

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 671-A01 (03MW1023A)	12/05/06	USGS	30	35	28	95.5	6.00	20	C
FSW 671-A01 (03MW1023A)	12/05/06	USGS	40	45	18	147	6.19	E 2.6	C
FSW 671-A01 (03MW1023A)	12/05/06	USGS	50	55	8	181	6.10	4.4	C
FSW 671-A01 (03MW1023A)	12/05/06	USGS	60	65	-2	174	6.25	3.5	C
FSW 671-A01 (03MW1023A)	12/05/06	USGS	70	75	-12	246	6.19	3.5	C
FSW 671-A01 (03MW1023A)	12/05/06	USGS	80	85	-22	258	6.19	E 0.3	C
FSW 671-A01 (03MW1023A)	12/05/06	USGS	90	95	-32	240	6.06	203	M
FSW 671-A01 (03MW1023A)	12/05/06	USGS	100	105	-42	265	5.95	274	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	110	115	-52	249	5.36	309	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	120	125	-62	129	5.73	304	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	130	135	-72	71.5	5.85	308	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	140	145	-82	78.4	5.97	288	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	150	155	-92	83.7	5.83	165	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	160	165	-102	69.8	6.12	138	M
FSW 671-A01 (03MW1023A)	12/06/06	USGS	170	175	-112	72.1	6.45	114	M
FSW 671-A01 (03MW1023A)	12/07/06	USGS	180	185	-122	67.3	6.26	126	M
FSW 671-A01 (03MW1023A)	12/07/06	USGS	190	195	-132	72.9	6.40	121	M
FSW 671-A01 (03MW1023A)	12/07/06	USGS	200	205	-142	69.2	6.54	123	M
FSW 671-A01 (03MW1023A)	12/07/06	USGS	210	215	-152	66.4	6.34	172	M
FSW 671-A01 (03MW1023A)	12/07/06	USGS	220	225	-162	63.0	6.56	224	M
FSW 671-A01 (03MW1023A)	12/07/06	USGS	230	235	-172	71.8	6.95	249	M
FSW 671-A01 (03MW1023A)	12/08/06	USGS	240	245	-182	94.7	6.67	96	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

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Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 671-A01 (03MW1023A)	12/05/06	USGS	30	35	28	9.7	7.4	21.1	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	40	45	18	10.5	5.8	E 1.1	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	50	55	8	10.8	4.6	E 2.1	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	60	65	-2	10.4	20.2	E 1.6	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	70	75	-12	10.8	6.4	E 1.6	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	80	85	-22	10.4	2.1	E 2.1	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	90	95	-32	10.5	4.5	E 1.1	--
FSW 671-A01 (03MW1023A)	12/05/06	USGS	100	105	-42	10.8	16.8	E 1.6	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	110	115	-52	11.3	10.3	E 0.5	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	120	125	-62	11.6	4.6	E 0.0	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	130	135	-72	11.2	14.3	E 1.1	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	140	145	-82	10.7	3.5	E 0.0	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	150	155	-92	10.8	4.6	E 0.0	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	160	165	-102	11.1	8.6	E 0.0	--
FSW 671-A01 (03MW1023A)	12/06/06	USGS	170	175	-112	10.7	75.2	E 0.5	--
FSW 671-A01 (03MW1023A)	12/07/06	USGS	180	185	-122	11.1	15.9	E 0.0	--
FSW 671-A01 (03MW1023A)	12/07/06	USGS	190	195	-132	11.1	2.5	E 0.0	--
FSW 671-A01 (03MW1023A)	12/07/06	USGS	200	205	-142	11.4	100.6	E 0.0	--
FSW 671-A01 (03MW1023A)	12/07/06	USGS	210	215	-152	11.4	19.0	E 0.0	--
FSW 671-A01 (03MW1023A)	12/07/06	USGS	220	225	-162	11.6	50.4	E 2.1	--
FSW 671-A01 (03MW1023A)	12/07/06	USGS	230	235	-172	11.4	210.7	7.4	--
FSW 671-A01 (03MW1023A)	12/08/06	USGS	240	245	-182	9.7	14.8	E 0.5	--

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[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 671-A01 (03MW1023A)	12/08/06	USGS	250	255	-192	121	7.01	E 2.1	C
FSW 672-A01 (03MW1029A)	01/08/07	AFCEE	40	45	28	66.0	6.30	372	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	50	55	18	78.0	6.30	154	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	60	65	8	141	6.32	29	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	70	75	-2	173	6.26	22	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	80	85	-12	156	6.28	21	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	90	95	-22	219	6.10	114	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	100	105	-32	238	6.03	172	M
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	110	115	-42	264	5.81	240	M
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	120	125	-52	237	6.38	300	M
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	130	135	-62	133	6.00	300	M
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	140	145	-72	99.0	6.01	299	M
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	150	155	-82	73.0	5.89	323	M
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	160	165	-92	85.0	6.16	334	M
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	170	175	-102	100	6.63	374	M
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	180	185	-112	93.0	6.83	315	M
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	190	195	-122	122	6.92	373	M
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	200	205	-132	88.0	7.07	309	M
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	210	215	-142	124	6.82	123	M
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	220	225	-152	91.0	6.94	55	M
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	230	235	-162	98.0	7.04	101	M

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FSW 671-A01 (03MW1023A)	12/08/06	USGS	250	255	-192	9.6	7.4	E 0.0	--
FSW 672-A01 (03MW1029A)	01/08/07	AFCEE	40	45	28	11.4	1.9	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	50	55	18	10.3	3.0	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	60	65	8	10.4	0.9	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	70	75	-2	10.8	1.4	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	80	85	-12	11.0	1.0	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	90	95	-22	11.1	0.6	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	100	105	-32	10.9	0.1	--	--
FSW 672-A01 (03MW1029A)	01/09/07	AFCEE	110	115	-42	10.7	0.4	--	--
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	120	125	-52	10.5	3.6	--	--
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	130	135	-62	10.2	2.9	--	--
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	140	145	-72	10.9	3.4	--	--
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	150	155	-82	10.8	1.7	--	--
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	160	165	-92	10.5	6.3	--	--
FSW 672-A01 (03MW1029A)	01/10/07	AFCEE	170	175	-102	10.8	16.0	--	--
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	180	185	-112	10.4	12.6	--	--
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	190	195	-122	10.0	18.6	--	--
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	200	205	-132	9.9	37.4	--	--
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	210	215	-142	10.8	24.3	--	--
FSW 672-A01 (03MW1029A)	01/11/07	AFCEE	220	225	-152	10.8	55.6	--	--
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	230	235	-162	10.5	34.0	--	--

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FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	240	245	-172	127	7.05	105	M
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	250	255	-182	129	7.14	122	M
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	260	265	-192	156	7.19	211	M
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	269	274	-201	160	7.68	161	M
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	55	60	29	74.0	--	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	65	70	19	114	--	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	75	80	9	165	--	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	85	90	-1	130	--	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	95	100	-11	118	--	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	105	110	-21	131	--	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	115	120	-31	223	--	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	125	130	-41	228	--	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	135	140	-51	148	--	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	145	150	-61	133	--	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	155	160	-71	162	--	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	165	170	-81	155	--	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	175	180	-91	116	--	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	185	190	-101	109	--	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	195	200	-111	98.0	--	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	205	210	-121	122	--	--	--
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	215	220	-131	116	--	--	--

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FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	250	255	-182	11.1	62.5	--	--
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	260	265	-192	10.1	99.1	--	--
FSW 672-A01 (03MW1029A)	01/12/07	AFCEE	269	274	-201	11.3	93.0	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	55	60	29	11.4	101.2	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	65	70	19	11.2	545.3	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	75	80	9	11.3	93.6	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	85	90	-1	11.3	70.9	--	--
FSW 673-A01 (03MW1031A)	01/05/07	AFCEE	95	100	-11	11.3	96.2	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	105	110	-21	11.1	106.3	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	115	120	-31	12.0	276.7	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	125	130	-41	11.1	124.2	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	135	140	-51	11.2	60.8	--	--
FSW 673-A01 (03MW1031A)	01/08/07	AFCEE	145	150	-61	11.1	204.7	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	155	160	-71	10.2	185.4	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	165	170	-81	10.1	93.6	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	175	180	-91	10.2	109.4	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	185	190	-101	9.9	223.3	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	195	200	-111	9.9	359.7	--	--
FSW 673-A01 (03MW1031A)	01/09/07	AFCEE	205	210	-121	9.9	178.2	--	--
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	215	220	-131	10.2	895.0	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	225	230	-141	97.0	--	--	--
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	235	240	-151	92.0	--	--	--
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	245	250	-161	84.0	--	--	--
FSW 673-A01 (03MW1031A)	01/11/07	AFCEE	255	260	-171	120	--	--	--
FSW 696-A01 (95DP0215)	12/03/07	AFCEE	45	50	13	54.0	--	--	--
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	55	60	3	77.0	--	--	--
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	65	70	-8	76.0	--	--	--
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	75	80	-18	285	--	--	--
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	85	90	-28	58.0	--	--	--
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	95	100	-38	90.0	--	--	--
FSW 696-A01 (95DP0215)	12/05/07	AFCEE	105	110	-48	124	--	--	--
FSW 696-A01 (95DP0215)	12/05/07	AFCEE	115	120	-58	155	--	--	--
FSW 696-A01 (95DP0215)	12/05/07	AFCEE	125	130	-68	137	--	--	--
FSW 697-A01 (95DP0216)	01/03/08	USGS	40	45	15	108	5.74	282	M
FSW 697-A01 (95DP0216)	01/03/08	USGS	50	55	5	62.0	5.97	301	M
FSW 697-A01 (95DP0216)	01/03/08	USGS	60	65	-6	68.1	6.06	318	M
FSW 697-A01 (95DP0216)	01/03/08	USGS	70	75	-16	57.1	6.13	306	M
FSW 697-A01 (95DP0216)	01/03/08	USGS	80	85	-26	65.4	5.98	230	M
FSW 697-A01 (95DP0216)	01/03/08	USGS	90	95	-36	80.9	6.18	260	M
FSW 697-A01 (95DP0216)	01/04/08	USGS	100	105	-46	146	6.17	23	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	225	230	-141	10.1	188.9	--	--
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	235	240	-151	9.5	385.4	--	--
FSW 673-A01 (03MW1031A)	01/10/07	AFCEE	245	250	-161	9.7	187.9	--	--
FSW 673-A01 (03MW1031A)	01/11/07	AFCEE	255	260	-171	8.8	111.2	--	--
FSW 696-A01 (95DP0215)	12/03/07	AFCEE	45	50	13	10.8	384.1	--	E 0.11
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	55	60	3	8.4	57.4	--	E 0.05
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	65	70	-8	7.9	176.3	--	E 0.13
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	75	80	-18	7.6	125.6	--	E 0.09
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	85	90	-28	8.3	44.6	--	E 0.00
FSW 696-A01 (95DP0215)	12/04/07	AFCEE	95	100	-38	8.6	22.5	--	E 0.06
FSW 696-A01 (95DP0215)	12/05/07	AFCEE	105	110	-48	8.5	46.5	--	E 0.06
FSW 696-A01 (95DP0215)	12/05/07	AFCEE	115	120	-58	8.9	69.6	--	E 0.02
FSW 696-A01 (95DP0215)	12/05/07	AFCEE	125	130	-68	8.9	209.8	--	E 0.07
FSW 697-A01 (95DP0216)	01/03/08	USGS	40	45	15	9.8	485.6	--	E 0.05
FSW 697-A01 (95DP0216)	01/03/08	USGS	50	55	5	8.2	135.1	--	E 0.03
FSW 697-A01 (95DP0216)	01/03/08	USGS	60	65	-6	9.9	57.8	--	E 0.00
FSW 697-A01 (95DP0216)	01/03/08	USGS	70	75	-16	8.3	115.1	--	E 0.00
FSW 697-A01 (95DP0216)	01/03/08	USGS	80	85	-26	10.1	38.2	--	E 0.00
FSW 697-A01 (95DP0216)	01/03/08	USGS	90	95	-36	8.0	139.3	--	E 0.03
FSW 697-A01 (95DP0216)	01/04/08	USGS	100	105	-46	9.8	49.0	--	E 0.11

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 697-A01 (95DP0216)	01/04/08	USGS	110	115	-56	130	6.34	15	M
FSW 698-A01 (95DP0217)	12/06/07	AFCEE	50	55	6	57.0	--	--	--
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	60	65	-5	75.0	--	--	--
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	70	75	-15	59.0	--	--	--
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	80	85	-25	87.0	--	--	--
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	90	95	-35	65.0	--	--	--
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	100	105	-45	76.0	--	--	--
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	110	115	-55	133	--	--	--
FSW 698-A01 (95DP0217)	12/10/07	AFCEE	120	125	-65	109	--	--	--
FSW 699-A01 (95DP0218)	12/13/07	AFCEE	40	45	14	190	--	--	--
FSW 699-A01 (95DP0218)	12/13/07	AFCEE	50	55	4	166	--	--	--
FSW 699-A01 (95DP0218)	12/13/07	AFCEE	60	65	-7	106	--	--	--
FSW 699-A01 (95DP0218)	12/17/07	AFCEE	70	75	-17	171	--	--	--
FSW 699-A01 (95DP0218)	12/17/07	AFCEE	80	85	-27	189	--	--	--
FSW 699-A01 (95DP0218)	12/17/07	AFCEE	90	95	-37	158	--	--	--
FSW 699-A01 (95DP0218)	12/18/07	AFCEE	100	105	-47	173	--	--	--
FSW 699-A01 (95DP0218)	12/18/07	AFCEE	110	115	-57	199	--	--	--
FSW 699-A02 (95MW1234A)	02/08/08	AFCEE	120	125	-67	132	6.47	22	M
FSW 699-A02 (95MW1234A)	02/12/08	AFCEE	140	145	-87	107	7.30	9	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 697-A01 (95DP0216)	01/04/08	USGS	110	115	-56	10.6	86.3	--	E 0.06
FSW 698-A01 (95DP0217)	12/06/07	AFCEE	50	55	6	8.4	303.6	--	E 0.00
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	60	65	-5	9.3	97.3	--	E 0.00
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	70	75	-15	9.3	37.3	--	E 0.15
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	80	85	-25	9.8	430.1	--	E 0.00
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	90	95	-35	9.5	57.1	--	E 0.06
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	100	105	-45	9.7	6.4	--	E 0.11
FSW 698-A01 (95DP0217)	12/07/07	AFCEE	110	115	-55	9.7	121.6	--	E 0.16
FSW 698-A01 (95DP0217)	12/10/07	AFCEE	120	125	-65	9.4	229.1	--	E 0.01
FSW 699-A01 (95DP0218)	12/13/07	AFCEE	40	45	14	9.3	148.8	--	E 0.04
FSW 699-A01 (95DP0218)	12/13/07	AFCEE	50	55	4	9.9	134.6	--	E 0.13
FSW 699-A01 (95DP0218)	12/13/07	AFCEE	60	65	-7	9.8	136.7	--	E 0.02
FSW 699-A01 (95DP0218)	12/17/07	AFCEE	70	75	-17	8.4	145.8	--	E 0.06
FSW 699-A01 (95DP0218)	12/17/07	AFCEE	80	85	-27	8.4	219.8	--	E 0.14
FSW 699-A01 (95DP0218)	12/17/07	AFCEE	90	95	-37	8.8	176.0	--	E 0.09
FSW 699-A01 (95DP0218)	12/18/07	AFCEE	100	105	-47	8.9	139.8	--	0.41
FSW 699-A01 (95DP0218)	12/18/07	AFCEE	110	115	-57	8.7	801.3	--	E 0.07
FSW 699-A02 (95MW1234A)	02/08/08	AFCEE	120	125	-67	10.0	39.0	--	E 0.05
FSW 699-A02 (95MW1234A)	02/12/08	AFCEE	140	145	-87	9.2	39.8	--	E 0.01

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 699-A02 (95MW1234A)	02/12/08	AFCEE	150	155	-97	159	7.83	49	M
FSW 699-A02 (95MW1234A)	02/12/08	AFCEE	160	165	-107	164	8.13	70	M
FSW 699-A02 (95MW1234A)	02/13/08	AFCEE	170	175	-117	176	8.23	127	M
FSW 699-A02 (95MW1234A)	02/13/08	AFCEE	180	185	-127	176	8.17	112	M
FSW 699-A02 (95MW1234A)	02/14/08	AFCEE	190	195	-137	165	7.82	46	M
FSW 699-A02 (95MW1234A)	02/14/08	AFCEE	200	205	-147	167	7.95	54	M
FSW 699-A02 (95MW1234A)	02/15/08	AFCEE	230	235	-177	184	7.69	182	M
FSW 699-A02 (95MW1234A)	02/15/08	AFCEE	240	245	-187	188	8.04	61	M
FSW 699-A02 (95MW1234A)	02/15/08	AFCEE	250	255	-197	210	8.08	63	M
FSW 699-A02 (95MW1234A)	02/19/08	AFCEE	260	265	-207	182	8.43	6.1	M
FSW 699-A02 (95MW1234A)	02/19/08	AFCEE	270	275	-217	221	8.64	13	M
FSW 700-A01 (95DP0219)	01/07/08	AFCEE	40	45	14	99.0	--	--	--
FSW 700-A01 (95DP0219)	01/07/08	AFCEE	50	55	4	81.0	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	60	65	-7	96.0	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	70	75	-17	97.0	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	80	85	-27	108	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	90	95	-37	122	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	100	105	-47	160	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	110	115	-57	138	--	--	--
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	120	125	-67	126	--	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 699-A02 (95MW1234A)	02/12/08	AFCEE	150	155	-97	9.8	59.0	--	E 0.03
FSW 699-A02 (95MW1234A)	02/12/08	AFCEE	160	165	-107	8.8	154.8	--	E 0.00
FSW 699-A02 (95MW1234A)	02/13/08	AFCEE	170	175	-117	10.6	270.8	--	E 0.05
FSW 699-A02 (95MW1234A)	02/13/08	AFCEE	180	185	-127	11.0	372.8	--	E 0.09
FSW 699-A02 (95MW1234A)	02/14/08	AFCEE	190	195	-137	9.8	212.8	--	E 0.00
FSW 699-A02 (95MW1234A)	02/14/08	AFCEE	200	205	-147	10.1	58.6	--	E 0.00
FSW 699-A02 (95MW1234A)	02/15/08	AFCEE	230	235	-177	10.6	12.3	--	E 0.00
FSW 699-A02 (95MW1234A)	02/15/08	AFCEE	240	245	-187	10.7	7.3	--	E 0.00
FSW 699-A02 (95MW1234A)	02/15/08	AFCEE	250	255	-197	11.0	11.1	--	E 0.00
FSW 699-A02 (95MW1234A)	02/19/08	AFCEE	260	265	-207	10.8	3.6	--	E 0.00
FSW 699-A02 (95MW1234A)	02/19/08	AFCEE	270	275	-217	10.8	43.6	--	E 0.09
FSW 700-A01 (95DP0219)	01/07/08	AFCEE	40	45	14	11.5	315.0	--	E 0.00
FSW 700-A01 (95DP0219)	01/07/08	AFCEE	50	55	4	11.5	147.3	--	E 0.05
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	60	65	-7	11.3	96.0	--	E 0.00
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	70	75	-17	11.4	55.1	--	E 0.00
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	80	85	-27	11.3	24.1	--	E 0.09
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	90	95	-37	11.3	25.4	--	E 0.10
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	100	105	-47	11.5	16.1	--	E 0.07
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	110	115	-57	11.4	84.9	--	E 0.02
FSW 700-A01 (95DP0219)	01/08/08	AFCEE	120	125	-67	11.1	197.0	--	E 0.00

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	40	45	9	143	--	--	--
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	50	55	-2	68.0	--	--	--
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	60	65	-12	78.0	--	--	--
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	70	75	-22	62.0	--	--	--
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	80	85	-32	66.0	--	--	--
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	90	95	-42	98.0	--	--	--
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	100	105	-52	153	--	--	--
FSW 701-A01 (95DP0220)	01/11/08	AFCEE	110	115	-62	159	--	--	--
FSW 702-A01 (95DP0221)	01/15/08	AFCEE	40	45	6	125	--	--	--
FSW 702-A01 (95DP0221)	01/15/08	AFCEE	50	55	-5	126	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	60	65	-15	77.0	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	70	75	-25	68.0	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	80	85	-35	81.0	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	90	95	-45	123	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	100	105	-55	129	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	110	115	-65	165	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	120	125	-75	189	--	--	--
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	130	135	-85	175	--	--	--
FSW 703-A01 (95DP0222)	01/22/08	AFCEE	40	45	2	119	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	50	55	-9	141	--	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	40	45	9	8.7	638.1	--	E 0.00
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	50	55	-2	9.6	260.1	--	E 0.09
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	60	65	-12	10.0	69.3	--	E 0.01
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	70	75	-22	10.2	38.1	--	E 0.00
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	80	85	-32	10.4	34.8	--	E 0.02
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	90	95	-42	9.9	63.8	--	E 0.12
FSW 701-A01 (95DP0220)	01/10/08	AFCEE	100	105	-52	10.0	52.3	--	E 0.04
FSW 701-A01 (95DP0220)	01/11/08	AFCEE	110	115	-62	10.2	1438.2	--	E 0.21
FSW 702-A01 (95DP0221)	01/15/08	AFCEE	40	45	6	8.5	747.8	--	E 0.16
FSW 702-A01 (95DP0221)	01/15/08	AFCEE	50	55	-5	10.4	103.4	--	E 0.08
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	60	65	-15	10.0	111.2	--	E 0.02
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	70	75	-25	9.7	30.0	--	E 0.08
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	80	85	-35	8.7	45.2	--	E 0.12
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	90	95	-45	9.5	80.7	--	E 0.09
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	100	105	-55	10.0	312.7	--	E 0.03
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	110	115	-65	9.9	177.9	--	E 0.13
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	120	125	-75	9.7	211.6	--	0.65
FSW 702-A01 (95DP0221)	01/17/08	AFCEE	130	135	-85	10.0	385.4	--	E 0.08
FSW 703-A01 (95DP0222)	01/22/08	AFCEE	40	45	2	10.4	259.9	--	E 0.16
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	50	55	-9	10.2	348.3	--	E 0.08

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	60	65	-19	80.0	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	70	75	-29	65.0	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	80	85	-39	69.0	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	90	95	-49	87.0	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	100	105	-59	110	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	110	115	-69	155	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	120	125	-79	152	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	130	135	-89	150	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	140	145	-99	129	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	150	155	-109	135	--	--	--
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	160	165	-119	143	--	--	--
FSW 703-A01 (95DP0222)	01/24/08	AFCEE	170	175	-129	137	--	--	--
FSW 704-A01 (95DP0223)	02/13/08	AFCEE	45	50	-1	110	--	--	--
FSW 704-A01 (95DP0223)	02/13/08	AFCEE	55	60	-11	88.0	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	65	70	-21	70.0	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	75	80	-31	79.0	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	85	90	-41	83.0	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	95	100	-51	155	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	105	110	-61	183	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	115	120	-71	134	--	--	--
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	125	130	-81	109	--	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	60	65	-19	10.2	72.2	--	E 0.10
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	70	75	-29	10.0	33.1	--	E 0.04
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	80	85	-39	10.2	63.3	--	E 0.11
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	90	95	-49	10.5	239.6	--	E 0.01
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	100	105	-59	10.2	172.1	--	E 0.03
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	110	115	-69	9.4	124.5	--	E 0.13
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	120	125	-79	10.1	282.1	--	E 0.12
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	130	135	-89	10.1	165.6	--	E 0.11
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	140	145	-99	9.7	411.2	--	E 0.13
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	150	155	-109	9.8	444.7	--	E 0.08
FSW 703-A01 (95DP0222)	01/23/08	AFCEE	160	165	-119	10.0	151.2	--	E 0.05
FSW 703-A01 (95DP0222)	01/24/08	AFCEE	170	175	-129	8.9	139.0	--	E 0.06
FSW 704-A01 (95DP0223)	02/13/08	AFCEE	45	50	-1	10.5	342.0	--	E 0.16
FSW 704-A01 (95DP0223)	02/13/08	AFCEE	55	60	-11	9.9	350.3	--	E 0.01
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	65	70	-21	10.0	122.5	--	E 0.00
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	75	80	-31	10.0	214.0	--	E 0.08
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	85	90	-41	10.1	38.7	--	E 0.00
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	95	100	-51	9.2	41.7	--	0.46
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	105	110	-61	10.4	310.6	--	E 0.16
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	115	120	-71	10.7	362.9	--	E 0.06
FSW 704-A01 (95DP0223)	02/14/08	AFCEE	125	130	-81	10.3	902.8	--	E 0.02

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
								--	
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	45	50	-3	147	--	--	--
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	55	60	-13	106	--	--	--
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	65	70	-23	89.0	--	--	--
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	75	80	-33	86.0	--	--	--
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	85	90	-43	114	--	--	--
FSW 705-A01 (95DP0224)	02/21/08	AFCEE	95	100	-53	162	--	--	--
FSW 705-A01 (95DP0224)	02/21/08	AFCEE	105	110	-63	154	--	--	--
FSW 705-A01 (95DP0224)	02/21/08	AFCEE	115	120	-73	--	--	--	--
FSW 705-A01 (95DP0224)	02/25/08	AFCEE	125	130	-83	206	--	--	--
FSW 706-A01 (03MW1046A)	03/17/08	USGS	30	35	25	63.2	6.53	300	M
FSW 706-A01 (03MW1046A)	03/17/08	USGS	40	45	15	110	6.32	36	M
FSW 706-A01 (03MW1046A)	03/17/08	USGS	50	55	5	143	6.02	23	C
FSW 706-A01 (03MW1046A)	03/17/08	AFCEE	60	65	-5	182	5.88	9	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	70	75	-15	195	6.25	45	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	80	85	-25	178	5.88	240	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	90	95	-35	219	6.20	27	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	100	105	-45	201	5.84	264	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	110	115	-55	81.0	6.17	242	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	120	125	-65	89.0	6.48	277	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	130	135	-75	83.0	6.51	309	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

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Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	45	50	-3	9.0	232.4	--	E 0.15
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	55	60	-13	9.4	166.7	--	E 0.05
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	65	70	-23	9.1	78.1	--	E 0.05
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	75	80	-33	8.7	232.1	--	E 0.06
FSW 705-A01 (95DP0224)	02/20/08	AFCEE	85	90	-43	9.0	53.3	--	E 0.05
FSW 705-A01 (95DP0224)	02/21/08	AFCEE	95	100	-53	5.7	986.8	--	E 0.10
FSW 705-A01 (95DP0224)	02/21/08	AFCEE	105	110	-63	9.4	887.5	--	E 0.11
FSW 705-A01 (95DP0224)	02/21/08	AFCEE	115	120	-73	--	--	--	E 0.05
FSW 705-A01 (95DP0224)	02/25/08	AFCEE	125	130	-83	6.4	156.5	--	E 0.09
FSW 706-A01 (03MW1046A)	03/17/08	USGS	30	35	25	9.9	1.7	E 0.0	--
FSW 706-A01 (03MW1046A)	03/17/08	USGS	40	45	15	10.6	3.6	E 0.0	--
FSW 706-A01 (03MW1046A)	03/17/08	USGS	50	55	5	10.3	0.0	E 0.0	--
FSW 706-A01 (03MW1046A)	03/17/08	AFCEE	60	65	-5	10.5	0.0	E 1.1	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	70	75	-15	8.7	2.8	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	80	85	-25	10.4	5.8	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	90	95	-35	9.3	0.7	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	100	105	-45	9.5	2.4	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	110	115	-55	9.9	2.5	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	120	125	-65	9.4	10.5	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	130	135	-75	10.2	6.1	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

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Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	140	145	-85	84.0	6.50	146	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	150	155	-95	83.0	6.47	195	M
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	160	165	-105	76.0	6.54	73	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	170	175	-115	74.0	7.02	64	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	180	185	-125	63.0	6.93	157	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	190	195	-135	62.0	6.90	201	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	200	205	-145	62.0	6.85	203	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	210	215	-155	61.0	6.93	212	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	220	225	-165	74.0	6.93	145	M
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	230	235	-175	107	6.89	15	M
FSW 706-A01 (03MW1046A)	03/20/08	AFCEE	240	245	-185	123	6.98	6.1	M
FSW 706-A01 (03MW1046A)	03/20/08	AFCEE	247	252	-192	130	7.09	225	M
SDW 105-A01 (03DP0037)	01/16/06	USGS	5	10	47	31.7	5.92	321	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	15	20	37	107	5.99	207	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	25	30	27	232	5.93	275	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	35	40	17	117	5.84	255	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	45	50	7	94.7	5.70	300	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	55	60	-3	103	5.90	261	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	65	70	-13	107	5.95	257	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	75	80	-23	107	6.05	266	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	85	90	-33	106	6.01	279	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	140	145	-85	10.9	0.0	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	150	155	-95	11.3	3.6	--	--
FSW 706-A01 (03MW1046A)	03/18/08	AFCEE	160	165	-105	11.1	6.9	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	170	175	-115	9.6	13.9	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	180	185	-125	9.6	22.7	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	190	195	-135	9.3	27.9	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	200	205	-145	9.2	21.8	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	210	215	-155	8.8	115.1	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	220	225	-165	9.5	125.8	--	--
FSW 706-A01 (03MW1046A)	03/19/08	AFCEE	230	235	-175	8.8	280.8	--	--
FSW 706-A01 (03MW1046A)	03/20/08	AFCEE	240	245	-185	11.7	20.7	--	--
FSW 706-A01 (03MW1046A)	03/20/08	AFCEE	247	252	-192	10.3	235.7	--	--
SDW 105-A01 (03DP0037)	01/16/06	USGS	5	10	47	6.2	982.6	--	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	15	20	37	9.3	535.7	--	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	25	30	27	10.2	170.0	45.8	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	35	40	17	10.7	343.7	13.2	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	45	50	7	10.4	140.8	6.3	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	55	60	-3	10.5	38.3	3.2	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	65	70	-13	10.2	42.7	6.3	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	75	80	-23	10.2	112.6	13.2	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	85	90	-33	10.1	40.7	8.4	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
SDW 105-A01 (03DP0037)	01/17/06	USGS	95	100	-43	107	5.98	284	M
SDW 105-A01 (03DP0037)	01/17/06	USGS	105	110	-53	127	5.99	286	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	115	120	-63	157	5.87	307	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	125	130	-73	151	6.08	275	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	135	140	-83	137	6.14	250	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	145	150	-93	227	6.18	272	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	155	160	-103	159	6.31	271	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	165	170	-113	180	6.24	227	M
SDW 105-A01 (03DP0037)	01/19/06	USGS	175	180	-123	164	6.34	293	M
SDW 105-A01 (03DP0037)	01/23/06	USGS	195	200	-143	86.5	6.89	63	M
SDW 105-A01 (03DP0037)	01/23/06	USGS	205	210	-153	120	6.59	11	M
SDW 105-A01 (03DP0037)	01/24/06	USGS	215	220	-163	136	7.36	31	M
SDW 105-A01 (03DP0037)	01/24/06	USGS	225	230	-173	91.9	6.47	24	C
SDW 105-A01 (03DP0037)	01/24/06	USGS	235	240	-183	99.3	6.94	24	C
SDW 105-A01 (03DP0037)	01/25/06	USGS	245	250	-193	151	7.10	18	C
SDW 105-A01 (03DP0037)	01/25/06	USGS	255	260	-203	245	7.65	9	C
SDW 105-A01 (03DP0037)	01/25/06	USGS	263	268	-211	229	7.84	E 1.9	C
SDW 106-A01 (03DP0038)	01/27/06	USGS	25	30	42	79.5	5.86	186	M
SDW 106-A01 (03DP0038)	01/27/06	USGS	35	40	32	120	5.76	12	M
SDW 106-A01 (03DP0038)	01/27/06	USGS	45	50	22	121	5.86	3.9	M
SDW 106-A01 (03DP0038)	01/27/06	USGS	55	60	12	120	5.85	3.9	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
SDW 105-A01 (03DP0037)	01/17/06	USGS	95	100	-43	10.2	21.1	E 0.5	--
SDW 105-A01 (03DP0037)	01/17/06	USGS	105	110	-53	10.0	34.1	E 0.5	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	115	120	-63	9.8	22.2	E 2.6	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	125	130	-73	10.0	23.4	6.8	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	135	140	-83	10.2	18.0	3.7	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	145	150	-93	10.7	35.4	E 1.6	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	155	160	-103	9.9	40.8	3.7	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	165	170	-113	10.1	80.1	5.8	--
SDW 105-A01 (03DP0037)	01/19/06	USGS	175	180	-123	9.9	56.9	3.2	--
SDW 105-A01 (03DP0037)	01/23/06	USGS	195	200	-143	9.5	79.9	5.8	--
SDW 105-A01 (03DP0037)	01/23/06	USGS	205	210	-153	10.5	296.3	43.2	--
SDW 105-A01 (03DP0037)	01/24/06	USGS	215	220	-163	10.7	119.5	32.6	--
SDW 105-A01 (03DP0037)	01/24/06	USGS	225	230	-173	10.2	93.1	17.9	--
SDW 105-A01 (03DP0037)	01/24/06	USGS	235	240	-183	10.1	127.5	9	--
SDW 105-A01 (03DP0037)	01/25/06	USGS	245	250	-193	10.2	151.3	20	--
SDW 105-A01 (03DP0037)	01/25/06	USGS	255	260	-203	10.2	669.6	40.5	--
SDW 105-A01 (03DP0037)	01/25/06	USGS	263	268	-211	10.0	920.7	--	--
SDW 106-A01 (03DP0038)	01/27/06	USGS	25	30	42	10.2	740.1	--	--
SDW 106-A01 (03DP0038)	01/27/06	USGS	35	40	32	11.9	149.6	--	--
SDW 106-A01 (03DP0038)	01/27/06	USGS	45	50	22	10.9	153.1	--	--
SDW 106-A01 (03DP0038)	01/27/06	USGS	55	60	12	10.6	105.2	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
SDW 106-A01 (03DP0038)	01/27/06	USGS	65	70	2	125	6.06	3.9	M
SDW 106-A01 (03DP0038)	01/27/06	USGS	75	80	-8	130	5.98	3.9	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	85	90	-18	143	5.79	105	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	95	100	-28	253	5.79	248	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	105	110	-38	199	5.76	317	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	115	120	-48	153	6.16	280	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	125	130	-58	82.1	6.08	327	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	135	140	-68	77.7	6.23	337	M
SDW 106-A01 (03DP0038)	01/30/06	USGS	145	150	-78	83.9	6.35	310	M
SDW 106-A01 (03DP0038)	01/31/06	USGS	155	160	-88	70.0	6.36	317	M
SDW 106-A01 (03DP0038)	01/31/06	USGS	165	170	-98	59.1	6.47	248	M
SDW 106-A01 (03DP0038)	01/31/06	USGS	175	180	-108	75.3	6.78	12	M
SDW 106-A01 (03DP0038)	01/31/06	USGS	185	190	-118	82.6	7.38	10	M
SDW 106-A01 (03DP0038)	01/31/06	USGS	195	200	-128	59.1	7.09	221	M
SDW 106-A01 (03DP0038)	02/01/06	USGS	205	210	-138	60.6	6.89	242	M
SDW 106-A01 (03DP0038)	02/01/06	USGS	215	220	-148	62.1	7.12	240	M
SDW 106-A01 (03DP0038)	02/01/06	USGS	225	230	-158	113	6.76	69	M
SDW 106-A01 (03DP0038)	02/01/06	USGS	233	238	-166	63.6	6.92	263	M
SDW 107-A01 (03MW1016A)	01/19/06	USGS	70	75	13	105	6.10	29	C
SDW 107-A01 (03MW1016A)	01/19/06	USGS	80	85	3	198	6.08	373	M
SDW 107-A01 (03MW1016A)	01/19/06	USGS	90	95	-7	157	6.09	359	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
SDW 106-A01 (03DP0038)	01/27/06	USGS	65	70	2	11.1	361.5	--	--
SDW 106-A01 (03DP0038)	01/27/06	USGS	75	80	-8	10.8	257.3	34	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	85	90	-18	10.9	96.6	15.8	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	95	100	-28	10.7	48.7	7.9	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	105	110	-38	11.0	23.2	4.7	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	115	120	-48	10.9	115.7	7.9	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	125	130	-58	11.1	163.0	3.2	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	135	140	-68	11.0	70.6	9.5	--
SDW 106-A01 (03DP0038)	01/30/06	USGS	145	150	-78	10.9	67.4	14.7	--
SDW 106-A01 (03DP0038)	01/31/06	USGS	155	160	-88	10.8	112.6	15.3	--
SDW 106-A01 (03DP0038)	01/31/06	USGS	165	170	-98	10.0	76.8	12.1	--
SDW 106-A01 (03DP0038)	01/31/06	USGS	175	180	-108	10.1	400.3	21.1	--
SDW 106-A01 (03DP0038)	01/31/06	USGS	185	190	-118	10.3	700.4	50.5	--
SDW 106-A01 (03DP0038)	01/31/06	USGS	195	200	-128	9.9	602.1	15.8	--
SDW 106-A01 (03DP0038)	02/01/06	USGS	205	210	-138	10.0	151.8	11.1	--
SDW 106-A01 (03DP0038)	02/01/06	USGS	215	220	-148	10.3	620.7	42.1	--
SDW 106-A01 (03DP0038)	02/01/06	USGS	225	230	-158	10.4	646.5	42.1	--
SDW 106-A01 (03DP0038)	02/01/06	USGS	233	238	-166	10.4	295.3	10.5	--
SDW 107-A01 (03MW1016A)	01/19/06	USGS	70	75	13	9.8	0.0	E 0.0	--
SDW 107-A01 (03MW1016A)	01/19/06	USGS	80	85	3	10.0	0.0	E 0.5	--
SDW 107-A01 (03MW1016A)	01/19/06	USGS	90	95	-7	9.8	0.7	E 0.5	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
SDW 107-A01 (03MW1016A)	01/19/06	USGS	100	105	-17	172	5.99	335	M
SDW 107-A01 (03MW1016A)	01/19/06	USGS	110	115	-27	127	6.01	412	M
SDW 107-A01 (03MW1016A)	01/20/06	USGS	120	125	-37	117	6.01	340	M
SDW 107-A01 (03MW1016A)	01/20/06	USGS	130	135	-47	129	5.98	346	M
SDW 107-A01 (03MW1016A)	01/20/06	USGS	140	145	-57	82.8	6.46	375	M
SDW 107-A01 (03MW1016A)	01/20/06	USGS	150	155	-67	68.5	6.73	428	M
SDW 107-A01 (03MW1016A)	01/20/06	USGS	160	165	-77	72.2	6.75	339	M
SDW 107-A01 (03MW1016A)	01/20/06	USGS	170	175	-87	75.2	6.72	294	M
SDW 107-A01 (03MW1016A)	01/23/06	USGS	190	195	-107	71.1	6.97	257	M
SDW 107-A01 (03MW1016A)	01/23/06	USGS	200	205	-117	65.7	6.99	271	M
SDW 107-A01 (03MW1016A)	01/23/06	USGS	210	215	-127	83.8	6.93	255	M
SDW 107-A01 (03MW1016A)	01/23/06	USGS	220	225	-137	80.9	6.80	177	M
SDW 107-A01 (03MW1016A)	01/23/06	USGS	230	235	-147	81.4	6.83	146	M
SDW 107-A01 (03MW1016A)	01/24/06	USGS	240	245	-157	86.4	7.26	178	M
SDW 107-A01 (03MW1016A)	01/24/06	USGS	250	255	-167	87.3	7.36	284	M
SDW 107-A01 (03MW1016A)	01/25/06	USGS	260	265	-177	104	6.82	13	M
SDW 107-A01 (03MW1016A)	01/25/06	USGS	270	275	-187	141	7.33	71	M
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	70	75	25	125	6.29	351	M
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	80	85	15	121	5.93	296	M
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	90	95	5	125	6.03	290	M
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	100	105	-5	122	6.01	302	M

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
SDW 107-A01 (03MW1016A)	01/19/06	USGS	100	105	-17	10.6	5.0	E 0.5	--
SDW 107-A01 (03MW1016A)	01/19/06	USGS	110	115	-27	9.5	0.4	E 0.5	--
SDW 107-A01 (03MW1016A)	01/20/06	USGS	120	125	-37	11.3	1.8	E 0.5	--
SDW 107-A01 (03MW1016A)	01/20/06	USGS	130	135	-47	11.2	0.0	E 0.5	--
SDW 107-A01 (03MW1016A)	01/20/06	USGS	140	145	-57	12.3	9.9	E 0.5	--
SDW 107-A01 (03MW1016A)	01/20/06	USGS	150	155	-67	11.8	22.9	E 1.6	--
SDW 107-A01 (03MW1016A)	01/20/06	USGS	160	165	-77	11.7	2.1	E 1.1	--
SDW 107-A01 (03MW1016A)	01/20/06	USGS	170	175	-87	11.1	2.1	E 0.5	--
SDW 107-A01 (03MW1016A)	01/23/06	USGS	190	195	-107	7.8	19.5	E 1.6	--
SDW 107-A01 (03MW1016A)	01/23/06	USGS	200	205	-117	9.1	24.7	4.2	--
SDW 107-A01 (03MW1016A)	01/23/06	USGS	210	215	-127	10.1	31.4	12.1	--
SDW 107-A01 (03MW1016A)	01/23/06	USGS	220	225	-137	9.8	9.5	4.2	--
SDW 107-A01 (03MW1016A)	01/23/06	USGS	230	235	-147	9.9	18.0	E 1.6	--
SDW 107-A01 (03MW1016A)	01/24/06	USGS	240	245	-157	10.6	18.3	E 0.5	--
SDW 107-A01 (03MW1016A)	01/24/06	USGS	250	255	-167	11.0	71.6	E 2.6	--
SDW 107-A01 (03MW1016A)	01/25/06	USGS	260	265	-177	9.0	27.1	E 2.6	--
SDW 107-A01 (03MW1016A)	01/25/06	USGS	270	275	-187	9.8	75.1	E 2.6	--
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	70	75	25	12.5	1.5	--	--
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	80	85	15	12.9	0.7	--	--
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	90	95	5	13.2	0.7	--	--
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	100	105	-5	13.1	0.0	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	110	115	-15	115	5.80	313	M
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	120	125	-25	115	5.88	292	M
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	130	135	-35	115	5.94	300	M
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	140	145	-45	118	6.85	308	M
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	150	155	-55	138	6.65	322	M
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	160	165	-65	153	6.50	313	M
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	170	175	-75	117	6.32	321	M
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	180	185	-85	88.0	6.46	358	M
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	190	195	-95	108	6.52	377	M
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	200	205	-105	98.0	6.92	340	M
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	210	215	-115	89.0	6.94	305	M
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	220	225	-125	87.0	7.08	245	M
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	230	235	-135	96.0	7.01	240	M
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	240	245	-145	99.0	6.97	204	M
SDW 551-A01 (03MW1022A)	11/14/06	AFCEE	250	255	-155	89.0	7.24	53	M
SDW 551-A01 (03MW1022A)	11/14/06	AFCEE	260	265	-165	91.0	7.16	266	M
SDW 551-A01 (03MW1022A)	11/14/06	AFCEE	270	275	-175	116	7.16	15	M
SDW 551-A01 (03MW1022A)	11/15/06	AFCEE	280	285	-185	158	6.99	5.5	M
SDW 551-A01 (03MW1022A)	11/15/06	AFCEE	290	295	-195	187	7.04	15	M
SDW 551-A01 (03MW1022A)	11/15/06	AFCEE	300	305	-205	264	7.03	5.8	M
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	40	45	26	123	--	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	110	115	-15	12.9	0.3	--	--
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	120	125	-25	12.6	0.4	--	--
SDW 551-A01 (03MW1022A)	11/09/06	AFCEE	130	135	-35	12.3	1.9	--	--
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	140	145	-45	12.1	1.1	--	--
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	150	155	-55	12.3	3.6	--	--
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	160	165	-65	12.8	9.0	--	--
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	170	175	-75	13.6	225.0	--	--
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	180	185	-85	12.6	3.2	--	--
SDW 551-A01 (03MW1022A)	11/10/06	AFCEE	190	195	-95	12.1	4.2	--	--
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	200	205	-105	12.4	9.0	--	--
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	210	215	-115	12.6	14.6	--	--
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	220	225	-125	13.2	2.8	--	--
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	230	235	-135	13.1	9.9	--	--
SDW 551-A01 (03MW1022A)	11/13/06	AFCEE	240	245	-145	13.1	8.1	--	--
SDW 551-A01 (03MW1022A)	11/14/06	AFCEE	250	255	-155	12.7	22.6	--	--
SDW 551-A01 (03MW1022A)	11/14/06	AFCEE	260	265	-165	12.7	16.6	--	--
SDW 551-A01 (03MW1022A)	11/14/06	AFCEE	270	275	-175	12.4	4.4	--	--
SDW 551-A01 (03MW1022A)	11/15/06	AFCEE	280	285	-185	12.3	24.9	--	--
SDW 551-A01 (03MW1022A)	11/15/06	AFCEE	290	295	-195	13.1	53.7	--	--
SDW 551-A01 (03MW1022A)	11/15/06	AFCEE	300	305	-205	12.9	3.5	--	--
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	40	45	26	12.1	122.2	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–08.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Specific conductance ($\mu\text{S}/\text{cm}$)	pH (standard units)	Dissolved oxygen (μM)	Dissolved oxygen method
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	50	55	16	116	--	--	--
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	60	65	6	115	--	--	--
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	70	75	-4	114	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	80	85	-14	151	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	90	95	-24	161	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	100	105	-34	158	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	110	115	-44	138	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	120	125	-54	136	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	130	135	-64	137	--	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	140	145	-74	133	--	--	--
SDW 552-A01 (03MW1026A)	11/13/06	AFCEE	160	165	-94	217	--	--	--
SDW 552-A01 (03MW1026A)	11/13/06	AFCEE	180	185	-114	107	--	--	--
SDW 552-A01 (03MW1026A)	11/14/06	AFCEE	190	195	-124	109	--	--	--
SDW 552-A01 (03MW1026A)	11/14/06	AFCEE	200	205	-134	99.0	--	--	--
SDW 552-A01 (03MW1026A)	11/14/06	AFCEE	210	215	-144	103	--	--	--
SDW 552-A01 (03MW1026A)	11/15/06	AFCEE	220	225	-154	97.0	--	--	--
SDW 552-A01 (03MW1026A)	11/15/06	AFCEE	230	235	-164	108	--	--	--

Table 8. Field water-quality analyses for groundwater samples collected from direct-push and sonic profile borings, Ashumet Valley treated-wastewater plume, Cape Cod, Massachusetts, 2006–2008.

[Locations of direct-push and sonic profile borings are shown in figures 1–3. Names shortened by removing prefix MA-. Altitudes are in feet above or below (-) the National Geodetic Vertical Datum of 1929 (NGVD29). Depths are in feet below land surface. All turbidity values were reported by Air Force Center for Engineering and the Environment. Direct-push or sonic profile-boring names in parentheses are location identifiers assigned by the Air Force Center for Engineering and the Environment. **Reporting agency:** USGS, U.S. Geological Survey; AFCEE, Air Force Center for Engineering and the Environment; **Dissolved oxygen method:** C, CHEMetrics photometer; M, YSI meter and probe or sonde. $\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; μM , micromole per liter; mg/L , milligram per liter; NTU, Nephelometric Turbidity Unit; E, estimated value less than the practical detection limit reported by CHEMetrics, Inc.; --, no data]

Direct-push or sonic profile-boring name	Sampling date	Reporting agency	Depth of top of sampling interval (ft)	Depth of bottom of sampling interval (ft)	Altitude of midpoint of sampled interval (ft)	Temperature (degrees Celsius)	Turbidity (NTU)	Phosphate, field photometer (μM)	Methylene blue active substances, field photometer (mg/L)
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	50	55	16	11.8	217.9	--	--
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	60	65	6	11.8	16.1	--	--
SDW 552-A01 (03MW1026A)	11/08/06	AFCEE	70	75	-4	12.0	51.6	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	80	85	-14	11.9	38.1	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	90	95	-24	11.8	36.0	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	100	105	-34	12.2	15.5	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	110	115	-44	11.8	57.5	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	120	125	-54	11.9	69.7	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	130	135	-64	11.7	23.3	--	--
SDW 552-A01 (03MW1026A)	11/10/06	AFCEE	140	145	-74	11.7	136.7	--	--
SDW 552-A01 (03MW1026A)	11/13/06	AFCEE	160	165	-94	12.1	40.0	--	--
SDW 552-A01 (03MW1026A)	11/13/06	AFCEE	180	185	-114	12.2	182.7	--	--
SDW 552-A01 (03MW1026A)	11/14/06	AFCEE	190	195	-124	12.3	181.7	--	--
SDW 552-A01 (03MW1026A)	11/14/06	AFCEE	200	205	-134	12.2	871.0	--	--
SDW 552-A01 (03MW1026A)	11/14/06	AFCEE	210	215	-144	12.2	361.0	--	--
SDW 552-A01 (03MW1026A)	11/15/06	AFCEE	220	225	-154	12.0	562.3	--	--
SDW 552-A01 (03MW1026A)	11/15/06	AFCEE	230	235	-164	12.9	1045.4	--	--