TABLE 12-8
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN
SURFACE WATER - REFERENCE LOCATION LOW TIDE

REMEDIAL INVESTIGATION REPORT
STRATFORD ARMY ENGINE PLANT
STRATFORD, CONNECTICUT

Scenario Timeframe: Current/Future Land Use
Medium: Surface Water
Exposure Medium: Surface Water
Exposure Point: Reference Location

CAS NUMBER	CHEMICAL	DETECTION FREQUENCY	RANGE OF DETECTION LIMITS MIN-MAX	MINIMUM (1) CONCENTRATION	MINIMUM QUALIFIER	MAXIMUM (1) CONCENTRATION	MAXIMUM QUALIFIER	SAMPLE ID OF MAXIMUM CONCENTRATION	AVERAGE (2) CONCENTRATION	UNITS	95% UCL	BACKGROUND VALUE (3)
Semivolatile Organics												
50-32-8	Benzo[a]pyrene	1/ 3	.000047 - .000047	8.8E-05		8.8E-05		SWUS001L	4.5E-05	mg/L	NC	4.5E-05
205-99-2	Benzo[b]fluoranthene	1/ 3	.000034 - .000034	7.1E-05	JP	7.1E-05	JP	SWUS001L	3.5E-05	mg/L	NC	3.5E-05
191-24-2	Benzo[ghi]perylene	1/ 3	.000066 - .000067	0.00014	JP	0.00014	JP	SWUS001L	6.9E-05	mg/L	NC	6.9E-05
193-39-5	Indeno[1,2,3-cd]pyrene	1/ 3	.000035 - .000035	0.00017		0.00017		SWUS001L	6.83E-05	mg/L	NC	6.8E-05
Inorganics/Metals												
7429-90-5	Aluminum	4/ 4	0 - 0	0.154		0.356		SWUS001L	0.266	mg/L	NC	0.27
7440-36-0	Antimony	4/ 4	0 - 0	0.0045	B	0.122		IBG-SW	0.03425	mg/L	NC	0.034
7440-38-2	Arsenic	2/ 3	.0017 - .0017	0.0018	B	0.002	B	SWUS003L	0.00155	mg/L	NC	0.0016
7440-70-2	Calcium	4/ 4	0 - 0	158	*	253		IBG-SW	190.75	mg/L	NC	191
7440-50-8	Copper	1/ 4	.0121 - .015	0.007		0.007		IBG-SW	0.00669	mg/L	NC	0.0067
7439-89-6	Iron	4/ 4	0 - 0	0.279		0.472		SWUS001L	0.3823	mg/L	NC	0.38
7439-92-1	Lead	3/ 3	0 - 0	0.0015	B	0.004		SWUS001L	0.0025	mg/L	NC	0.0025
7439-95-4	Magnesium	4/ 4	0 - 0	459	J	840		IBG-SW	587.25	mg/L	NC	587
7439-96-5	Manganese	4/ 4	0 - 0	0.035		0.0854		SWUS001L	0.0703	mg/L	NC	0.070
22967-92-6	Methyl mercury	1/ 3	8E-08 - 8E-08	1.18E-07	J	1.18E-07	J	SWUS001L	6.6E-08	mg/L	NC	6.6E-08
7440-09-7	Potassium	4/ 4	0 - 0	184	J	267		IBG-SW	218.5	mg/L	NC	219
7440-23-5	Sodium	3/ 3	0 - 0	3780	J	4430	J	SWUS001L	4170	mg/L	NC	4170
7440-62-2	Vanadium	1/ 4	.0069 - .0074	0.016	J	0.016	J	IBG-SW	0.00669	mg/L	NC	0.0067
7440-66-6	Zinc	3/ 3	0 - 0	0.0036	B	0.0109	B	SWUS001L	0.00737	mg/L	NC	0.0074
	Metals, Dissolved											
7429-90-5	Aluminum	3/ 3	0 - 0	0.111	B	0.134	B	SWUS001LD	0.1197	mg/L	NC	0.12
7440-36-0	Antimony	3/ 3	0 - 0	0.0067		0.0078		SWUS002LD	0.0072	mg/L	NC	0.0072
7440-38-2	Arsenic	1/ 3	.0017 - .0017	0.002	B	0.002	B	SWUS001LD	0.0012	mg/L	NC	0.0012
7440-70-2	Calcium	3/ 3	0 - 0	156	*	177	*	SWUS001LD	169.3	mg/L	NC	169
7439-89-6	Iron	3/ 3	0 - 0	0.0688	B	0.0787	B	SWUS003LD	0.0737	mg/L	NC	0.0737
7439-92-1	Lead	2/ 3	.0011 - .0011	0.0014	B	0.0019	B	SWUS003LD	0.00128	mg/L	NC	0.0013
7439-95-4	Magnesium	3/ 3	0 - 0	460	J	524	J	SWUS001LD	500.3	mg/L	NC	500
7439-96-5	Manganese	3/ 3	0 - 0	0.0636		0.0748		SWUS002LD	0.0694	mg/L	NC	0.069
7440-09-7	Potassium	3/ 3	0 - 0	182	J	212	J	SWUS001LD	199.67	mg/L	NC	200
7440-23-5	Sodium	3/ 3	0 - 0	3800	J	4340	J	SWUS001LD	4143.3	mg/L	NC	4143
7440-66-6	Zinc	3/ 3	0 - 0	0.0034	B	0.0071	B	SWUS001LD	0.00537	mg/L	NC	0.0054

(1) Minimum or maximum concentration detected in exposure area. Samples included in data set are provided in **Appendix T-1**.
(2) Average concentration is calculated using 1/2 the detection limit for non-detects.
(3) Background values shown is equal to the lesser of the maximum or average concentration.
B - report value less than Contract Required Detection Limit but greater than or equal to the Instrument Detection Limit
J - estimated value
P - a greater than 25% difference was detected between GC columns
* - sample duplicate results not within control limits