

Table A5A. Quality-control summary for matrix-spike recoveries of volatile organic compounds (VOCs) and gasoline oxygenates and degradates in samples collected for the Southern Sierra Groundwater Ambient Monitoring and Assessment (GAMA) study, California, June 2006.

[Acceptable recovery range is between 70 and 130 percent]

Constituent	Number of spike samples	Minimum recovery (percent)	Maximum recovery (percent)	Median recovery (percent)
Acetone ¹	6	78	98	82
Acrylonitrile	6	97	115	106
<i>tert</i> -Amyl alcohol	2	95	113	104
Benzene	6	96	106	97
Bromobenzene	6	98	113	102
Bromochloromethane	6	82	96	88
Bromodichloromethane	6	104	132	109
Bromoethene	6	106	122	112
Bromoform (tribromomethane)	6	101	127	107
Bromomethane	6	86	147	124
2-Butanone (ethyl methyl ketone)	6	95	112	97
<i>tert</i> -Butyl alcohol (TBA)	2	88	110	99
Butylbenzene (<i>n</i> -Butylbenzene)	6	88	99	94
<i>sec</i> -Butylbenzene	6	94	106	100
<i>tert</i> -Butylbenzene	6	97	120	104
Carbon disulfide	6	87	101	95
Chlorobenzene	6	100	110	103
Chloroethane	6	80	97	88
Chloroform (trichloromethane) ²	6	104	130	109
Chloromethane	6	81	113	94
3-Chloropropene	6	139	168	144
2-Chlorotoluene	6	96	109	99
4-Chlorotoluene	6	79	88	85
Dibromochloromethane	6	113	137	113
1,2-Dibromo-3-chloropropane (DBCP)	6	98	110	100
1,2-Dibromoethane (EDB)	6	100	115	104
Dibromomethane	6	96	121	102
1,2-Dichlorobenzene ²	6	94	111	100
1,3-Dichlorobenzene	6	98	109	100
1,4-Dichlorobenzene	6	94	106	98
<i>trans</i> -1,4-Dichloro-2-butene	6	99	123	104
Dichlorodifluoromethane (CFC-12)	6	52	73	67
1,1-Dichloroethane	6	145	179	152
1,2-Dichloroethane	6	115	156	123
1,1-Dichloroethylene (DCE)	6	88	110	97
<i>cis</i> -1,2-Dichloroethylene ²	6	100	115	103
<i>trans</i> -1,2-Dichloroethylene	6	96	111	99
Dichloromethane (methylene chloride)	6	24	30	30
1,1-Dichloropropene	6	131	155	138
1,2-Dichloropropane ²	6	100	117	105
1,3-Dichloropropane	6	125	152	134
<i>cis</i> -1,3-Dichloropropane	6	97	110	102
<i>trans</i> -1,3-Dichloropropane	6	102	119	107
2,2-Dichloropropane	6	92	124	111
Diethyl ether	6	113	131	119
Diisopropyl ether ¹	6	96	115	102
Ethylbenzene	6	96	113	100
Ethyl <i>tert</i> -butyl ether (ETBE, <i>tert</i> -butyl ethyl ether) ¹	6	98	121	102
Ethyl methacrylate	6	102	117	102
<i>o</i> -Ethyl toluene (2-Ethyltoluene)	6	74	82	80
Hexachlorobutadiene	6	84	107	92
Hexachloroethane	6	101	117	103

Table A5A. Quality-control summary for matrix-spike recoveries of volatile organic compounds (VOCs) and gasoline oxygenates and degradates in samples collected for the Southern Sierra Groundwater Ambient Monitoring and Assessment (GAMA) study, California, June 2006—Continued.

[Acceptable recovery range is between 70 and 130 percent]

Constituent	Number of spike samples	Minimum recovery (percent)	Maximum recovery (percent)	Median recovery (percent)
2-Hexanone (<i>n</i> -Butyl methyl ketone)	6	97	111	101
Isopropylbenzene	6	102	117	106
4-Isopropyl-1-methylbenzene	6	83	94	87
Methyl acetate	2	114	116	115
Methyl acrylate	6	105	120	108
Methyl acrylonitrile	6	84	99	90
Methyl <i>tert</i> -butyl ether (MTBE) ^{1,2}	6	94	120	99
Methyl iodide (iodomethane)	6	81	141	104
Methyl methacrylate	6	93	105	96
4-Methyl-2-pentanone (MIBK, isobutyl methyl ketone)	6	94	113	100
Methyl <i>tert</i> -pentyl ether ¹	6	119	144	122
Naphthalene	6	77	94	83
<i>n</i> -Propylbenzene	6	91	106	96
Styrene	6	94	102	100
1,1,1,2-Tetrachloroethane	6	100	119	102
1,1,2,2-Tetrachloroethane	6	114	127	116
Tetrachloroethene (PCE) ²	6	96	108	99
Tetrachloromethane (carbon tetrachloride) ²	6	164	221	188
Tetrahydrofuran	6	96	112	107
1,2,3,4-Tetramethylbenzene	6	63	77	68
1,2,3,5-Tetramethylbenzene (isodurene)	6	62	75	66
Toluene ¹	6	98	113	104
1,2,3-Trichlorobenzene	6	55	63	55
1,2,4-Trichlorobenzene	6	115	133	115
1,1,1-Trichloroethane (TCA)	6	104	136	111
1,1,2-Trichloroethane	6	84	102	87
Trichloroethene (TCE) ²	6	94	115	100
Trichlorofluoromethane (CFC-11) ²	6	106	149	119
1,2,3-Trichloropropane (1,2,3-TCP)	6	90	118	96
1,1,2-Trichlorotrifluoroethane (CFC-113) ²	6	81	102	95
1,2,3-Trimethylbenzene	6	80	97	84
1,2,4-Trimethylbenzene	6	82	93	86
1,3,5-Trimethylbenzene	6	94	109	100
Vinyl chloride	6	87	106	87
<i>m</i> - and <i>p</i> -Xylene	6	166	189	172
<i>o</i> -Xylene	6	77	91	82

¹Constituents on schedules 2020 and 4024; only values from schedule 2020 are reported because it is the preferred analytical schedule.²Constituents detected in ground-water samples.