

2018 UCMR4 Sampling Results

Sampling Locations	Contaminant	Analyte	Results (ppb)			
			1Q	2Q	3Q	4Q
Baden Pump Station (SSPL)	Metals	germanium	<0.3	<0.3	<0.3	<0.3
		manganese	4.7	4.6	3.1	5.1
	Pesticides	alpha-hexachlorocyclohexane	<0.01	<0.01	<0.01	<0.01
		chlorpyrifos	<0.03	<0.03	<0.03	<0.03
		dimethipin	<0.2	<0.2	<0.2	<0.2
		ethoprop	<0.03	<0.03	<0.03	<0.03
		oxyfluorfen	<0.05	<0.05	<0.05	<0.05
		profenofos	<0.3	<0.3	<0.3	<0.3
		tebuconazole	<0.2	<0.2	<0.2	<0.2
		total permethrin (cis- & trans-)	<0.04	<0.04	<0.04	<0.04
	tribufos	<0.07	<0.07	<0.07	<0.07	
	Alcohols	1-butanol	<2	<2	<2	<2
		2-methoxyethanol	<0.4	<0.4	<0.4	<0.4
		2-propen-1-ol	<0.5	<0.5	<0.5	<0.5
	SVOCs	butylated hydroxyanisole	<0.03	<0.03	<0.03	<0.03
o-toluidine		<0.007	<0.007	<0.007	<0.007	
quinoline		0.029	<0.02	<0.02	<0.02	
Baden Pump Station (SA2)	Metals	germanium	<0.3	<0.3	<0.3	<0.3
		manganese	2	1.2	0.62	1
	Pesticides	alpha-hexachlorocyclohexane	<0.01	<0.01	<0.01	<0.01
		chlorpyrifos	<0.03	<0.03	<0.03	<0.03
		dimethipin	<0.2	<0.2	<0.2	<0.2
		ethoprop	<0.03	<0.03	<0.03	<0.03
		oxyfluorfen	<0.05	<0.05	<0.05	<0.05
		profenofos	<0.3	<0.3	<0.3	<0.3
		tebuconazole	<0.2	<0.2	<0.2	<0.2
		total permethrin (cis- & trans-)	<0.04	<0.04	<0.04	<0.04
	tribufos	<0.07	<0.07	<0.07	<0.07	
	Alcohols	1-butanol	<2	<2	<2	<2
		2-methoxyethanol	<0.4	<0.4	<0.4	<0.4
		2-propen-1-ol	<0.5	<0.5	<0.5	<0.5
	SVOCs	butylated hydroxyanisole	<0.03	<0.03	<0.03	<0.03
o-toluidine		<0.007	<0.007	<0.007	<0.007	
quinoline		<0.02	<0.02	<0.02	<0.02	
LMPS (Sutro discharge)	Metals	germanium	<0.3	<0.3	<0.3	<0.3
		manganese	4.2	2.9	1.3	3.5
	Pesticides	alpha-hexachlorocyclohexane	<0.01	<0.01	<0.01	<0.01
		chlorpyrifos	<0.03	<0.03	<0.03	<0.03
		dimethipin	<0.2	<0.2	<0.2	<0.2
		ethoprop	<0.03	<0.03	<0.03	<0.03
		oxyfluorfen	<0.05	<0.05	<0.05	<0.05
		profenofos	<0.3	<0.3	<0.3	<0.3
		tebuconazole	<0.2	<0.2	<0.2	<0.2
		total permethrin (cis- & trans-)	<0.04	<0.04	<0.04	<0.04
	tribufos	<0.07	<0.07	<0.07	<0.07	
	Alcohols	1-butanol	<2	<2	<2	<2
		2-methoxyethanol	<0.4	<0.4	<0.4	<0.4
		2-propen-1-ol	<0.5	<0.5	<0.5	<0.5
	SVOCs	butylated hydroxyanisole	<0.03	<0.03	<0.03	<0.03
o-toluidine		<0.007	<0.007	<0.007	<0.007	
quinoline		0.024	<0.02	1.5	0.44	
LMPS (Sunset discharge)	Metals	germanium	<0.3	<0.3	<0.3	<0.3
		manganese	4.3	3.5	6.6	5.9
	Pesticides	alpha-hexachlorocyclohexane	<0.01	<0.01	<0.01	<0.01
		chlorpyrifos	<0.03	<0.03	<0.03	<0.03
		dimethipin	<0.2	<0.2	<0.2	<0.2
		ethoprop	<0.03	<0.03	<0.03	<0.03

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Sampling Locations	Contaminant	Analyte	Results (ppb)			
			1Q	2Q	3Q	4Q
LMPS (Sunset discharge)	Pesticides	oxyfluorfen	<0.05	<0.05	<0.05	<0.05
		profenofos	<0.3	<0.3	<0.3	<0.3
		tebuconazole	<0.2	<0.2	<0.2	<0.2
		total permethrin (cis- & trans-)	<0.04	<0.04	<0.04	<0.04
		tribufos	<0.07	<0.07	<0.07	<0.07
	Alcohols	1-butanol	<2	<2	<2	<2
		2-methoxyethanol	<0.4	<0.4	<0.4	<0.4
		2-propen-1-ol	<0.5	<0.5	<0.5	<0.5
	SVOCs	butylated hydroxyanisole	<0.03	<0.03	<0.03	<0.03
o-toluidine		<0.007	<0.007	<0.007	<0.007	
quinoline		0.027	<0.02	0.025	0.022	
Sunset Reservoir (North)	Metals	germanium	<0.3	<0.3	<0.3	<0.3
		manganese	3.8	3.2	3	2.7
	Pesticides	alpha-hexachlorocyclohexane	<0.01	<0.01	<0.01	<0.01
		chlorpyrifos	<0.03	<0.03	<0.03	<0.03
		dimethipin	<0.2	<0.2	<0.2	<0.2
		ethoprop	<0.03	<0.03	<0.03	<0.03
		oxyfluorfen	<0.05	<0.05	<0.05	<0.05
		profenofos	<0.3	<0.3	<0.3	<0.3
		tebuconazole	<0.2	<0.2	<0.2	<0.2
		total permethrin (cis- & trans-)	<0.04	<0.04	<0.04	<0.04
	tribufos	<0.07	<0.07	<0.07	<0.07	
	Alcohols	1-butanol	<2	<2	<2	<2
		2-methoxyethanol	<0.4	<0.4	<0.4	<0.4
		2-propen-1-ol	<0.5	<0.5	<0.5	<0.5
	SVOCs	butylated hydroxyanisole	<0.03	<0.03	<0.03	<0.03
		o-toluidine	<0.007	<0.007	<0.007	<0.007
		quinoline	0.023	<0.02	<0.02	<0.02
Sunset Reservoir (South)	Metals	germanium	<0.3	<0.3	<0.3	Sunset Reservoir (South) was out of service during 4Q18
		manganese	4.1	2.4	2.8	
	Pesticides	alpha-hexachlorocyclohexane	<0.01	<0.01	<0.01	
		chlorpyrifos	<0.03	<0.03	<0.03	
		dimethipin	<0.2	<0.2	<0.2	
		ethoprop	<0.03	<0.03	<0.03	
		oxyfluorfen	<0.05	<0.05	<0.05	
		profenofos	<0.3	<0.3	<0.3	
		tebuconazole	<0.2	<0.2	<0.2	
	total permethrin (cis- & trans-)	<0.04	<0.04	<0.04		
	tribufos	<0.07	<0.07	<0.07		
	Alcohols	1-butanol	<2	<2	<2	
		2-methoxyethanol	<0.4	<0.4	<0.4	
		2-propen-1-ol	<0.5	<0.5	<0.5	
SVOCs	butylated hydroxyanisole	<0.03	<0.03	<0.03		
	o-toluidine	<0.007	<0.007	<0.007		
	quinoline	0.026	<0.02	<0.02		
HPS	Haloacetic Acids	HAA5	29.9	57	53	40
		HAA6Br	2.02	0.68	0.42	1.61
		HAA9	31.9	57.4	53.3	41.6
UMS#01	Haloacetic Acids	HAA5	13.6	36	31	21.3
		HAA6Br	4.56	2.51	2.17	2.31
		HAA9	17.6	38.5	33.2	23.6
UMS#02	Haloacetic Acids	HAA5	27.5	46	46	41
		HAA6Br	1.56	1.86	0.39	1.41
		HAA9	29.1	48.3	45.9	42.4
UMS#03	Haloacetic Acids	HAA5	28.4	47	44	41
		HAA6Br	1.71	1.03	0.45	1.36

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Sampling Locations	Contaminant	Analyte	Results (ppb)			
			1Q	2Q	3Q	4Q
UMS#03	Haloacetic Acids	HAA9	30.1	48.2	44.6	42.4
UMS#09	Haloacetic Acids	HAA5	26.1	42	42	38
		HAA6Br	1.03	0.86	0.34	1.12
		HAA9	27.1	42.8	42.5	39.1
SUTS#03	Haloacetic Acids	HAA5	25.4	42	30	28
		HAA6Br	1.30	0.95	2.31	2.06
		HAA9	26.7	43.1	32.3	30.1
PHS	Haloacetic Acids	HAA5	30.3	58	51	44.1
		HAA6Br	1.58	1.01	0.42	1.72
		HAA9	31.9	58.7	51.0	45.8
FOREST_K_HPS_1	Haloacetic Acids	HAA5	32.9	65	45	34.32
		HAA6Br	1.78	1.67	1.74	3.91
		HAA9	34.7	66.7	46.3	37.8
SHS#02	Haloacetic Acids	HAA5	26.4	43	39	37
		HAA6Br	1.67	0.91	0.50	0.39
		HAA9	28.1	44.2	39.5	37.4
LA_GRANDE_TK	Haloacetic Acids	HAA5	30.1	52	36	37.5
		HAA6Br	1.92	0.62	1.78	2.14
		HAA9	32.0	52.1	37.9	39.6
SS#07	Haloacetic Acids	HAA5	26.9	43	37	28
		HAA6Br	2.10	1.18	1.22	1.88
		HAA9	29.0	44.2	38.2	29.9
MT_DAVIDSON_TK	Haloacetic Acids	HAA5	26.2	46	41	40.2
		HAA6Br	1.84	0.91	1.03	0.78
		HAA9	28.0	47.0	42.2	41.0

Sampling Locations	Contaminant	Analyte	Results (ppb)							
			April		May		June		July	
Baden Pump Station (SSPL)	Cyanotoxins	Anatoxin-a	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
		Cylindrospermopsin	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
		Total Microcystins	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Baden Pump Station (SA2)	Cyanotoxins	Anatoxin-a	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
		Cylindrospermopsin	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
		Total Microcystins	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3

Key:

FOREST_K_HPS = Forest Knoll Tank (Hunters Point Reservoir) System	SA2 = San Andreas #2 Pipeline
HAA = Haloacetic acid	SHS = Stanford Heights Reservoir System
HPS = Hunters Point Reservoir System	SS = Sunset Reservoir System
LA_GRANDE_TK = La Grande Tank	SSPL = Sunset Supply Pipeline
LMPS = Lake Merced Pump Station	SUTS = Sutro Reservoir System
MT_DAVIDSON_TK = Mt. Davidson Tank	SVOCs = Semi-volatile Organic Chemicals
PHS = Potrero Heights Reservoir System	UMS = University Mound System

Notes:

- **Bold text** represents a detection of the respective analyte.
- The HAA5 group includes the following HAAs: monobromoacetic acid, dibromoacetic acid, monochloroacetic acid, dichloroacetic acid, & trichloroacetic acid.
- The HAA6Br group includes the following HAAs: monobromoacetic acid, dibromoacetic acid, tribromoacetic acid, chlorodibromoacetic acid, bromochloroacetic acid, & bromodichloroacetic acid.
- The HAA9 group includes the following HAAs: monobromoacetic acid, dibromoacetic acid, tribromoacetic acid, chlorodibromoacetic acid, monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, bromochloroacetic acid, & bromodichloroacetic acid.