-22	<0.48	0.22	0.14	0.48	250	19	–13.67	80.1	0.4
MSMB-29	E0.49	0.22	0.10	0.48	*340	20	–16.15	96.0	0.4
MSMB-30	E0.31	0.22	0.10	0.47	*560	24	–14.40	78.9	0.4
MSMB-33	<0.58	0.27	0.11	0.58	*1,610	36	–17.32	53.8	0.4
MSMB-35	E0.29	0.21	0.09	0.45	170	16	–14.56	96.8	0.5
MSMB-37	<0.51	0.24	0.10	0.51	*750	26	–14.35	57.2	0.4
MSMB-40	E0.46	0.26	0.14	0.56	*460	23	–11.77	72.6	0.4
MSMB-44	E0.24	0.22	0.13	0.47	*410	22	nc	nc	nc
MSMB-45	E0.53	0.23	0.12	0.49	260	19	–13.40	91.7	0.4
MSMB-47	<0.39	0.18	0.08	0.39	*610	25	–10.60	32.4	0.2
MSMBFP-02	<0.54	0.25	0.10	0.54	*450	22	–14.53	92.9	0.5
MSMBFP-03	E0.56	0.21	0.22	0.45	*560	23	–15.70	89.9	0.4
MSMBMW-01	nc				nc	nc	–12.64	19.7	0.2
MSMBMW-02	nc				nc	nc	–13.38	43.3	0.3
MSMBMW-03	nc				nc	nc	–14.07	72.4	0.4
MSPR-01	E0.36	0.21	0.12	0.46	*650	24	–14.30	90.5	0.4
MSPR-08	<0.58	0.27	0.14	0.58	*470	23	–12.90	47.4	0.3
MSPR-10	E0.42	0.21	0.12	0.45	*450	22	–13.00	67.1	0.3
MSSC-04	E0.66	0.27	0.16	na	280	19	–19.50	65.6	0.3
MSSC-06	<0.45	0.21	0.10	0.45	190	18	–20.40	71.2	0.3
MSSC-07	E0.56	0.21	0.13	0.45	280	20	–14.30	31.3	0.2
MSSC-08	<0.59	0.27	0.10	0.59	200	17	–15.97	57.2	0.4
MSSV-01	0.96	0.22	0.13	0.46	*390	20	–15.10	8.8	0.1
MSSV-02	<0.53	0.25	0.11	0.53	*650	25	–12.50	100.1	0.4
MSSV-03	E0.25	0.25	0.11	0.53	*930	29	–13.09	99.0	0.5
MSSV-07	<0.47	0.22	0.09	0.47	*590	23	–12.60	99.8	0.4
MSSV-11	<0.46	0.21	0.09	0.46	*820	28	–10.50	89.4	0.4
MSSV-18	<0.44	0.21	0.10	0.44	*680	26	–10.80	16.2	0.2
MSSV-19	<0.54	0.25	0.12	0.54	600	26	–10.80	33.6	0.2

[1]Combined Radium-226 plus Radium-228.

[2]Proposed MCL-US.