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**GROUNDWATER MONITORING  
VALIDATED ANALYTICAL RESULTS FOR THE FOURTH QUARTER 1993  
ASH LANDFILL, SENECA ARMY DEPOT**

**PREPARED FOR:**  
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D#10

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## **SECTION 1.0**

### **Volatile Organic Compounds:**

- 1.1 Summary of Validated Volatile Analysis Results  
(TCL and 524.2)**
- 1.2 Validated Volatile Analysis Results  
(TCL and 524.2)**
- 1.3 Summary of Volatile Historical Data for  
Selected Wells**

**1.1 Summary of Validated Volatile Analysis  
Results (TCL and 524.2)**

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
SUMMARY OF VALIDATED VOLATILE ANALYSIS RESULTS (TCL and 524.2)**

MONITORING WELL	COMPOUND										TOTAL VOCs (ug/l)	
	1,2-DCE (ug/l)	TCE (ug/l)	Vinyl Chloride (ug/l)	Chloroform (ug/l)	1,2-DCA (ug/l)	Methylene Chloride (ug/l)	Benzene (ug/l)					
PT-10	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-11	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-12	81	95	10U	10U	10U	10U	10U	10U	10U	10U	10U	176
PT-15	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-16	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-17	12	100	10U	10U	10U	10U	10U	10U	10U	10U	10U	112
PT-18	1000U	9500	1000U	1000U	1000U	1000U	1000U	1000U	1000U	1000U	1000U	9500
PT-19	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-20	40	31	10U	10U	10U	10U	10U	10U	10U	10U	10U	71
PT-21	18	5J	10U	10U	10U	10U	10U	10U	10U	10U	10U	23
PT-22	140	92	10U	10U	10U	10U	10U	5J	10U	10U	10U	237
PT-23	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-24	72	4J	10U	10U	10U	10U	10U	10U	10U	10U	10U	76
PT-25	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
PT-26	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-27	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-28	43	28	10U	10U	10U	10U	10U	10U	10U	10U	10U	71
MW-29	63	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	63
MW-30	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-31	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-32	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-33	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-34	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-35D	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-36	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-37	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-38D	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-39	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-40	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-41D	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
MW-42D	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	ND
FH-S	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	ND
FH-D	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	ND
BRN-S	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	ND

Notes:

- 1,2-DCE = 1,2-Dichloroethene (total)
- TCE = Trichloroethene
- 1,2-DCA = 1,2-Dichloroethane
- J = Estimated Value
- U = Not detected above the concentration shown
- ND = Not Detected
- ug/l = micrograms per liter

**1.2 Validated Volatile Analysis Results  
(TCL and 524.2)**

ASH LANDFILL FOURTH QUARTER 1983 MONITORING  
VALIDATED VOLATILE ANALYSIS RESULTS (TCL)

ALQMVOC.WK3	MATRIX	WATER		WATER		WATER		WATER		WATER		WATER	
	LOCATION	ASH	ASH	ASH	ASH	ASH	ASH	ASH	ASH	ASH	ASH	ASH	ASH
	DATE SAMPLED DATE ANALYZED ES ID LAB ID	11/19/83 11/24/83 PT-10 38516-4	11/20/83 11/29/83 PT-11 38533-1	11/23/83 11/30/83 PT-12 38548-4	11/10/83 11/16/83 PT-15 38384-4	11/21/83 11/29/83 PT-16 38533-5	11/22/83 11/30/83 PT-17 38548-1						
COMPOUND	UNITS												
CHLOROMETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
BROMOMETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
VINYL CHLORIDE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
CHLOROETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
METHYLENE CHLORIDE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
ACETONE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
CARBON DISULFIDE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,1-DICHLOROETHENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,1-DICHLOROETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,2-DICHLOROETHENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
CHLOROFORM	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,2-DICHLOROETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
2-BUTANONE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,1,1-TRICHLOROETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
CARBON TETRACHLORIDE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
BROMODICHLOROMETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,2-DICHLOROPROPANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
Cis-1,3-DICHLOROPROPENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
TRICHLOROETHENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
DIBROMOCHLOROMETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,1,2-TRICHLOROETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
BENZENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
TRANS-1,3-DICHLOROPROPENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
BROMOFORM	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
4-METHYL-2-PENTANONE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
2-HEXANONE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
TETRACHLOROETHENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-TETRACHLOROETHANE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
TOLUENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
CHLOROBENZENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
ETHYLBENZENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
STYRENE	ug/L	10	U	U	U	U	U	U	U	U	U	U	U
XYLENES(TOTAL)	ug/L	10	U	U	U	U	U	U	U	U	U	U	U





ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
 VAUDATED VOLATILE ANALYSIS RESULTS (TCL)

ALQMVOC.WG3	MATRIX LOCATION DATE SAMPLED DATE ANALYZED ES ID LAB ID	WATER ASH 12/03/93 PT-26 38695-6	WATER ASH 11/21/93 11/29/93 MW-27 38533--3	WATER ASH 12/05/93 12/13/93 MW-27 38656-2	WATER ASH 11/21/93 11/29/93 MW-26 38533-7	WATER ASH 12/01/93 12/07/93 MW-29 38619-6	WATER ASH 11/22/93 11/30/93 MW-30 38548-8
COMPOUND	UNITS	10	10	10	10	10	10
CHLOROMETHANE	ug/L	U	U	U	U	U	U
BROMOMETHANE	ug/L	U	U	U	U	U	U
VINYL CHLORIDE	ug/L	U	U	U	U	U	U
CHLOROETHANE	ug/L	U	U	U	U	U	U
METHYLENE CHLORIDE	ug/L	U	U	U	U	U	U
ACETONE	ug/L	U	U	U	U	U	U
CARBON DISULFIDE	ug/L	U	U	U	U	U	U
1,1-DICHLOROETHENE	ug/L	U	U	U	U	U	U
1,1-DICHLOROETHANE	ug/L	U	U	U	U	U	U
1,2-DICHLOROETHENE	ug/L	U	U	U	43	U	U
CHLOROFORM	ug/L	U	U	U	U	U	U
1,2-DICHLOROETHANE	ug/L	U	U	U	U	U	U
2-BUTANONE	ug/L	U	U	U	U	U	U
1,1,1-TRICHLOROETHANE	ug/L	U	U	U	U	U	U
CARBON TETRACHLORIDE	ug/L	U	U	U	U	U	U
BROMODICHLOROMETHANE	ug/L	U	U	U	U	U	U
1,2-DICHLOROPROPANE	ug/L	U	U	U	U	U	U
Cis-1,3-DICHLOROPROPENE	ug/L	U	U	U	U	U	U
TRICHLOROETHENE	ug/L	U	U	U	28	U	U
DIBROMOCHLOROMETHANE	ug/L	U	U	U	U	U	U
1,1,2-TRICHLOROETHANE	ug/L	U	U	U	U	U	U
BENZENE	ug/L	U	U	U	U	U	U
TRANS-1,3-DICHLOROPROPENE	ug/L	U	U	U	U	U	U
BROMOFORM	ug/L	U	U	U	U	U	U
4-METHYL-2-PENTANONE	ug/L	U	U	U	U	U	U
2-HEXANONE	ug/L	U	U	U	U	U	U
TETRACHLOROETHENE	ug/L	U	U	U	U	U	U
1,1,2,2-TETRACHLOROETHANE	ug/L	U	U	U	U	U	U
TOLUENE	ug/L	U	U	U	U	U	U
CHLOROBENZENE	ug/L	U	U	U	U	U	U
ETHYLBENZENE	ug/L	U	U	U	U	U	U
STYRENE	ug/L	U	U	U	U	U	U
XYLENES(TOTAL)	ug/L	U	U	U	U	U	U

ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
 VAUDATED VOLATILE ANALYSIS RESULTS (TCL)

AL40MW/C.WK3	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	LOCATION	ASH	ASH	ASH	ASH	ASH	ASH	ASH
	DATE SAMPLED	12/01/93	11/22/93	12/03/93	12/03/93	12/03/93	12/03/93	12/03/93
	DATE ANALYZED	12/07/93	11/30/93	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93
	ES ID	MW-33	MW-34	MW-35D	MW-36	MW-37		
	LAB ID	38619-1	38548-7	38635-4	38635-5	38384-44		
	UNITS							
CHLOROMETHANE	ug/L	10	10	10	10	10	10	10
BROMOMETHANE	ug/L	10	10	10	10	10	10	10
VINYL CHLORIDE	ug/L	10	10	10	10	10	10	10
CHLOROETHANE	ug/L	10	10	10	10	10	10	10
METHYLENE CHLORIDE	ug/L	10	10	10	10	10	10	10
ACETONE	ug/L	10	10	10	10	10	10	10
CARBON DISULFIDE	ug/L	10	10	10	10	10	10	10
1,1-DICHLOROETHENE	ug/L	10	10	10	10	10	10	10
1,1-DICHLOROETHANE	ug/L	10	10	10	10	10	10	10
1,2-DICHLOROETHENE	ug/L	10	10	10	10	10	10	10
CHLOROFORM	ug/L	10	10	10	10	10	10	10
1,2-DICHLOROETHANE	ug/L	10	10	10	10	10	10	10
2-BUTANONE	ug/L	10	10	10	10	10	10	10
1,1,1-TRICHLOROETHANE	ug/L	10	10	10	10	10	10	10
CARBON TETRACHLORIDE	ug/L	10	10	10	10	10	10	10
BROMODICHLOROMETHANE	ug/L	10	10	10	10	10	10	10
1,2-DICHLOROPROPANE	ug/L	10	10	10	10	10	10	10
Cis-1,3-DICHLOROPROPENE	ug/L	10	10	10	10	10	10	10
TRICHLOROETHENE	ug/L	10	10	10	10	10	10	10
DIBROMOCHLOROMETHANE	ug/L	10	10	10	10	10	10	10
1,1,2-TRICHLOROETHANE	ug/L	10	10	10	10	10	10	10
BENZENE	ug/L	10	10	10	10	10	10	10
TRANS-1,3-DICHLOROPROPENE	ug/L	10	10	10	10	10	10	10
BROMOFORM	ug/L	10	10	10	10	10	10	10
4-METHYL-2-PENTANONE	ug/L	10	10	10	10	10	10	10
2-HEXANONE	ug/L	10	10	10	10	10	10	10
TETRACHLOROETHENE	ug/L	10	10	10	10	10	10	10
1,1,2,2-TETRACHLOROETHANE	ug/L	10	10	10	10	10	10	10
TOLUENE	ug/L	10	10	10	10	10	10	10
CHLOROBENZENE	ug/L	10	10	10	10	10	10	10
ETHYLBENZENE	ug/L	10	10	10	10	10	10	10
STYRENE	ug/L	10	10	10	10	10	10	10
XYLENES(TOTAL)	ug/L	10	10	10	10	10	10	10

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
VALIDATED VOLATILE ANALYSIS RESULTS (TC)**

AL4QMVOC.WK3	MATRIX LOCATION	DATE SAMPLED		WATER ASH	WATER ASH	WATER ASH	WATER ASH	WATER ASH	WATER ASH
		DATE ANALYZED	DATE ANALYZED						
		ES ID	ES ID						
		11/09/93	11/10/93	11/09/93	11/10/93	11/09/93	11/10/93	11/09/93	11/10/93
		MW-39	MW-40	MW-41D	MW-42D	TB-119	TB-121	TB-119	TB-121
		36384-46	36384-49	36384-45	36384-42	36384-48	36619-2	36384-48	36619-2
							(trip blank)		(trip blank)
	UNITS								
CHLOROMETHANE	ug/L	10	10	10	10	10	10	10	10
BROMOMETHANE	ug/L	10	10	10	10	10	10	10	10
VINYL CHLORIDE	ug/L	10	10	10	10	10	10	10	10
CHLOROETHANE	ug/L	10	10	10	10	10	10	10	10
METHYLENE CHLORIDE	ug/L	10	10	10	10	10	10	10	10
ACETONE	ug/L	10	10	10	10	10	10	10	10
CARBON DISULFIDE	ug/L	10	10	10	10	10	10	10	10
1,1-DICHLOROETHENE	ug/L	10	10	10	10	10	10	10	10
1,1-DICHLOROETHANE	ug/L	10	10	10	10	10	10	10	10
1,2-DICHLOROETHENE	ug/L	10	10	10	10	10	10	10	10
CHLOROFORM	ug/L	10	10	10	10	10	10	10	10
1,2-DICHLOROETHANE	ug/L	10	10	10	10	10	10	10	10
2-BUTANONE	ug/L	10	10	10	10	10	10	10	10
1,1,1-TRICHLOROETHANE	ug/L	10	10	10	10	10	10	10	10
CARBON TETRACHLORIDE	ug/L	10	10	10	10	10	10	10	10
BROMOCHLOROMETHANE	ug/L	10	10	10	10	10	10	10	10
1,2-DICHLOROPROPANE	ug/L	10	10	10	10	10	10	10	10
Cis-1,3-DICHLOROPROPENE	ug/L	10	10	10	10	10	10	10	10
TRICHLOROETHENE	ug/L	10	10	10	10	10	10	10	10
DIBROMOCHLOROMETHANE	ug/L	10	10	10	10	10	10	10	10
1,1,2-TRICHLOROETHANE	ug/L	10	10	10	10	10	10	10	10
BENZENE	ug/L	10	10	10	10	10	10	10	10
TRANS-1,3-DICHLOROPROPENE	ug/L	10	10	10	10	10	10	10	10
BROMOFORM	ug/L	10	10	10	10	10	10	10	10
4-METHYL-2-PENTANONE	ug/L	10	10	10	10	10	10	10	10
2-HEXANONE	ug/L	10	10	10	10	10	10	10	10
TETRACHLOROETHENE	ug/L	10	10	10	10	10	10	10	10
1,1,2,2-TETRACHLOROETHANE	ug/L	10	10	10	10	10	10	10	10
TOLUENE	ug/L	10	10	10	10	10	10	10	10
CHLOROBENZENE	ug/L	10	10	10	10	10	10	10	10
ETHYLBENZENE	ug/L	10	10	10	10	10	10	10	10
STYRENE	ug/L	10	10	10	10	10	10	10	10
XYLENES (TOTAL)	ug/L	10	10	10	10	10	10	10	10





ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
 VALIDATED VOLATILE ANALYSIS RESULTS (22/2)

CAS NO.	COMPOUND	MATRIX SITE	WATER		WATER		WATER	
			DATE SAMPLED	ASH	ASH	ASH	DATE SAMPLED	ASH
		DATE ANALYZED	FH-S	FH-D	BRN-S	BRN-S	TB	
		ES ID	204589	204588	204587	204587	204590	
		LAB ID	204589	204588	204587	204587	204590	
		UNITS					(trip blank)	
74-87-3	Chloromethane	ug/L	U	U	U	U	U	U
630-20-6	1,1,1,2-Tetrachloroethane	ug/L	U	U	U	U	U	U
74-83-9	Bromomethane	ug/L	U	U	U	U	U	U
79-34-6	1,1,2,2-Tetrachloroethane	ug/L	U	U	U	U	U	U
76-71-8	Dichlorodifluoromethane	ug/L	U	U	U	U	U	U
96-18-4	1,2,3-Trichloropropane	ug/L	U	U	U	U	U	U
76-01-4	Vinyl chloride	ug/L	U	U	U	U	U	U
127-18-4	Tetrachloroethene	ug/L	U	U	U	U	U	U
76-00-3	Chloroethane	ug/L	U	U	U	U	U	U
98-12-8	1,2-Dibromo-3-chloropropane	ug/L	U	U	U	U	U	U
76-09-2	Methylene chloride	ug/L	U	U	U	U	U	U
87-86-3	Hexachlorocyclopentadiene	ug/L	U	U	U	U	U	U
76-89-4	Trichlorofluoromethane	ug/L	U	U	U	U	U	U
71-43-2	Benzene	ug/L	U	U	U	U	U	U
76-35-4	1,1-Dichloroethane	ug/L	U	U	U	U	U	U
108-88-3	Toluene	ug/L	U	U	U	U	U	U
74-87-6	Bromochloromethane	ug/L	U	U	U	U	U	U
108-90-7	Chlorobenzene	ug/L	U	U	U	U	U	U
76-34-3	1,1-Dichloroethane	ug/L	U	U	U	U	U	U
100-41-4	Ethylbenzene	ug/L	U	U	U	U	U	U
166-59-4	1,2-Dichloroethene (cis)	ug/L	U	U	U	U	U	U
108-86-1	Bromobenzene	ug/L	U	U	U	U	U	U
166-60-6	1,2-Dichloroethene (trans)	ug/L	U	U	U	U	U	U
98-82-8	Isopropylbenzene	ug/L	U	U	U	U	U	U
87-86-3	Chloroform	ug/L	U	U	U	U	U	U
1330-20-7	Xylene (total)	ug/L	U	U	U	U	U	U
74-85-3	Dibromomethane	ug/L	U	U	U	U	U	U
100-42-6	Styrene	ug/L	U	U	U	U	U	U
107-08-2	1,2-Dichloroethane	ug/L	U	U	U	U	U	U
103-66-1	n-Propylbenzene	ug/L	U	U	U	U	U	U
590-20-7	2,2-Dichloropropane	ug/L	U	U	U	U	U	U
98-08-6	tert-Butylbenzene	ug/L	U	U	U	U	U	U
71-86-6	1,1,1-Trichloroethane	ug/L	U	U	U	U	U	U
96-49-8	2-Chlorotoluene	ug/L	U	U	U	U	U	U
56-23-6	Carbon Tetrachloride	ug/L	U	U	U	U	U	U
106-43-4	4-Chlorotoluene	ug/L	U	U	U	U	U	U
76-27-4	Bromodichloromethane	ug/L	U	U	U	U	U	U
135-98-8	sec-Butylbenzene	ug/L	U	U	U	U	U	U
78-87-6	1,2-Dichloropropane	ug/L	U	U	U	U	U	U
541-73-1	1,3-Dichlorobenzene	ug/L	U	U	U	U	U	U
563-68-6	1,1-Dichloropropene	ug/L	U	U	U	U	U	U
96-60-1	1,2-Dichlorobenzene	ug/L	U	U	U	U	U	U
1061-01-6	cis-1,3-Dichloropropene	ug/L	U	U	U	U	U	U
106-46-7	1,4-Dichlorobenzene	ug/L	U	U	U	U	U	U
10061-02-8	trans-1,3-Dichloropropene	ug/L	U	U	U	U	U	U
99-87-6	p-Isopropyltoluene	ug/L	U	U	U	U	U	U
79-01-6	Trichloroethene	ug/L	U	U	U	U	U	U
106-67-8	1,3,5-Trimethylbenzene	ug/L	U	U	U	U	U	U
124-48-1	Dibromochloromethane	ug/L	U	U	U	U	U	U
104-51-8	m-Butylbenzene	ug/L	U	U	U	U	U	U
79-00-6	1,1,2-Trichloroethane	ug/L	U	U	U	U	U	U
98-83-6	1,2,4-Trimethylbenzene	ug/L	U	U	U	U	U	U
142-26-9	1,3-Dichloropropane	ug/L	U	U	U	U	U	U
120-82-1	1,2,4-Trichlorobenzene	ug/L	U	U	U	U	U	U
108-93-4	1,2-Dibromodichloroethane	ug/L	U	U	U	U	U	U
87-61-6	1,2,3-Trichlorobenzene	ug/L	U	U	U	U	U	U
76-26-2	Bromoform	ug/L	U	U	U	U	U	U
91-20-3	Naphthalene	ug/L	U	U	U	U	U	U
67-64-1	Acetone	ug/L	U	U	U	U	U	U
76-83-3	2-Butanone	ug/L	U	U	U	U	U	U
108-10-1	4-Methyl-2-Pentanone	ug/L	U	U	U	U	U	U
591-78-6	2-Hexanone	ug/L	U	U	U	U	U	U

**1.3 Summary of Volatile Historical Data  
for Selected Wells**

**Note: The monitoring wells that have been  
included in this section are only  
those for which elevated levels of  
VOAs have been historically identified**

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-12**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	Galsion		Galsion		Galsion		Galsion		Galsion		Galsion		Galsion		Galsion		
		Aug 1987	Oct 1987	Mar 1989	Sept 1989	Mar 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	NET	NET	NET	NET	NET	NET	NET	NET
<b>VLATILE ORGANICS</b>	<b>Units</b>																	
ethane	ug/L	<5	<5	10U	50U					<1.0	<1.0	<5.0	<5.0	51.0	<1.0	<1.0	<1.0	<1.0
ethane	ug/L	<5	<5	5U	50U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
chloroethane	ug/L	<5	<5	10U	17					7	<2.0	<2.0	<2.0	140	<1.0	<1.0	<1.0	<1.0
chloroethane	ug/L	<5	<5	10U	50U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethane	ug/L	<5	<5	5U	25U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-trichloroethane	ug/L	<5	<5	5U	25U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloroethane	ug/L	<5	<5	5U	25U					1.5	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane	ug/L	1700	94	68	950					129	<1.0	100	790	3100	<1.0	<1.0	<1.0	870
1,1,1-trichloroethane	ug/L	<5	<5	5U	25U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloroethane	ug/L	<5	<5	5U	25U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloroethane	ug/L	<5	95.0	5U	25U					<1.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-trichloroethane (total)	ug/L	-	-	-	-	43.0	1000.0			-	-	-	-	-	-	-	-	-

**Notes:**

Galsion = Galsion Laboratories  
NET = National Environmental Testing  
GTC = General Testing Corporation  
ES = Engineering-Science, Inc. (PACE Laboratory)  
- = No Data



**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-12**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET		NET		NET		NET		GTC		ES		ES		
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993	ES	ES			
<b>VLATILE ORGANICS</b>																
Chloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1-Dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1,1-Trichloroethane	ug/L	35	160	1.5	14	14	14	14	14	5U	9	9	10U	100U	100U	
1,1,2-Trichloroethane	ug/L	30.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,2-Dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	63U	63U	
1,1,2,2-Tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1,1,2-Tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1,2,2-Tetrachloroethane	ug/L	<10	7.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1,1,1-Tetrachloroethane	ug/L	2100	1350	170	119	323	323	323	323	1800	260	260	45	1400	1400	
1,1,2,2-Tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1,1,2-Tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	20U	20U	10U	120U	120U	
1,1,2,2-Tetrachloroethane	ug/L	51.0	63.2	2.7	5.8	5.8	5.8	5.8	5.8	54	54	54	-	-	-	
Dichloroethane	ug/L	-	-	-	-	-	-	-	-	2800	-	-	-	-	-	
Chloroethane (total)	ug/L	-	-	-	-	-	-	-	-	-	320	320	36	2000	2000	

Notes:

Galson = Galson Laboratories  
NET = National Environmental Testing  
GTC = General Testing Corporation  
ES = Engineering-Science, Inc. (PACE Laboratory)  
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-17**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	Aug 1987		Oct 1987		Mar 1989		Jan 1990		Mar 1990		June 1990		Sept 1990		Dec 1990	
		Galson	Galson	Galson	Galson	Galson	Galson	NET	NET	NET	NET	NET	NET	NET	NET	NET	NET
<b>VOLATILE ORGANICS</b>																	
ethane	ug/L	-	-	10U	<20	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
propane	ug/L	-	-	10U	<20	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
butane	ug/L	-	-	10U	<20	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloride	ug/L	-	-	5U	<20	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-trichloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane	ug/L	-	-	59	240	170	170	90	170	400	400	340	340	92	92	92	92
1,1,2,2-tetrachloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,1-tetrachloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	ug/L	-	-	5U	<10	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2-tetrachloroethane (total)	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane (total)	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-17**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET	NET	NET	NET	NET	NET	GTC	ES	ES	ES
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993
<b>PLATILE ORGANICS</b>											
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
propane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
chloride	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
1,1-Dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
1,2-Dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
1,1,1-Trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
1,1,2-Trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	11U
1,1,1,2-Tetrachloroethane	ug/L	460	529	75.1	100	72.4	160	140	140	27	210
1,1,2,2-Tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	11U
1,1,1,2,2-Pentachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	11U
1,1,1,2,2-Pentachloroethane (total)	ug/L	<10	<1.0	<1.0	<1.0	<1.0	35	35	-	-	-
		-	-	-	-	-	-	-	27	-	44

Notes:

- Galsion = Galsion Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering - Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-18**  
**ASH LANDFILL**  
**SENECA ARMY DEPOT**  
**ROMULUS, NEW YORK**

Parameter	Source Date	Units	Galson	Galson	Galson	Galson	NET	NET	NET	NET	NET	NET
			Aug 1987	OCT 1987	Mar 1989	Sept 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	Dec 1990	
<b>VOLATILE ORGANICS</b>												
Ethane		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
Formaldehyde		ug/L	-	-	-	86	<1.0	230	<5.0	610	700	<10
Acetone		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
Chloroethane		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
Dichloroethane		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
Trichloroethane		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
Perchloroethane		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
1,1-Dichloroethane		ug/L	-	-	-	2500	<1.0	7600	5900	17000	22000	<10
1,2-Dichloroethane		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10
Trichloroethane (total)		ug/L	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<10

Notes: Galson = Galson Laboratories  
NET = National Environmental Testing  
GTC = General Testing Corporation  
ES = Engineering-Science, Inc. (PACE Laboratory)  
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-18**

ASH LANDFILL  
 SENECA ARMY DEPOT  
 ROMULUS, NEW YORK

Parameter	Source: Date:	NET	NET	NET	NET	NET	NET	NET	GTC	ES	ES	ES
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993	
<b>VOLATILE ORGANICS</b>												
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	830U
propane	ug/L	490	457	157	11.7	175	270	300J	200	300J	300J	830U
nitride	ug/L	<10	<1.0	<1.0	<1.0	<100	10	1000U	1000U	1000U	1000U	830U
butane	ug/L	<10	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
Chloride	ug/L	<10	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,1-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,2-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,1,1-trichloroethane	ug/L	<10	<1.0	1.7	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,1,2-trichloroethane	ug/L	<10	<1.0	3710	9840	7920	14000	16000	10000	10000	16000	13000
1,1,2,2-tetrachloroethane	ug/L	12000	10000	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,1,1,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,1,1,2,2-pentachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
1,1,1,2,2,2-hexachloroethane	ug/L	<10	<1.0	3.0	<1.0	<100	5U	1000U	1000U	1000U	1000U	830U
Dichloroethane	ug/L	-	-	-	-	-	700	-	-	-	-	-
Trichloroethane (total)	ug/L	-	-	-	-	-	-	440	440	450	450	590J

**Notes:**

- Galsion = Galsion Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-20**  
**ASH LANDFILL**  
**SENECA ARMY DEPOT**  
**ROMULUS, NEW YORK**

Parameter	Source: Date:	Galson		Galson		Galson		Galson		NET		NET		NET		
		Aug 1987	OCT 1987	Mar 1989	Mar 1989	Sept 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	Dec 1990	NET	NET	NET	NET	NET
<b>VLATILE ORGANICS</b>																
ethane	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
m	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
oride	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
ane	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
e Chloride	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
chloroethane	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
loroethane	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
loroethene	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
ethene	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
roethene	ug/L	-	-	-	-	-	-	-	-	23	26	46	52	35	35	<10
luoromethane	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
-2-Dichloroethene	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
Dichloroethene	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10
loroethene (total)	ug/L	-	-	-	-	-	-	-	-	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<10

Notes:

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-20**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET	NET	NET	NET	NET	NET	GTC	ES	ES	ES	ES
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993	
<b>VLATILE ORGANICS</b>												
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
propane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
acetylene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
chloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,2-dichloroethane	ug/L	36	30	34	21	18	18	24	23	32	6J	10U
1,1,2-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,2,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2,2-pentachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	26	26	26	26	26
1,1,1,2,2,2-hexachloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2,2,2-hexachloroethane (total)	ug/L	-	-	-	-	-	-	-	-	-	-	-
									26	26	26	49

Notes:

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-21**  
**ASH LANDFILL**  
**SENECA ARMY DEPOT**  
**ROMULUS, NEW YORK**

Parameter	Source: Date:	Galson	Galson	Galson	Galson	Galson	NET	NET	NET	NET	NET	NET
		Aug 1987	Oct 1987	Mar 1989	Sept 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	Dec 1990		
<b>VLATILE ORGANICS</b>	<b>Units</b>											
ethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
m	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
oride	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
ane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
e Chloride	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
chloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	2.0
loroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
oroethene	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
ethene	ug/L	-	-	-	-	-	<1.0	<5.0	1.0	<5.0	1.0	3.0
roethene	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
luoromethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	5.0
2--Dichloroethene	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	5.0
Dichloroethene	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<5.0	<1.0	<10
loroethene (total)	ug/L	-	-	-	-	-	<1.0	<5.0	-	<5.0	-	-

**Notes:**

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data



**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-21**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET	NET	NET	NET	NET	NET	GTC	ES	ES	ES
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993
<b>VOLATILE ORGANICS</b>											
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
propane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
acetylene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
chloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,1-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,2-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
perchloroethane	ug/L	2.0	<1.0	2.5	2.4	2.3	2.3	5U	-	10U	3J
1,1,1-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	6J
1,1,2-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,1,1,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,1,2,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,1,1,2,2-pentachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,1,1,2,2,2-hexachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	-	10U	10U
1,1,1,2,2,2-hexachloroethane (total)	ug/L	-	-	-	-	-	-	17	-	-	13

**Notes:**

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-22**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source Date:	Galson		Galson		Galson		Galson		Galson		Galson		Galson		
		Aug 1987	OCT 1987	Mar 1989	Sept 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	Dec 1990	NET	NET	NET	NET	NET	NET
<b>VOLATILE ORGANICS</b>																
ethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
oride	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
e Chloride	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ichloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
loroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ethene	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
roethene	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
luoromethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Dichloroethene	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethene	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
loroethene (total)	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**

Galson = Galson Laboratories  
NET = National Environmental Testing  
GTC = General Testing Corporation  
ES = Engineering-Science, Inc. (PACE Laboratory)  
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-22**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET	NET	NET	NET	NET	NET	GTC	ES	ES	ES	ES
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993	
<b>DLATILE ORGANICS</b>												
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,2-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2-tetrachloroethane	ug/L	<10	<1.0	1.3	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,2,2-tetrachloroethane	ug/L	8.0	<1.0	3.0	4.4	<1.0	<1.0	5.2	5.0	3J	5J	5J
1,1,1,2,2-pentachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2,2,2-hexachloroethane	ug/L	100	74.9	69.3	73.9	98.9	98.9	89	89	79	87	87
1,1,1-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,2-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	5U	5U	5U	5U	5U
1,1,1,2-tetrachloroethane	ug/L	3.0	<1.0	1.4	1.7	2.4	2.4	5U	5U	5U	5U	5U
Dichloroethane	ug/L	-	-	-	-	-	-	150	-	-	-	-
1,1,1,2,2,2-hexachloroethane (total)	ug/L	-	-	-	-	-	-	-	140	140	140	140

Notes:

- Galsion = Galsion Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-23**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source Date	NET										GTC	ES	ES	ES		
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993						
<b>VLATILE ORGANICS</b>																	
methane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
benzene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
toluene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
ethylbenzene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
o-xylene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
m-xylene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
p-xylene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,2-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1-dichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,2-trichloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,2,2-tetrachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2,2-pentachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
1,1,1,2,2,2-hexachloroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U
total	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**

- Galsion = Galsion Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-24**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	Galson		Galson		Galson		Galson		Galson		Galson		NET	NET	NET
		Aug 1987	OCT 1987	Mar 1989	Sept 1989	Mar 1989	Sept 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	Dec 1990				
<b>VLATILE ORGANICS</b>																
ethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
propane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
butane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
pentane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1-Dichloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,2-Dichloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1,1-Trichloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1,1,2,2-Pentachloroethane	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0
1,1,1,2,2-Pentachloroethane (total)	ug/L	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	<1.0

Notes:

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL PT-24**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET 1991		NET 1991		NET 1992		NET 1992		GTC 1992		ES 1993		ES 1993		
		June	Sept	Dec	Mar	June	Sept	Dec	Jan	April	July	ES	ES			
<b>DLATILE ORGANICS</b>																
ethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
m	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
bride	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
ane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
e Chloride	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
chloroethane	ug/L	1.0	<1.0	126	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
loroethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
loroethene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
roethene	ug/L	8.0	8.6	2.8	4.4	6.2	6.7	7.0	6J	6.7	7.0	7.0	5J	6J	ES	
luoromethane	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
2-- Dichloroethene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
Dichloroethene	ug/L	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5U	10U	10U	10U	10U	ES	
loroethene (total)	ug/L	-	-	-	-	-	110	-	-	110	100	-	-	-	99	

Notes:

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL MW-28**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source:	Galson	Galson	Galson	Galson	Galson	Galson	NET	NET	NET	NET	NET
	Date:	Aug 1987	OCT 1987	Mar 1989	Mar 1989	Sept 1989	Jan 1990	Mar 1990	June 1990	Sept 1990	Dec 1990	NET
VOLATILE ORGANICS	Units											
	Chloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1-Dichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,2-Dichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,1-Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,2-Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,1,2-Tetrachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,2,2-Tetrachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,1,2,2-Pentachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,1,2,2-Pentachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,1,2,2-Pentachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10
	1,1,1,2,2-Pentachloroethane (total)	ug/L	-	-	-	-	-	<1.0	<5.0	<1.0	<1.0	<10

Notes:

- Galson = Galson Laboratories
- NET = National Environmental Testing
- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data





**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL MW-29**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	Galson						NET	NET	NET	NET	NET
		Aug 1987	CCT 1987	Mar 1989	Sept 1989	Jan 1990	Mar 1990					
<b>HALOGENATED ALIPHATIC ORGANICS</b>												
1,1,1-Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1,2-Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1-Dichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,2-Dichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1,1,2-Tetrachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1,2,2-Tetrachloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1,1-Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1,2-Trichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,1-Dichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
1,2-Dichloroethane	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10
Dichloroethane (total)	ug/L	-	-	-	-	-	<1.0	<5.0	<5.0	<5.0	<5.0	<10

**Notes:**

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- = No Data

**SUMMARY OF HISTORICAL DATA FOR MONITORING WELL MW-29**

ASH LANDFILL  
SENECA ARMY DEPOT  
ROMULUS, NEW YORK

Parameter	Source: Date:	NET		NET		NET		NET		GTC		ES		ES		
		June 1991	Sept 1991	Dec 1991	Mar 1992	June 1992	Sept 1992	Dec 1992	Jan 1993	April 1993	July 1993	ES	ES			
VOLATILE ORGANICS	Units															
	methane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	ethylene	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	acetylene	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	ethane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	propane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	isobutane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	butane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	pentane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	hexane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	heptane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	octane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	nonane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	decane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
	undecane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U
dodecane	<10	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	5U	10U	10U	10U	10U	10U	
total		-	-	-	-	-	-	-	-	67	70	78	97	-	-	

Notes:

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- GTC = General Testing Corporation
- ES = Engineering-Science, Inc. (PACE Laboratory)
- = No Data



**Section 2.0**  
**Indicator Parameters**

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX SITE DATE SAMPLED ES ID LAB ID UNITS	WATER ASH 11/19/93 PT-10 *	WATER ASH 11/20/93 PT-11 *	WATER ASH 11/23/93 PT-12 *	WATER ASH 11/10/93 PT-15 *	WATER ASH 11/21/93 PT-16 *	WATER ASH 11/22/93 PT-17 *	CONCENTRATION	UNITS
Total Organic Carbon	mg/L	7.46	7.34	7.06	7.42	7.19	7.16	6.91	6
pH	units	57	47	1 U	B	13	25	36	6
Chloride	mg/L	20	47	170	59	24	45	240	36
Sulfate	mg/L	820	840	960	590	610	710	1400	240
Specific Conductance	umhos/cm	0.05 U	0.39	1.1	0.4	0.05 U	0.28	0.1	1400
Nitrate+Nitrite	mg/L as N	0.02 U	0.05	0.06	0.02 U	0.03	0.02 U	0.1	0.1
Total Organic Halides	mg/L								1.5

**Notes:**

(1) \* The Lab ID is different for each parameter

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
INDICATOR ANALYSIS RESULTS**

AL40MMSK.WK3	PARAMETER	MATRIX SITE DATE SAMPLED ES ID LAB ID UNITS	WATER ASH 11/19/93 PT-19 *	WATER ASH 11/23/93 PT-20 *	WATER ASH 12/05/93 PT-21 *	WATER ASH 11/23/93 PT-22 *	WATER ASH 11/10/93 PT-23 *	WATER ASH 11/21/93 PT-24 *
Total Organic Carbon	mg/L	2	7.30	7.07	7.49	7.13	7.38	7.17
pH	units	2	47	27	84	9	15	13
Chloride	mg/L	2	64	130	140	180	33	47
Sulfate	mg/L	2	830	940	990	1300	630	650
Specific Conductance	umhos/cm	2	0.21	0.09	0.41	0.06	0.11	0.33
Nitrate+Nitrite	mg/L as N	2	0.02	0.02	0.05	0.17	0.03	0.04
Total Organic Halides	mg/L	2						

Notes:

(1) \* The Lab ID is different for each parameter

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX SITE DATE SAMPL'D ES ID LAB ID UNITS	WATER ASH 12/03/93 PT-26 *	WATER ASH 11/21/93 MW-27 *	WATER ASH 12/05/93 MW-27 *	WATER ASH 11/21/93 MW-28 *	WATER ASH 12/01/93 MW-29 *	WATER ASH 11/22/93 MW-30 *
Total Organic Carbon	mg/L	7.51	7.42	7.42	7.20	7.20	7.25
pH	units	5	3	4	2	2	1
Chloride	mg/L	50	34	35	20	13	28
Sulfate	mg/L	95	72	62	29	61	57
Specific Conductance	umhos/cm	850	600	710	610	750	760
Nitrate+Nitrite	mg/L as N	0.6	0.15	0.05 U	0.3	0.51	0.26
Total Organic Halides	mg/L	0.02 U	0.08	0.05	0.09	0.02 U	0.02 U

Notes:  
(1) \* The Lab ID is different for each parameter

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
INDICATOR ANALYSIS RESULTS**

AL4QMMSC.WK3	PARAMETER	MATRIX SITE	DATE SAMPLED	WATER ASH	WATER ASH	WATER ASH	WATER ASH	WATER ASH	WATER ASH
	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID
	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID
	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
Total Organic Carbon	mg/L	3	7.22	1	7.17	1 U	6	6	1
pH	units				42	7.29	7.99	7.37	7.34
Chloride	mg/L		95		41	45	15	27	10
Sulfate	mg/L		50		41	40	100	30	33
Specific Conductance	umhos/cm		850		580	720	820	550	560
Nitrate+Nitrite	mg/L as N		0.55		0.31	0.17	0.05 U	0.62	0.05
Total Organic Halides	mg/L		0.03		0.02 U	0.02 U	0.02 U	0.02 U	0.02

Notes:  
(1) \* The Lab ID is different for each parameter



**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
INDICATOR ANALYSIS RESULTS**

AL40MMSC.WK3	PARAMETER	MATRIX SITE	DATE SAMPL'D	WATER ASH	WATER ASH	WATER ASH	WATER ASH	WATER ASH	WATER ASH
		ES ID	LAB ID	ES ID	LAB ID	ES ID	LAB ID	ES ID	LAB ID
	UNITS								
Total Organic Carbon	mg/L			1 U	2	3	3	3	4
pH	units			7.43	7.27	7.64	7.55	7.23	7.44
Chloride	mg/L			6	30	11	3	19	18
Sulfate	mg/L			59	42	43	22	31	34
Specific Conductance	umhos/cm			560	660	680	550	830	780
Nitrate+ Nitrite	mg/L as N			0.13	0.42	0.05 U	0.08	1.3	13
Total Organic Halides	mg/L			0.02 U	0.02	0.03	0.02 U	0.02 U	0.02 U

Notes:  
(1) \* The Lab ID is different for each parameter

**ASH LANDFILL FOURTH QUARTER 1993 MONITORING  
INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX SITE DATE SAMPL'D ES ID	WATER ASH PT - 18R *	(PT - 18 Rinsate)	WATER ASH MW-90 *	(Duplicate of PT - 18)	WATER ASH PT - 20R *	(PT - 20 Rinsate)	WATER ASH PT - 9 *	(Duplicate of PT - 20)
Total Organic Carbon		5		5		1 U		8	
pH		6.92		6.92		6.83		7.06	
Chloride		1 U		37		13		98	
Sulfate		1		260		1		140	
Specific Conductance		830		1400		9.5		960	
Nitrate+Nitrite		0.05 U		0.13		0.05 U		0.1	
Total Organic Halides		0.05		0.42		0.02 U		0.1	

Notes:  
(1) \* The Lab ID is different for each parameter

Field Identification: PT15

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.40	0.05	38384-001	11/17/93	526	353.2/1
pH (units)	7.42		38384-017	11/11/93	244	150.1/1
Chloride (mg/L)	8	1	38384-025	11/19/93	553	325.1/1
Sulfate (mg/L)	59	1	38384-025	11/18/93	541	300.0/1
Specific Conductance (umhos/cm)	590		38384-025	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	BDL	1	38384-033	11/17/93	806	415.1/1

Field Identification: MW42D

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.08	0.05	38384-002	11/17/93	526	353.2/1
pH (units)	7.55		38384-018	11/11/93	244	150.1/1
Chloride (mg/L)	3	1	38384-026	11/19/93	553	325.1/1
Sulfate (mg/L)	22	1	38384-026	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	550		38384-026	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	3	1	38384-034	11/17/93	806	415.1/1

Field Identification: MW37

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.20	0.05	38384-003	11/17/93	526	353.2/1
pH (units)	7.63		38384-019	11/11/93	244	150.1/1
Chloride (mg/L)	56	1	38384-027	11/19/93	553	325.1/1
Sulfate (mg/L)	41	1	38384-027	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	780		38384-027	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	2	1	38384-035	11/17/93	806	415.1/1

Field Identification: AMW41D

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38384-004	11/17/93	526	353.2/1
pH (units)	7.64		38384-020	11/11/93	244	150.1/1
Chloride (mg/L)	11	1	38384-028	11/19/93	553	325.1/1
Sulfate (mg/L)	43	1	38384-028	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	680		38384-028	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	2	1	38384-036	11/17/93	806	415.1/1

500001



Field Identification: AMW39

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.42	0.05	38384-005	11/17/93	526	353.2/1
pH (units)	7.27		38384-022	11/11/93	244	150.1/1
Chloride (mg/L)	30	1	38384-029	11/19/93	553	325.1/1
Sulfate (mg/L)	42	1	38384-029	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	660		38384-029	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	2	1	38384-037	11/17/93	806	415.1/1

Field Identification: APT19

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.21	0.05	38384-006	11/17/93	526	353.2/1
pH (units)	7.30		38384-021	11/11/93	244	150.1/1
Chloride (mg/L)	47	1	38384-030	11/19/93	553	325.1/1
Sulfate (mg/L)	64	1	38384-030	11/18/93	541	300.0/1
Specific Conductance (umhos/cm)	830		38384-030	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	2	1	38384-038	11/17/93	806	415.1/1

Field Identification: MW40

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.13	0.05	38384-007	11/17/93	526	353.2/1
pH (units)	7.43		38384-023	11/11/93	244	150.1/1
Chloride (mg/L)	6	1	38384-031	11/19/93	553	325.1/1
Sulfate (mg/L)	59	1	38384-031	11/18/93	541	300.0/1
Specific Conductance (umhos/cm)	560		38384-031	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	BDL	1	38384-039	11/17/93	806	415.1/1

Field Identification: PT23

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.11	0.05	38384-008	11/17/93	526	353.2/1
pH (units)	7.38		38384-024	11/11/93	244	150.1/1
Chloride (mg/L)	15	1	38384-032	11/19/93	553	325.1/1
Sulfate (mg/L)	33	1	38384-032	11/18/93	541	300.0/1
Specific Conductance (umhos/cm)	630		38384-032	11/12/93	178	120.1/1
Total Organic Carbon (mg/L)	1	1	38384-040	11/17/93	806	415.1/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500002



Field Identification: PT10

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38516-001	11/23/93	529	353.2/1
pH (units)	7.46		38516-002	10/20/93	247	150.1/1
Total Organic Carbon (mg/L)	6	1	38516-005	11/29/93	812	415.1/1
Chloride (mg/L)	57	1	38516-006	11/24/93	556	325.1/1
Sulfate (mg/L)	20	1	38516-006	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	820		38516-006	11/22/93	179	120.1/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500003

Field Identification: PT11

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Sulfate (mg/L)	47	1	38533-001	11/24/93	545	300.0/1
Total Organic Carbon (mg/L)	3	1	38533-010	11/29/93	812	415.1/1
pH (units)	7.34		38533-022	11/23/93	250	150.1/1
Chloride (mg/L)	47	1	38533-028	11/24/93	556	325.1/1
Sulfate (mg/L)	140	10	38533-028	11/30/93	546	300.0/1
Specific Conductance (umhos/cm)	840		38533-028	11/24/93	180	120.1/1
Nitrate + Nitrite (mg/L as N)	0.39	0.05	38533-034	12/02/93	531	353.2/1

Field Identification: MW27

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38533-011	11/29/93	812	415.1/1
pH (units)	7.42		38533-023	11/23/93	250	150.1/1
Chloride (mg/L)	34	1	38533-029	11/24/93	556	325.1/1
Sulfate (mg/L)	72	1	38533-029	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	600		38533-029	11/24/93	180	120.1/1
Nitrate + Nitrite (mg/L as N)	0.15	0.05	38533-035	12/02/93	531	353.2/1

Field Identification: APT16

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	1	1	38533-012	11/29/93	812	415.1/1
pH (units)	7.19		38533-024	11/23/93	250	150.1/1
Chloride (mg/L)	13	1	38533-030	11/24/93	556	325.1/1
Sulfate (mg/L)	24	1	38533-030	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	610		38533-030	11/24/93	180	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38533-036	12/02/93	531	353.2/1

Field Identification: APT24

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38533-013	11/29/93	813	415.1/1
pH (units)	7.17		38533-025	11/23/93	250	150.1/1
Chloride (mg/L)	13	1	38533-031	11/24/93	556	325.1/1
Sulfate (mg/L)	47	1	38533-031	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	650		38533-031	11/24/93	180	120.1/1
Nitrate + Nitrite (mg/L as N)	0.33	0.05	38533-037	12/02/93	531	353.2/1

500004



Field Identification: AMW28

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38533-014	11/29/93	812	415.1/1
pH (units)	7.20		38533-026	11/23/93	250	150.1/1
Chloride (mg/L)	20	1	38533-032	11/24/93	556	325.1/1
Sulfate (mg/L)	29	1	38533-032	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	610		38533-032	11/24/93	180	120.1/1
Nitrate + Nitrite (mg/L as N)	0.30	0.05	38533-038	12/02/93	531	353.2/1

Field Identification: AMW38D

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	1	1	38533-015	11/29/93	812	415.1/1
pH (units)	7.34		38533-027	11/23/93	250	150.1/1
Chloride (mg/L)	10	1	38533-033	11/24/93	556	325.1/1
Sulfate (mg/L)	33	1	38533-033	11/24/93	545	300.0/1
Specific Conductance (umhos/cm)	560		38533-033	11/24/93	180	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38533-039	12/02/93	531	353.2/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500005



# REPORT OF LABORATORY ANALYSIS

PACE Interregional-New England  
 P.O. Box 2130  
 One Lafayette Road  
 Hampton, NH 03842

December 09, 1993  
 PACE Project Number: 131117500  
 WPPLAB5277

Attn:

Client Reference: N31111524 SEN10

PACE Sample Number: 97 0105425  
 Date Collected: 11/10/93  
 Date Received: 11/16/93

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>PT15</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>
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INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/03/93
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PACE Sample Number: 97 0105433  
 Date Collected: 11/10/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-10

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>MW42D</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>
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INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/03/93
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December 09, 1993  
 PACE Project Number: 131117500

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Client Reference: N31111524 SEN10

PACE Sample Number: 97 0105441  
 Date Collected: 11/10/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-11  
 Parameter Units MDL MW37 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 ND SW846 9020 12/03/93

PACE Sample Number: 97 0105450  
 Date Collected: 11/09/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-12  
 Parameter Units MDL MW41D ASH METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.03 SW846 9020 12/03/93

PACE Sample Number: 97 0105468  
 Date Collected: 11/09/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-13  
 Parameter Units MDL PT19 ASH METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.02 SW846 9020 12/03/93

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December 09, 1993  
 PACE Project Number: 131117500

Client Reference: N31111524 SEN10

PACE Sample Number: 97 0105476  
 Date Collected: 11/09/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-14  
 Parameter Units MDL MW39 ASH METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.02 SW846 9020 12/06/93

PACE Sample Number: 97 0105484  
 Date Collected: 11/10/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-15  
 Parameter Units MDL MW40 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 ND SW846 9020 12/06/93

PACE Sample Number: 97 0105492  
 Date Collected: 11/10/93  
 Date Received: 11/16/93  
 Client Sample ID: 38384-16  
 Parameter Units MDL PT23 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.03 SW846 9020 12/06/93

December 09, 1993  
 PACE Project Number: 131117500

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Client Reference: N31111524 SEN10

PACE Sample Number: 97 0110496  
 Date Collected: 11/19/93  
 Date Received: 11/24/93  
 Client Sample ID: PT-10  
 Parameter Units MDL 38516-7 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 ND SW846 9020 12/06/93

PACE Sample Number: 97 0110500  
 Date Collected: 11/20/93  
 Date Received: 11/24/93  
 Client Sample ID: PT-11  
 Parameter Units MDL 38533-16 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.05 SW846 9020 12/06/93

PACE Sample Number: 97 0110518  
 Date Collected: 11/22/93  
 Date Received: 11/24/93  
 Client Sample ID: MW-27  
 Parameter Units MDL 38533-17 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.08 SW846 9020 12/06/93

December 09, 1993  
 PACE Project Number: 131117500

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Client Reference: N31111524 SEN10

PACE Sample Number: 97 0110526  
 Date Collected: 11/21/93  
 Date Received: 11/24/93  
 Client Sample ID: PT-16  
 Parameter Units MDL 38533-18 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.03 SW846 9020 12/06/93

PACE Sample Number: 97 0110534  
 Date Collected: 11/21/93  
 Date Received: 11/24/93  
 Client Sample ID: PT-24  
 Parameter Units MDL 38533-19 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.04 SW846 9020 12/06/93

PACE Sample Number: 97 0110542  
 Date Collected: 11/21/93  
 Date Received: 11/24/93  
 Client Sample ID: MW-28  
 Parameter Units MDL 38533-20 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.09 SW846 9020 12/07/93

December 09, 1993  
 PACE Project Number: 131117500

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Client Reference: N31111524 SEN10

PACE Sample Number: 97 0110550  
 Date Collected: 11/21/93  
 Date Received: 11/24/93  
 Client Sample ID: MW-38D  
 Parameter Units MDL 38533-21 METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 ND SW846 9020 12/07/93

PACE Sample Number: 97 0110763  
 Date Collected: 11/21/93  
 Date Received: 11/24/93  
 Client Sample ID: PT-24  
 Parameter Units MDL 38533-19 MS METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.14 SW846 9020 12/07/93

PACE Sample Number: 97 0110771  
 Date Collected: 11/21/93  
 Date Received: 11/24/93  
 Client Sample ID: PT-24  
 Parameter Units MDL 38533-19 MSD METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen mg/L 0.02 0.04 SW846 9020 12/07/93

These data have been reviewed and are approved for release.

Frances P. McConahy  
 Project Manager

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FOOTNOTES  
for pages 1 through 6

December 09, 1993  
PACE Project Number: 131117500

Client Reference: N31111524 SEN10

MDL Method Detection Limit  
ND Not detected at or above the MDL.

Field Identification: APT20

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38548-013	11/29/93	812	415.1/1
pH (units)	7.07		38548-033	11/24/93	251	150.1/1
Chloride (mg/L)	27	1	38548-043	12/02/93	557	325.1/1
Sulfate (mg/L)	130	10	38548-043	12/01/93	548	300.0/1
Specific Conductance (umhos/cm)	940		38548-043	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.09	0.05	38548-053	12/02/93	531	353.2/1

Field Identification: APT9

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	8	1	38548-014	11/29/93	812	415.1/1
pH (units)	7.06		38548-034	11/24/93	251	150.1/1
Chloride (mg/L)	98	1	38548-044	12/02/93	557	325.1/1
Sulfate (mg/L)	140	10	38548-044	12/01/93	548	300.0/1
Specific Conductance (umhos/cm)	960		38548-044	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.1	0.05	38548-054	12/02/93	531	353.2/1

Field Identification: APT22

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38548-015	12/06/93	814	415.1/1
pH (units)	7.13		38548-035	11/24/93	251	150.1/1
Chloride (mg/L)	9	1	38548-045	12/02/93	557	325.1/1
Sulfate (mg/L)	180	10	38548-045	12/01/93	548	300.0/1
Specific Conductance (umhos/cm)	1300		38548-045	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.06	0.05	38548-055	12/02/93	531	353.2/1

Field Identification: APT12

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38548-016	12/06/93	814	415.1/1
pH (units)	7.06		38548-036	11/24/93	251	150.1/1
Chloride (mg/L)	BDL	1	38548-046	12/02/93	557	325.1/1
Sulfate (mg/L)	170	10	38548-046	12/01/93	548	300.0/1
Specific Conductance (umhos/cm)	960		38548-046	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	1.1	0.05	38548-056	12/02/93	531	353.2/1

500001

Field Identification: APT20R

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	BDL	1	38548-017	12/06/93	814	415.1/1
pH (units)	6.83		38548-037	11/24/93	251	150.1/1
Chloride (mg/L)	13	1	38548-047	12/02/93	557	325.1/1
Sulfate (mg/L)	1	1	38548-047	11/30/93	547	300.0/1
Specific Conductance (umhos/cm)	9.5		38548-047	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38548-057	12/02/93	531	353.2/1

Field Identification: AMW34

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	BDL	1	38548-018	12/06/93	814	415.1/1
pH (units)	7.29		38548-038	11/24/93	251	150.1/1
Chloride (mg/L)	45	1	38548-048	12/02/93	557	325.1/1
Sulfate (mg/L)	40	1	38548-048	11/30/93	547	300.0/1
Specific Conductance (umhos/cm)	720		38548-048	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.17	0.05	38548-058	12/02/93	531	353.2/1

Field Identification: AMW30

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	1	1	38548-019	12/06/93	814	415.1/1
pH (units)	7.25		38548-039	11/24/93	251	150.1/1
Chloride (mg/L)	28	1	38548-049	12/02/93	557	325.1/1
Sulfate (mg/L)	57	1	38548-049	11/30/93	547	300.0/1
Specific Conductance (umhos/cm)	760		38548-049	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.26	0.05	38548-059	12/02/93	531	353.2/1

Field Identification: AMW31

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	BDL	1	38548-020	12/06/93	814	415.1/1
pH (units)	7.27		38548-040	11/24/93	251	150.1/1
Chloride (mg/L)	26	1	38548-050	12/02/93	557	325.1/1
Sulfate (mg/L)	31	1	38548-050	11/30/93	547	300.0/1
Specific Conductance (umhos/cm)	660		38548-050	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.55	0.05	38548-060	12/02/93	531	353.2/1

500002



Field Identification: APT25

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	BDL	1	38548-021	12/06/93	814	415.1/1
pH (units)	7.20		38548-041	11/24/93	251	150.1/1
Chloride (mg/L)	32	1	38548-051	12/02/93	557	325.1/1
Sulfate (mg/L)	32	1	38548-051	11/30/93	547	300.0/1
Specific Conductance (umhos/cm)	580		38548-051	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	1.1	0.05	38548-061	12/02/93	531	353.2/1

Field Identification: APT17

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	BDL	1	38548-022	12/06/93	814	415.1/1
pH (units)	7.16		38548-042	11/24/93	251	150.1/1
Chloride (mg/L)	25	1	38548-052	12/02/93	557	325.1/1
Sulfate (mg/L)	45	1	38548-052	11/30/93	547	300.0/1
Specific Conductance (umhos/cm)	710		38548-052	11/29/93	181	120.1/1
Nitrate + Nitrite (mg/L as N)	0.28	0.05	38548-062	12/02/93	531	353.2/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500000

Field Identification: MW33

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	1	1	38619-008	12/06/93	814	415.1/1
pH (units)	7.17		38619-020	12/03/93	255	150.1/1
Chloride (mg/L)	42	1	38619-026	12/06/93	560	325.1/1
Sulfate (mg/L)	41	1	38619-026	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	580		38619-026	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.31	0.05	38619-032	12/03/93	533	353.2/1

Field Identification: PT18

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	6	1	38619-009	12/06/93	814	415.1/1
pH (units)	6.91		38619-021	12/03/93	255	150.1/1
Chloride (mg/L)	36	1	38619-027	12/06/93	560	325.1/1
Sulfate (mg/L)	240	10	38619-027	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	1400		38619-027	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.10	0.05	38619-033	12/03/93	533	353.2/1

Field Identification: MW32

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38619-010	12/06/93	814	415.1/1
pH (units)	7.22		38619-022	12/03/93	255	150.1/1
Chloride (mg/L)	95	1	38619-028	12/06/93	560	325.1/1
Sulfate (mg/L)	50	1	38619-028	12/08/93	551	300.0/1
Specific Conductance (umhos/cm)	850		38619-028	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.55	0.05	38619-034	12/03/93	533	353.2/1

Field Identification: PT18R

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	5	1	38619-011	12/06/93	814	415.1/1
pH (units)	6.92		38619-023	12/03/93	255	150.1/1
Chloride (mg/L)	BDL	1	38619-029	12/06/93	560	325.1/1
Sulfate (mg/L)	1	1	38619-029	12/08/93	551	300.0/1
Specific Conductance (umhos/cm)	830		38619-029	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38619-035	12/03/93	533	353.2/1

500004

Field Identification: MW29

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38619-012	12/06/93	814	415.1/1
pH (units)	7.20		38619-024	12/03/93	255	150.1/1
Chloride (mg/L)	13	1	38619-030	12/06/93	560	325.1/1
Sulfate (mg/L)	61	1	38619-030	12/08/93	551	300.0/1
Specific Conductance (umhos/cm)	750		38619-030	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.51	0.05	38619-036	12/03/93	533	353.2/1

Field Identification: MW90

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	5	1	38619-013	12/06/93	814	415.1/1
pH (units)	6.92		38619-025	12/03/93	255	150.1/1
Chloride (mg/L)	37	1	38619-031	12/06/93	560	325.1/1
Sulfate (mg/L)	260	10	38619-031	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	1400		38619-031	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.13	0.05	38619-037	12/03/93	533	353.2/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500005



# REPORT OF LABORATORY ANALYSIS

PACE Interregional-New England  
P.O. Box 2130  
One Lafayette Road  
Hampton, NH 03842

December 15, 1993  
PACE Project Number: 131206502  
WPPLAB5324

Attn:

Client Reference: Seneca Army Depot SDG-SEN11

PACE Sample Number: 97 0112928  
Date Collected: 11/23/93  
Date Received: 12/04/93  
38548-23

Parameter                      Units                      MDL                      METHOD    DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      0.02                      SW846-9020    12/10/93

PACE Sample Number: 97 0112936  
Date Collected: 11/23/93  
Date Received: 12/04/93  
Client Sample ID: 38548-25

Parameter                      Units                      MDL                      METHOD    DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      0.17                      SW846-9020    12/10/93

Page 2

December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

PACE Sample Number: *PT 12* 97 0112944  
 Date Collected: 11/23/93  
 Date Received: 12/04/93  
 Client Sample ID: 38548-26

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen

mg/L                      0.02                      0.06                      SW846-9020                      12/10/93

PACE Sample Number: *PT 26R* 97 0112952  
 Date Collected: 11/23/93  
 Date Received: 12/04/93  
 Client Sample ID: 38548-27

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen

mg/L                      0.02                      ND                      SW846-9020                      12/10/93

PACE Sample Number: *1110034* 97 0112960  
 Date Collected: 11/22/93  
 Date Received: 12/04/93  
 Client Sample ID: 38548-28

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen

mg/L                      0.02                      ND                      SW846-9020                      12/09/93

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December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

PACE Sample Number:		97 0112979			
Date Collected:	<i>AMU-30</i>	11/22/93			
Date Received:		12/04/93			
Client Sample ID:		38548-29			
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>	

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	ND	SW846-9020	12/09/93

PACE Sample Number:		97 0112987			
Date Collected:	<i>AMU31</i>	11/22/93			
Date Received:		12/04/93			
Client Sample ID:		38548-30			
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>	

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	ND	SW846-9020	12/09/93

PACE Sample Number:		97 0112995			
Date Collected:	<i>PT25</i>	11/22/93			
Date Received:		12/04/93			
Client Sample ID:		38548-31			
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>	

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	ND	SW846-9020	12/09/93

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December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

PACE Sample Number: 97 0113002  
 Date Collected: 11/22/93  
 Date Received: 12/04/93  
 Client Sample ID: 38548-32

0717

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      ND                      SW846-9020                      12/09/93

PACE Sample Number: 97 0113010  
 Date Collected: 12/01/93  
 Date Received: 12/04/93  
 Client Sample ID: 38619-14

41133

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      ND                      SW846-9020                      12/10/93

PACE Sample Number: 97 0113029  
 Date Collected: 12/01/93  
 Date Received: 12/04/93  
 Client Sample ID: 38619-15

0718

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.20                      1.5                      SW846-9020                      12/10/93

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December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

PACE Sample Number: 97 0113037  
 Date Collected: *11/15/93* 12/01/93  
 Date Received: 12/04/93  
 Client Sample ID: 38619-16  
Parameter                      Units                      MDL                      METHOD    DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen

mg/L                      0.02                      0.03                      SW846-9020    12/10/93

PACE Sample Number: 97 0113045  
 Date Collected: *DT 18R* 12/01/93  
 Date Received: 12/04/93  
 Client Sample ID: 38619-17  
Parameter                      Units                      MDL                      METHOD    DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen

mg/L                      0.02                      0.05                      SW846-9020    12/10/93

PACE Sample Number: 97 0113053  
 Date Collected: *11/29* 12/01/93  
 Date Received: 12/04/93  
 Client Sample ID: 38619-18  
Parameter                      Units                      MDL                      METHOD    DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS  
 Total Organic Halogen

mg/L                      0.02                      ND                      SW846-9020    12/10/93



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December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

PACE Sample Number:			97 0113061		
Date Collected:			12/01/93		
Date Received:			12/04/93		
Client Sample ID:			38619-19		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.20	0.42	SW846-9020	12/10/93

PACE Sample Number:			97 0114289		
Date Collected:			11/23/93		
Date Received:			12/07/93		
Client Sample ID:			38548-34		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	0.10	SW846-9020	12/10/93

These data have been reviewed and are approved for release.

*Frances P. McConahy*  
 Frances P. McConahy  
 Project Manager



Field Identification: APT21

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38635-007	12/06/93	815	415.1/1
Chloride (mg/L)	84	1	38635-024	12/06/93	560	325.1/1
Sulfate (mg/L)	140	10	38635-024	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	990		38635-024	12/07/93	182	120.1/1

Field Identification: MW35D

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	6	1	38635-010	12/06/93	815	415.1/1
pH (units)	7.99		38635-021	12/04/93	256	150.1/1
Chloride (mg/L)	15	1	38635-027	12/06/93	560	325.1/1
Sulfate (mg/L)	100	1	38635-027	12/08/93	552	300.0/1
Specific Conductance (umhos/cm)	820		38635-027	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38635-032	12/08/93	535	353.2/1

Field Identification: MW36

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	6	1	38635-011	12/06/93	815	415.1/1
pH (units)	7.37		38635-022	12/04/93	256	150.1/1
Chloride (mg/L)	27	1	38635-028	12/06/93	560	325.1/1
Sulfate (mg/L)	30	1	38635-028	12/08/93	552	300.0/1
Specific Conductance (umhos/cm)	550		38635-028	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.62	0.05	38635-033	12/08/93	535	353.2/1

Field Identification: PT26

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	5	1	38635-012	12/06/93	815	415.1/1
pH (units)	7.51		38635-023	12/04/93	256	150.1/1
Chloride (mg/L)	50	1	38635-029	12/06/93	560	325.1/1
Sulfate (mg/L)	95	1	38635-029	12/08/93	552	300.0/1
Specific Conductance (umhos/cm)	850		38635-029	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.60	0.05	38635-034	12/08/93	535	353.2/1

500001

Field Identification: OMW28

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	5	1	38635-008	12/06/93	815	415.1/1
pH (units)	11.40		38635-019	12/04/93	256	150.1/1
Chloride (mg/L)	10	1	38635-025	12/06/93	560	325.1/1
Sulfate (mg/L)	130	10	38635-025	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	560		38635-025	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	0.83	0.05	38635-030	12/08/93	535	353.2/1

Field Identification: OMW29

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	4	1	38635-009	12/06/93	815	415.1/1
pH (units)	7.32		38635-020	12/04/93	256	150.1/1
Chloride (mg/L)	10	1	38635-026	12/06/93	560	325.1/1
Sulfate (mg/L)	160	10	38635-026	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	870		38635-026	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	1.4	0.05	38635-031	12/08/93	535	353.2/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500002

Field Identification: FHS

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38642-004	12/10/93	821	415.1/1
Chloride (mg/L)	19	1	38642-007	12/10/93	561	325.1/1
Sulfate (mg/L)	31	1	38642-007	12/08/93	552	300.0/1
Specific Conductance (umhos/cm)	830		38642-007	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	1.3	0.05	38642-010	12/08/93	535	353.2/1
pH (units)	7.23		38642-013	12/06/93	257	150.1/1

Field Identification: FHD

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38642-005	12/10/93	821	415.1/1
Chloride (mg/L)	14	1	38642-008	12/10/93	561	325.1/1
Sulfate (mg/L)	34	1	38642-008	12/08/93	552	300.0/1
Specific Conductance (umhos/cm)	780		38642-008	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38642-011	12/08/93	535	353.2/1
pH (units)	8.49		38642-014	12/06/93	257	150.1/1

Field Identification: BRN

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	4	1	38642-006	12/10/93	821	415.1/1
Chloride (mg/L)	18	1	38642-009	12/10/93	561	325.1/1
Sulfate (mg/L)	110	5	38642-009	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	880		38642-009	12/07/93	182	120.1/1
Nitrate + Nitrite (mg/L as N)	13	0.5	38642-012	12/08/93	535	353.2/1
pH (units)	7.44		38642-015	12/06/93	257	150.1/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500003

Field Identification: AMW27

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	4	1	38656-008	12/10/93	821	415.1/1
Chloride (mg/L)	35	1	38656-013	12/10/93	561	325.1/1
Sulfate (mg/L)	62	1	38656-013	12/08/93	552	300.0/1
Specific Conductance (umhos/cm)	710		38656-013	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	BDL	0.05	38656-018	12/08/93	535	353.2/1
pH (units)	7.42		38656-024	12/07/93	258	150.1/1

Field Identification: OMW16

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	4	1	38656-009	12/10/93	821	415.1/1
Chloride (mg/L)	3	1	38656-014	12/10/93	561	325.1/1
Sulfate (mg/L)	150	10	38656-014	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	720		38656-014	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	0.32	0.05	38656-019	12/08/93	535	353.2/1
pH (units)	7.26		38656-025	12/07/93	258	150.1/1

Field Identification: OMW23

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38656-010	12/10/93	821	415.1/1
Chloride (mg/L)	17	1	38656-015	12/10/93	561	325.1/1
Sulfate (mg/L)	260	10	38656-015	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	990		38656-015	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	0.22	0.05	38656-020	12/08/93	535	353.2/1
pH (units)	7.21		38656-026	12/07/93	258	150.1/1

Field Identification: OMW7

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38656-011	12/10/93	821	415.1/1
Chloride (mg/L)	2	1	38656-016	12/10/93	562	325.1/1
Sulfate (mg/L)	51	1	38656-016	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	530		38656-016	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	0.25	0.05	38656-021	12/08/93	535	353.2/1
pH (units)	7.35		38656-027	12/07/93	258	150.1/1

500004

Field Identification: OMW22

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	2	1	38656-012	12/10/93	821	415.1/1
Chloride (mg/L)	2	1	38656-017	12/10/93	562	325.1/1
Sulfate (mg/L)	140	10	38656-017	12/13/93	553	300.0/1
Specific Conductance (umhos/cm)	640		38656-017	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	0.18	0.05	38656-023	12/08/93	535	353.2/1
pH (units)	7.40		38656-029	12/07/93	258	150.1/1

Field Identification: APT21

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Nitrate + Nitrite (mg/L as N)	0.41	0.05	38656-022	12/08/93	535	353.2/1
pH (units)	7.49		38656-028	12/07/93	258	150.1/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500005

Field Identification: AMW30

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38668-006	12/13/93	821	415.1/1
Chloride (mg/L)	27	1	38668-011	12/10/93	561	325.1/1
Sulfate (mg/L)	25	1	38668-011	12/14/93	441	300.0/1
Specific Conductance (umhos/cm)	1000		38668-011	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	0.45	0.05	38668-016	12/08/93	535	353.2/1
pH (units)	7.02		38668-021	12/08/93	259	150.1/1

Field Identification: AMW1

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	4	1	38668-007	12/10/93	821	415.1/1
Chloride (mg/L)	4	1	38668-012	12/10/93	562	325.1/1
Sulfate (mg/L)	170	10	38668-012	12/14/93	441	300.0/1
Specific Conductance (umhos/cm)	700		38668-012	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	1.2	0.05	38668-017	12/08/93	535	353.2/1
pH (units)	7.16		38668-022	12/08/93	259	150.1/1

Field Identification: AMW13

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	3	1	38668-008	12/10/93	821	415.1/1
Chloride (mg/L)	11	1	38668-013	12/10/93	562	325.1/1
Sulfate (mg/L)	230	10	38668-013	12/14/93	441	300.0/1
Specific Conductance (umhos/cm)	990		38668-013	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	5.0	0.05	38668-018	12/08/93	535	353.2/1
pH (units)	7.04		38668-023	12/08/93	259	150.1/1

500006



Field Identification: AMW14

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	4	1	38668-009	12/10/93	821	415.1/1
Chloride (mg/L)	23	1	38668-014	12/10/93	562	325.1/1
Sulfate (mg/L)	240	10	38668-014	12/14/93	441	300.0/1
Specific Conductance (umhos/cm)	1100		38668-014	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	15	0.5	38668-019	12/08/93	535	353.2/1
pH (units)	7.17		38668-024	12/08/93	259	150.1/1

Field Identification: AMW15

Matrix: WATER

Parameter	Result	Reporting Limit	Lab No.	Date Analyzed	QC Batch	Method/Ref.
Total Organic Carbon (mg/L)	5	1	38668-010	12/10/93	821	415.1/1
Chloride (mg/L)	7	1	38668-015	12/10/93	562	325.1/1
Sulfate (mg/L)	400	10	38668-015	12/14/93	441	300.0/1
Specific Conductance (umhos/cm)	1400		38668-015	12/09/93	183	120.1/1
Nitrate + Nitrite (mg/L as N)	2.2	0.05	38668-020	12/08/93	535	353.2/1
pH (units)	7.18		38668-025	12/08/93	259	150.1/1

References: 1) 40 CFR Part 136, Friday, October 26, 1984

500007



# REPORT OF LABORATORY ANALYSIS

PACE Interregional-New England  
 P.O. Box 2130  
 One Lafayette Road  
 Hampton, NH 03842

December 17, 1993  
 PACE Project Number: 131207502  
 WPPLAB5337

Attn: Gretchen Franzheim

Client Reference: N31204502/N31206503

PACE Sample Number:  
 Date Collected:  
 Date Received:

*PT 21*

97 0114297  
 12/02/93  
 12/07/93  
 38635-13

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>
<u>INORGANIC ANALYSIS</u>					
INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	0.05	SW846 9020	12/13/93

PACE Sample Number:  
 Date Collected:  
 Date Received:  
 Client Sample ID:

*011430*

97 0114300  
 12/02/93  
 12/07/93  
 38635-14

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>
<u>INORGANIC ANALYSIS</u>					
INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/13/93

December 17, 1993  
PACE Project Number: 131207502

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Client Reference: N31204502/N31206503

PACE Sample Number:			97 0114319		
Date Collected:	<i>0.11629</i>		12/02/93		
Date Received:			12/07/93		
Client Sample ID:			38635-15		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>                    </u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	0.02	SW846 9020	12/13/93

PACE Sample Number:			97 0114327		
Date Collected:	<i>MU-35</i>		12/03/93		
Date Received:			12/07/93		
Client Sample ID:			38635-16		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>                    </u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/13/93

PACE Sample Number:			97 0114335		
Date Collected:	<i>MU-36</i>		12/03/93		
Date Received:			12/07/93		
Client Sample ID:			38635-17		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>                    </u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS					
Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/13/93

December 17, 1993  
 PACE Project Number: 131207502

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Client Reference: N31204502/N31206503

PACE Sample Number: 97 0114343  
 Date Collected: 12/03/93  
 Date Received: 12/07/93  
 Client Sample ID: 38635-18

*15-26*

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      ND                      SW846 9020                      12/13/93

PACE Sample Number: 97 0114351  
 Date Collected: 12/04/93  
 Date Received: 12/07/93  
 Client Sample ID: 38642-1

*FHS*

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      ND                      SW846 9020                      12/13/93

PACE Sample Number: 97 0114360  
 Date Collected: 12/04/93  
 Date Received: 12/07/93  
 Client Sample ID: 38642-2

*FHD*

Parameter                      Units                      MDL                      METHOD                      DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen                      mg/L                      0.02                      ND                      SW846 9020                      12/13/93

December 17, 1993  
 PACE Project Number: 131207502

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Client Reference: N31204502/N31206503

PACE Sample Number:			97 0114378		
Date Collected:	<i>BRW</i>		12/04/93		
Date Received:			12/07/93		
Client Sample ID:			38642-3		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>                    </u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/13/93
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PACE Sample Number:			97 0116176		
Date Collected:	<i>N.M.W.27</i>		12/05/93		
Date Received:			12/10/93		
Client Sample ID:			38656-3		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>                    </u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	0.05	SW846 9020	12/13/93
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PACE Sample Number:			97 0116184		
Date Collected:	<i>04/16/94</i>		12/05/93		
Date Received:			12/10/93		
Client Sample ID:			38656-4		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>                    </u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/14/93
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December 17, 1993  
 PACE Project Number: 131207502

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Client Reference: N31204502/N31206503

PACE Sample Number: *OMW23* 97 0116192  
 Date Collected: 12/05/93  
 Date Received: 12/10/93  
 Client Sample ID: 38656-5  
Parameter Units MDL METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen mg/L 0.02 0.02 SW846 9020 12/14/93

PACE Sample Number: *OMW7* 97 0116206  
 Date Collected: 12/05/93  
 Date Received: 12/10/93  
 Client Sample ID: 38656-6  
Parameter Units MDL METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen mg/L 0.02 0.06 SW846 9020 12/14/93

PACE Sample Number: *OMW22* 97 0116214  
 Date Collected: 12/05/93  
 Date Received: 12/10/93  
 Client Sample ID: 38656-7  
Parameter Units MDL METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen mg/L 0.02 ND SW846 9020 12/14/93

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December 17, 1993  
PACE Project Number: 131207502

Client Reference: N31204502/N31206503

PACE Sample Number:	<i>Ratee 30</i>	97 0116222		
Date Collected:		12/06/93		
Date Received:		12/10/93		
Client Sample ID:		38668-1		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	0.02	SW846 9020	12/14/93
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PACE Sample Number:	<i>AMU</i>	97 0116230		
Date Collected:		12/06/93		
Date Received:		12/10/93		
Client Sample ID:		38668-2		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	ND	SW846 9020	12/14/93
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PACE Sample Number:	<i>mu 13</i>	97 0116249		
Date Collected:		12/06/93		
Date Received:		12/10/93		
Client Sample ID:		38668-3		
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>METHOD</u>	<u>DATE ANALYZED</u>

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen	mg/L	0.02	0.04	SW846 9020	12/14/93
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December 17, 1993  
 PACE Project Number: 131207502

Client Reference: N31204502/N31206503

PACE Sample Number: 97 0116257  
 Date Collected: *AMU 14* 12/06/93  
 Date Received: 12/10/93  
 Client Sample ID: 38668-4  
 Parameter Units MDL METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen mg/L 0.02 0.04 SW846 9020 12/14/93

PACE Sample Number: 97 0116265  
 Date Collected: *AMU 15* 12/06/93  
 Date Received: 12/10/93  
 Client Sample ID: 38668-5  
 Parameter Units MDL METHOD DATE ANALYZED

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Total Organic Halogen mg/L 0.02 ND SW846 9020 12/14/93

These data have been reviewed and are approved for release.

*Frances P. McConahy*  
 Frances P. McConahy  
 Project Manager





## REPORT OF LABORATORY ANALYSIS

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Page 8    FOOTNOTES  
    for pages 1 through 7

December 17, 1993  
PACE Project Number: 131207502

Client Reference: N31204502/N31206503

MDL        Method Detection Limit  
ND         Not detected at or above the MDL.



**Section 3.0**  
**QA/QC Data**

- 3.1 Surrogate Spike Recoveries**
- 3.2 Matrix Spike/Matrix Spike Duplicates**
- 3.3 Method Blanks**
- 3.4 Laboratory Control Samples and  
Duplicates for Indicator Parameters**

### 3.1 Surrogate Spike Recoveries

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
	=====	=====	=====	=====	=====	=====
01	AMW28	101	100	98	0	0
02	AMW38D	104	105	104	0	0
03	AMW39	99	102	122 *	0	1
04	AMW41D	97	101	104	0	0
05	APT16	104	97	106	0	0
06	APT19	98	102	105	0	0
07	APT24	99	100	103	0	0
08	MW27	103	105	106	0	0
09	MW37	99	100	101	0	0
10	MW40	97	100	105	0	0
11	MW42D	98	102	101	0	0
12	PT10	102	104	102	0	0
13	PT11	100	98	104	0	0
14	PT15	100	100	94	0	0
15	PT23	99	103	104	0	0
16	TB1110	96	101	105	0	0
17	TB1119	104	107	108	0	0
18	TB1120	104	99	114	0	0
19	TB1121	105	98	108	0	0
20	TB1122	99	101	102	0	0
21	TB119	97	101	110	0	0
22	APT24MS	102	100	108	0	0
23	APT24MSD	103	97	108	0	0
24	LCSV1MS	97	99	102	0	0
25	LCSV2MS	103	104	91	0	0
26	LCSV3MS	101	101	113	0	0
27	PT10MS	99	100	104	0	0
28	PT10MSD	100	106	104	0	0
29	VBLKCN	100	103	101	0	0
30	VBLKCO	99	103	104	0	0

QC LIMITS  
 SMC1 (TOL) = Toluene-d8 ( 88-110)  
 SMC2 (BFB) = Bromofluorobenzene ( 86-115)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4( 76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

100001

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	VBLKED	97	99	102	0	0
02	VBLKEF	99	96	109	0	0

## QC LIMITS

SMC1 (TOL) = Toluene-d8 ( 88-110)

SMC2 (BFB) = Bromofluorobenzene ( 86-115)

SMC3 (DCE) = 1,2-Dichloroethane-d4( 76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN11

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	AMW30	104	97	100	0	0
02	AMW31	98	95	101	0	0
03	AMW34	106	99	98	0	0
04	APT12	103	98	97	0	0
05	APT17	98	96	99	0	0
06	APT20	95	91	100	0	0
07	APT20R	99	90	93	0	0
08	APT22	104	102	93	0	0
09	APT25	95	90	99	0	0
10	APT9	102	98	90	0	0
11	MW29	95	93	104	0	0
12	MW32	102	101	99	0	0
13	MW33	98	102	102	0	0
14	MW90	100 D	98 D	96 D	0 D	0
15	PT18	103 D	92 D	103 D	0 D	0
16	PT18R	92	96	91	0	0
17	TB1122	100	96	109	0	0
18	TB1123	100	93	98	0	0
19	TB121	96	98	93	0	0
20	LCSV1MS	98	96	96	0	0
21	MW33MS	101	100	99	0	0
22	MW33MSD	94	100	97	0	0
23	VBLKEG	99	98	104	0	0
24	VBLKEJ	97	93	99	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 ( 88-110)  
 SMC2 (BFB) = Bromofluorobenzene ( 86-115)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 ( 76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN12

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
	=====	=====	=====	=====	=====	=====
01	AMW27	102	100	101	0	0
02	APT21	101	103	100	0	0
03	MW35D	98	103	105	0	0
04	MW36	100	102	100	0	0
05	PT26	99	104	105	0	0
06	TB122	98	104	98	0	0
07	TB123	99	102	102	0	0
08	TB125	101	101	100	0	0
09	AMW27MS	100	100	102	0	0
10	AMW27MSD	99	100	102	0	0
11	LCSV1MS	100	101	110	0	0
12	LCSV1MSD	98	100	102	0	0
13	VBLKCD	99	101	96	0	0
14	VBLKCF	102	101	97	0	0

## QC LIMITS

SMC1 (TOL) = Toluene-d8 ( 88-110)

SMC2 (BFB) = Bromofluorobenzene ( 86-115)

SMC3 (DCE) = 1,2-Dichloroethane-d4( 76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out



### 3.2 Matrix Spike/Matrix Spike Duplicates

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEC

SAS No.:

SDG No.: SEN10

Matrix Spike - EPA Sample No.: BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	51.79	104	61-145
Trichloroethene	50.00	0	48.97	98	71-120
Benzene	50.00	0	51.09	102	76-127
Toluene	50.00	0	48.00	96	76-125
Chlorobenzene	50.00	0	49.82	100	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: Matrix Spike Blank LCSV1

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEC

SAS No.:

SDG No.: SEN10

Matrix Spike - EPA Sample No.: BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	44.98	90	61-145
Trichloroethene	50.00	0	50.96	102	71-120
Benzene	50.00	0	48.18	96	76-127
Toluene	50.00	0	48.85	98	76-125
Chlorobenzene	50.00	0	54.20	108	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: Matrix Spike Blank LCSV3

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix Spike - EPA Sample No.: BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	63.45	127	61-145
Trichloroethene	50.00	0	56.76	114	71-120
Benzene	50.00	0	60.83	122	76-127
Toluene	50.00	0	57.31	115	76-125
Chlorobenzene	50.00	0	52.78	106	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: Matrix Spike Blank LCSV2

100005

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix Spike - EPA Sample No.: APT24

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	47.48	95	61-145
Trichloroethene	50.00	4.249	56.04	104	71-120
Benzene	50.00	0	48.08	96	76-127
Toluene	50.00	0	48.70	97	76-125
Chlorobenzene	50.00	0	53.57	107	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.00	46.05	92	3	14	61-145
Trichloroethene	50.00	60.80	113	8	14	71-120
Benzene	50.00	50.22	100	4	11	76-127
Toluene	50.00	47.71	95	2	13	76-125
Chlorobenzene	50.00	55.35	111	4	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix Spike - EPA Sample No.: PT10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	57.86	116	61-145
Trichloroethene	50.00	0	50.86	102	71-120
Benzene	50.00	0	54.16	108	76-127
Toluene	50.00	0	54.11	108	76-125
Chlorobenzene	50.00	0	49.64	99	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.00	52.75	106	9	14	61-145
Trichloroethene	50.00	55.92	112	9	14	71-120
Benzene	50.00	54.62	109	1	11	76-127
Toluene	50.00	55.81	112	4	13	76-125
Chlorobenzene	50.00	52.41	105	6	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEC

SAS No.:

SDG No.: SEN11

Matrix Spike - EPA Sample No.: LCSV1MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	51.31	103	61-145
Trichloroethene	50.00	0	52.13	104	71-120
Benzene	50.00	0	50.76	102	76-127
Toluene	50.00	0	48.65	97	76-125
Chlorobenzene	50.00	0	55.54	111	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: Matrix Spike Blank is LCSV1MS

100005

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN11

Matrix Spike - EPA Sample No.: MW33

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	57.49	115	61-145
Trichloroethene	50.00	0	51.65	103	71-120
Benzene	50.00	0	51.31	103	76-127
Toluene	50.00	0	50.22	100	76-125
Chlorobenzene	50.00	0	56.58	113	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.00	51.58	103	11	14	61-145
Trichloroethene	50.00	51.23	102	1	14	71-120
Benzene	50.00	54.10	108	5	11	76-127
Toluene	50.00	48.11	96	4	13	76-125
Chlorobenzene	50.00	56.35	113	0	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:



## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN12

Matrix Spike - EPA Sample No.: AMW27

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	47.47	95	61-145
Trichloroethene	50.00	0	49.33	99	71-120
Benzene	50.00	0	50.07	100	76-127
Toluene	50.00	0	48.70	97	76-125
Chlorobenzene	50.00	0	52.36	105	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.00	46.34	93	2	14	61-145
Trichloroethene	50.00	50.93	102	3	14	71-120
Benzene	50.00	51.75	104	4	11	76-127
Toluene	50.00	50.06	100	3	13	76-125
Chlorobenzene	50.00	53.19	106	1	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEC

SAS No.:

SDG No.: SEN12

Matrix Spike - EPA Sample No.: BLANK

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	32.13	64	61-145
Trichloroethene	50.00	0	50.57	101	71-120
Benzene	50.00	0	50.76	102	76-127
Toluene	50.00	0	49.93	100	76-125
Chlorobenzene	50.00	0	54.25	108	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.00	45.79	92	36 *	14	61-145
Trichloroethene	50.00	49.24	98	3	14	71-120
Benzene	50.00	49.90	100	2	11	76-127
Toluene	50.00	47.96	96	4	13	76-125
Chlorobenzene	50.00	52.42	105	3	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 1 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: MSB DUPLICATES LCSV1MS/MSD

### 3.3 Method Blanks

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKCN
--------

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Lab File ID: C9575

Lab Sample ID: BC111693A

Date Analyzed: 11/16/93

Time Analyzed: 1139

GC Column: SP1000 ID: 2.00(mm)

Heated Purge: (Y/N) N

Instrument ID: CMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
=====				
01	AMW41D	38384-45	C9580	1454
02	APT19	38384-47	C9584	1735
03	MW37	38384-44	C9589	2031
04	MW40	38384-49	C9586	1846
05	MW42D	38384-42	C9577	1309
06	PT15	38384-41	C9576	1234
07	PT23	38384-50	C9587	1921
08	TB1110	38384-43	C9578	1344
09	TB119	38384-48	C9585	1810
10	LCSV1MS	LCC111693D	C9583	1700

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKCO
--------

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEC

SAS No.:

SDG No.: SEN10

Lab File ID: C9595

Lab Sample ID: BC111793A

Date Analyzed: 11/17/93

Time Analyzed: 1126

GC Column: SP1000 ID: 2.00(mm)

Heated Purge: (Y/N) N

Instrument ID: CMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMW39	38384-46	C9596	1201

COMMENTS:

100009

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKED

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Lab File ID: E5244

Lab Sample ID: BE112493A

Date Analyzed: 11/24/93

Time Analyzed: 1202

GC Column: 502.2 ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: EMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	PT10	38516-4	E5247	1353
02	TB1119	38516-3	E5246	1320
03	LCSV2MS	LCE112493D	E5253	1709
04	PT10MS	38516-4MS	E5248	1426
05	PT10MSD	38516-4MSD	E5249	1458

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKEF
--------

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Lab File ID: E5268

Lab Sample ID: BE112993A

Date Analyzed: 11/29/93

Time Analyzed: 1102

GC Column: 502.2 ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: EMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMW28	38533-7	E5279	1717
02	AMW38D	38533-8	E5280	1749
03	APT16	38533-5	E5273	1359
04	APT24	38533-6	E5274	1432
05	MW27	38533-3	E5271	1253
06	PT11	38533-1	E5269	1147
07	TB1120	38533-2	E5270	1221
08	TB1121	38533-9	E5281	1822
09	TB1122	38533-4	E5272	1327
10	APT24MS	38533-6MS	E5275	1505
11	APT24MSD	38533-6MSD	E5277	1611
12	LCSV3MS	LCE112993D	E5278	1643

COMMENTS:

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKCN

Lab Name: PACE NEW ENGLA Contract: NYASP  
 Lab Code: Case No.: SENEC SAS No.: SDG No.: SEN10  
 Matrix: (soil/water) WATER Lab Sample ID: BC111693A  
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: C9575  
 Level: (low/med) LOW Date Received:  
 Moisture: not dec. Date Analyzed: 11/16/93  
 Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	Q
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5 J
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	10 U
75-35-4	1,1-Dichloroethene	10 U
75-34-3	1,1-Dichloroethane	10 U
540-59-0	1,2-Dichloroethene (total)	10 U
67-66-3	Chloroform	10 U
107-06-2	1,2-Dichloroethane	10 U
78-93-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	10 U
56-23-5	Carbon Tetrachloride	10 U
75-27-4	Bromodichloromethane	10 U
78-87-5	1,2-Dichloropropane	10 U
10061-01-5	cis-1,3-Dichloropropene	10 U
79-01-6	Trichloroethene	10 U
124-48-1	Dibromochloromethane	10 U
79-00-5	1,1,2-Trichloroethane	10 U
71-43-2	Benzene	10 U
10061-02-6	trans-1,3-Dichloropropene	10 U
75-25-2	Bromoform	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	10 U
79-34-5	1,1,2,2-Tetrachloroethane	10 U
108-88-3	Toluene	10 U
108-90-7	Chlorobenzene	10 U
100-41-4	Ethylbenzene	10 U
100-42-5	Styrene	10 U
1330-20-7	Xylene (total)	10 U

100130



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKCO

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: BC111793A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: C9595

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/17/93

Column: SP1000 ID: 2.00 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKED

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: BE112493A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5244

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/24/93

Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKEF

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: BE112993A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5268

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/29/93

Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSV1MS

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: LCC111693D

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: C9583

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/16/93

Column: SP1000 ID: 2.00 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	52	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	49	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	51	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	48	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSV3MS

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: LCE112993D

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5278

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/29/93

Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	45	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	48	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	49	
108-90-7	Chlorobenzene	54	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PT10MS

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: 38516-4MS

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5248

Level: (low/med) LOW

Date Received: 11/20/93

Moisture: not dec.

Date Analyzed: 11/24/93

GC Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	58	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	54	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	54	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PT10MSD

Lab Name: PACE NEW ENGLA

Contract: NYASP

b Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: 38516-4MSD

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5249

Level: (low/med) LOW

Date Received: 11/20/93

Moisture: not dec.

Date Analyzed: 11/24/93

Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	53	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	56	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	55	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	56	
108-90-7	Chlorobenzene	52	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

APT24MS

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN10

Matrix: (soil/water) WATER

Lab Sample ID: 38533-6MS

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5275

Level: (low/med) LOW

Date Received: 11/23/93

% Moisture: not dec.

Date Analyzed: 11/29/93

GC Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	10	U
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	10	U
75-35-4	-----1,1-Dichloroethene	47	
75-34-3	-----1,1-Dichloroethane	10	U
540-59-0	-----1,2-Dichloroethene (total)	71	
67-66-3	-----Chloroform	10	U
107-06-2	-----1,2-Dichloroethane	10	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
75-27-4	-----Bromodichloromethane	10	U
78-87-5	-----1,2-Dichloropropane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
79-01-6	-----Trichloroethene	56	
124-48-1	-----Dibromochloromethane	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
71-43-2	-----Benzene	48	
10061-02-6	-----trans-1,3-Dichloropropene	10	U
75-25-2	-----Bromoform	10	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	10	U
79-34-5	-----1,1,2,2-Tetrachloroethane	10	U
108-88-3	-----Toluene	49	
108-90-7	-----Chlorobenzene	54	
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
1330-20-7	-----Xylene (total)	10	U

100217



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

APT24MSD

Lab Name: PACE NEW ENGLA	Contract: NYASP	
Lab Code:	Case No.: SENEC	SAS No.: SDG No.: SEN10
Matrix: (soil/water) WATER		Lab Sample ID: 38533-6MSD
Sample wt/vol: 5.00 (g/mL) ML		Lab File ID: E5277
Level: (low/med) LOW		Date Received: 11/23/93
% Moisture: not dec.		Date Analyzed: 11/29/93
GC Column: 502.2	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)		Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	10	U
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	10	U
75-35-4	-----1,1-Dichloroethene	46	
75-34-3	-----1,1-Dichloroethane	10	U
540-59-0	-----1,2-Dichloroethene (total)	67	
67-66-3	-----Chloroform	10	U
107-06-2	-----1,2-Dichloroethane	10	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
75-27-4	-----Bromodichloromethane	10	U
78-87-5	-----1,2-Dichloropropane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
79-01-6	-----Trichloroethene	61	
124-48-1	-----Dibromochloromethane	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
71-43-2	-----Benzene	50	
10061-02-6	-----trans-1,3-Dichloropropene	10	U
75-25-2	-----Bromoform	10	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	10	U
79-34-5	-----1,1,2,2-Tetrachloroethane	10	U
108-88-3	-----Toluene	48	
108-90-7	-----Chlorobenzene	55	
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
1330-20-7	-----Xylene (total)	10	U

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKCD
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Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code: Case No.: SENEK SAS No.: SDG No.: SEN12

Lab File ID: C9895 Lab Sample ID: BC120893A

Date Analyzed: 12/08/93 Time Analyzed: 1059

GC Column: SP1000 ID: 2.00(mm) Heated Purge: (Y/N) N

Instrument ID: CMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	APT21	38635-1	C9899	1325
02	MW35D	38635-4	C9902	1511
03	MW36	38635-5	C9908	1857
04	PT26	38635-6	C9906	1746
05	TB122	38635-2	C9907	1822
06	TB123	38635-3	C9901	1436

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKCF

Lab Name: PACE NEW ENGLA                      Contract: NYASP  
 Lab Code:                      Case No.: SENEK                      SAS No.:                      SDG No.: SEN12  
 Lab File ID:                      C9941                      Lab Sample ID: BC121393A  
 Date Analyzed:                      12/13/93                      Time Analyzed:                      1207  
 GC Column: SP1000                      ID: 2.00(mm)                      Heated Purge: (Y/N) N  
 Instrument ID:                      CMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMW27	38656-2	C9942	1242
02	TB125	38656-1	C9944	1352
03	AMW27MS	38656-2MS	C9943	1317
04	AMW27MSD	38656-2MSD	C9945	1427
05	LCSV1MS	LCC121393	C9946	1503
06	LCSV1MSD	LCC121393D	C9948	1613

REMARKS:

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKCD

b Name: PACE NEW ENGLA Contract: NYASP  
#b Code: Case No.: SENEC SAS No.: SDG No.: SEN12  
Matrix: (soil/water) WATER Lab Sample ID: BC120893A  
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: C9895  
Level: (low/med) LOW Date Received:  
Moisture: not dec. Date Analyzed: 12/08/93  
GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0  
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	Q
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	7 J
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	10 U
75-35-4	1,1-Dichloroethene	10 U
75-34-3	1,1-Dichloroethane	10 U
540-59-0	1,2-Dichloroethene (total)	10 U
67-66-3	Chloroform	10 U
107-06-2	1,2-Dichloroethane	10 U
78-93-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	10 U
56-23-5	Carbon Tetrachloride	10 U
75-27-4	Bromodichloromethane	10 U
78-87-5	1,2-Dichloropropane	10 U
10061-01-5	cis-1,3-Dichloropropene	10 U
79-01-6	Trichloroethene	10 U
124-48-1	Dibromochloromethane	10 U
79-00-5	1,1,2-Trichloroethane	10 U
71-43-2	Benzene	10 U
10061-02-6	trans-1,3-Dichloropropene	10 U
75-25-2	Bromoform	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	10 U
79-34-5	1,1,2,2-Tetrachloroethane	10 U
108-88-3	Toluene	10 U
108-90-7	Chlorobenzene	10 U
100-41-4	Ethylbenzene	10 U
100-42-5	Styrene	10 U
1330-20-7	Xylene (total)	10 U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBKCF

Job Name: PACE NEW ENGLA

Contract: NYASP

Job Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN12

Matrix: (soil/water) WATER

Lab Sample ID: BC121393A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: C9941

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 12/13/93

GC Column: SP1000 ID: 2.00 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AMW27MS

b Name: PACE NEW ENGLA

Contract: NYASP

Lab Code: Case No.: SENEK SAS No.: SDG No.: SEN12

Matrix: (soil/water) WATER Lab Sample ID: 38656-2MS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: C9943

Level: (low/med) LOW Date Received: 12/07/93

Moisture: not dec. Date Analyzed: 12/13/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	47	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	49	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	50	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	49	
108-90-7	Chlorobenzene	52	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AMW27MSD

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN12

Matrix: (soil/water) WATER

Lab Sample ID: 38656-2MSD

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: C9945

Level: (low/med) LOW

Date Received: 12/07/93

Moisture: not dec.

Date Analyzed: 12/13/93

GC Column: SP1000 ID: 2.00 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	46	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	52	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	53	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSV1MS

b Name: PACE NEW ENGLA

Contract: NYASP

Lab Code: Case No.: SENEK SAS No.: SDG No.: SEN12

Matrix: (soil/water) WATER Lab Sample ID: LCC121393

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: C9946

Level: (low/med) LOW Date Received:

Moisture: not dec. Date Analyzed: 12/13/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	32	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	51	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	54	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSV1MSD

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code: Case No.: SENEC SAS No.: SDG No.: SEN12

Matrix: (soil/water) WATER

Lab Sample ID: LCC121393D

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: C9948

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 12/13/93

GC Column: SP1000 ID: 2.00 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	46	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	49	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	50	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	48	
108-90-7	Chlorobenzene	52	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKEG

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN11

Lab File ID: E5296

Lab Sample ID: BE113093A

Date Analyzed: 11/30/93

Time Analyzed: 1218

GC Column: 502.2

ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: EMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	AMW30	38548-8	E5309	1910
02	AMW31	38548-9	E5310	1943
03	AMW34	38548-7	E5308	1837
04	APT12	38548-4	E5301	1448
05	APT17	38548-11	E5312	2048
06	APT20	38548-1	E5298	1309
07	APT20R	38548-5	E5302	1521
08	APT22	38548-3	E5300	1415
09	APT25	38548-10	E5311	2016
10	APT9	38548-2	E5299	1342
11	TB1122	38548-12	E5313	2121
12	TB1123	38548-6	E5307	1805

COMMENTS:

100005

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKEJ

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN11

Lab File ID: E5377

Lab Sample ID: BE120793A

Date Analyzed: 12/07/93

Time Analyzed: 1147

GC Column: 502.2 ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: EMS-HP

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW29	38619-6	E5386	1702
02	MW32	38619-4	E5384	1552
03	MW33	38619-1	E5380	1340
04	MW90	38619-7	E5387	1735
05	PT18	38619-3	E5379	1307
06	PT18R	38619-5	E5385	1629
07	TB121	38619-2	E5383	1519
08	LCSV1MS	LCE120793	E5392	2019
09	MW33MS	38619-1MS	E5381	1413
10	MW33MSD	38619-1MSD	E5382	1446

COMMENTS:

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKEG

b Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN11

Matrix: (soil/water) WATER

Lab Sample ID: BE113093A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5296

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 11/30/93

GC Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO. COMPOUND Q

74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKEJ

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEK

SAS No.:

SDG No.: SEN11

Matrix: (soil/water) WATER

Lab Sample ID: BE120793A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5377

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 12/07/93

GC Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSV1MS

.b Name: PACE NEW ENGLA                      Contract: NYASP  
 .ab Code:                      Case No.: SENEC                      SAS No.:                      SDG No.: SEN11  
 .atrix: (soil/water) WATER                      Lab Sample ID: LCE120793  
 .mple wt/vol:                      5.00 (g/mL) ML                      Lab File ID: E5392  
 .evel: (low/med) LOW                      Date Received: 12/02/93  
 .Moisture: not dec.                      Date Analyzed: 12/07/93  
 .ic Column: 502.2                      ID: 0.530 (mm)                      Dilution Factor: 1.0  
 .oil Extract Volume:                      (uL)                      Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	7	J
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	10	U
75-35-4	-----1,1-Dichloroethene	51	
75-34-3	-----1,1-Dichloroethane	10	U
540-59-0	-----1,2-Dichloroethene (total)	10	U
67-66-3	-----Chloroform	10	U
107-06-2	-----1,2-Dichloroethane	10	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
75-27-4	-----Bromodichloromethane	10	U
78-87-5	-----1,2-Dichloropropane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
79-01-6	-----Trichloroethene	52	
124-48-1	-----Dibromochloromethane	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
71-43-2	-----Benzene	51	
10061-02-6	-----trans-1,3-Dichloropropene	10	U
75-25-2	-----Bromoform	10	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	10	U
79-34-5	-----1,1,2,2-Tetrachloroethane	10	U
108-88-3	-----Toluene	49	
108-90-7	-----Chlorobenzene	56	
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
1330-20-7	-----Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW33MS

Lab Name: PACE NEW ENGLA

Contract: NYASP

Lab Code:

Case No.: SENEC

SAS No.:

SDG No.: SEN11

Matrix: (soil/water) WATER

Lab Sample ID: 38619-1MS

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: E5381

Level: (low/med) LOW

Date Received: 12/02/93

Moisture: not dec.

Date Analyzed: 12/07/93

GC Column: 502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	57	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	52	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	51	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	57	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW33MSD

b Name: PACE NEW ENGLA	Contract: NYASP	
b Code:	Case No.: SENEK	SAS No.:
		SDG No.: SEN11
Matrix: (soil/water) WATER		Lab Sample ID: 38619-1MSD
Sample wt/vol: 5.00 (g/mL) ML		Lab File ID: E5382
Level: (low/med) LOW		Date Received: 12/02/93
Moisture: not dec.		Date Analyzed: 12/07/93
GC Column: 502.2	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)		Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	52	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	54	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	48	
108-90-7	Chlorobenzene	56	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U



3.4 Laboratory Control Samples and  
Duplicates for Indicator Parameters

NOTE: Laboratory Control Samples for Volatile  
Organic Analysis are Listed with the  
Matrix Spike Summary Sheets (Form 3A)

QUALITY CONTROL  
 Total Organic Carbon  
 Method: 415.1 EPA-600/4-84-017

QC Batch: 806 For: 38384  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 1.00

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	5.0	4.590	91.8	3.0
LCS2	5.0	4.730	94.6	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
38397-11	8.22	8.12	8.17	1.2

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.					
38397-11	MS	8.22	5	12.88	93.2
38397-11	MSD	8.22	5	13.18	99.2
					RPD= 6.237

QUALITY CONTROL

Nitrate plus Nitrite Nitrogen (combined)  
 Method: 353.2 EPA-600/4-84-017

QC Batch: 526 For: 38384  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 0.05

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
	-----	-----	-----
LCS1	2.0	1.932	96.6
LCS2	2.0	1.916	95.8

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
-----	-----	-----	-----	-----
38421	0.45	0.45	0.45	0.9

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
-----	-----	-----	-----	-----
38421 MS	0.45	1	1.46	101.4
38421 MSD	0.45	1	1.46	101.1
			RPD=	0.296

QUALITY CONTROL

Total Organic Carbon

Method: 415.1 EPA-600/4-84-017

QC Batch: 812 For: 38516

Matrix: WATER

METHOD BLANK:

Result
mg/L
-----
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
	-----	-----	-----	-----
LCS1	5.0	4.410	88.2	5.7
LCS2	5.0	4.670	93.4	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
-----	-----	-----	-----	-----
38467-9	20.60	20.90	20.75	1.4

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
-----	-----	-----	-----	-----
38467-9 MS	20.60	50	76.20	111.2
38467-9 MSD	20.60	50	76.50	111.8
			RPD=	0.538

QUALITY CONTROL  
 Total Organic Carbon  
 Method: 415.1 EPA-600/4-84-017

QC Batch: 813  
 Matrix: WATERS

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

	LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %	Relative Percent Difference %
	-----	-----	-----	-----
LCS1	5.0	4.880	97.6	0.8
LCS2	5.0	4.840	96.8	

FIELD SAMPLE:

Precision			Relative Percent Difference	
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
-----	-----	-----	-----	-----
38533-13	1.94	2.12	2.03	8.9

FIELD SAMPLE:

Accuracy		Spike		
Lab No.	Replicate 1 mg/L	Added mg/L	Found mg/L	Recovery %
-----	-----	-----	-----	-----
38533-13 MS	1.94	5	6.54	92.0
38533-13 MSD	1.94	5	6.67	94.6
				RPD= 2.787

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 244

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	6.99
LCS2	7.0	6.99

FIELD SAMPLE:

Precision

	Replicate 1 Units	Replicate 2 Units
Lab No.	-----	-----
38384-17	7.42	7.50

500033

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 247

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.00
LCS2	7.0	7.01

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 Units	Replicate 2 Units
-----	-----	-----
38516-2	7.46	7.45

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 250

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	6.98
LCS2	7.0	6.99

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 Units	Replicate 2 Units
-----	-----	-----
38533-25	7.17	7.18

500041



QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 553

Matrix: WATER

METHOD BLANK:

Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
	-----	-----	-----	-----
LCS1	200.0	196.871	98.4	0.5
LCS2	200.0	197.930	99.0	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
-----	-----	-----	-----	-----
38384-25	7.79	7.97	7.88	2.3

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
-----	-----	-----	-----	-----
38384-25 MS	7.79	50	57.91	100.2
38384-25 MSD	7.79	50	58.32	101.1
			RPD=	0.815

QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 556

Matrix: WATER

METHOD BLANK:

Result  
mg/L

-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
	-----	-----	-----	-----
LCS1	200.0	197.449	98.7	0.2
LCS2	200.0	197.870	98.9	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
-----	-----	-----	-----	-----
38533-31	13.33	13.03	13.18	2.3

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
-----	-----	-----	-----	-----
38533-31 MS	13.33	50	67.46	108.3
38533-31 MSD	13.33	50	66.70	106.8
			RPD=	1.412

QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 557 For: 38533

Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
LCS1	200.0	197.782	98.9
LCS2	200.0	198.794	99.4

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
38591-1	3.79	3.80	3.79	0.2

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
38591-1 MS	3.79	50	54.56	101.5
38591-1 MSD	3.79	50	57.17	106.8
RPD=				5.018

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 545

Matrix: WATER

METHOD BLANK:

Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	50.0	48.400	96.8	0.2
LCS2	50.0	48.300	96.6	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
38533-31	46.80	46.70	46.75	0.2

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
38533-31 MS	46.80	20	66.00	96.0
38533-31 MSD	46.80	20	65.30	92.5
				RPD= 3.714

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 546 For: 38533

Matrix: WATER

METHOD BLANK:

Result  
mg/L

-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	50.0	49.200	98.4	0.4
LCS2	50.0	49.000	98.0	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
38513-2	1720.00	1680.00	1700.00	2.4

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
38513-2	1720.00	1000	2780.00	106.0

500064

QUALITY CONTROL  
 Specific Conductance  
 Method: 120.1 EPA-600/4-84-017

QC Batch: 178 For: 38384  
 Matrix: Water

METHOD BLANK:                      Result  
    mg/L  
    -----  
    1.73

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	141.3	154.600	109.4	1.5
LCS2	141.3	152.300	107.8	

FIELD SAMPLE:

Lab No.	Precision		Average mg/L	Relative Percent Difference
	Replicate 1 mg/L	Replicate 2 mg/L		%
38351-16	799.00	794.00	796.50	0.6



QUALITY CONTROL  
 Specific Conductance  
 Method: 120.1 EPA-600/4-84-017

QC Batch: 180  
 Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
0.69

LABORATORY CONTROL SAMPLES:		Accuracy	Precision	
	True Value mg/L -----	Observed Value mg/L -----	Recovery % -----	Relative Percent Difference %
LCS1	141.3	142.100	100.6	1.4
LCS2	141.3	140.100	99.2	

FIELD SAMPLE:

Precision	Replicate 1 mg/L -----	Replicate 2 mg/L -----	Average mg/L -----	Relative Percent Difference %
Lab No.				
-----				
38533-31	648.00	653.00	650.50	0.8

500101



QUALITY CONTROL  
 Nitrate plus Nitrite Nitrogen (combined)  
 Method: 353.2 EPA-600/4-84-017

QC Batch: 529  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 0.05

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	2.0	2.015	100.8	2.3
LCS2	2.0	1.970	98.5	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
-----	-----	-----	-----	-----
38516-1	< 0.05	< 0.05	NC	NC

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.					
-----	-----	-----	-----	-----	-----
38516-1	MS	< 0.05	1.45	1.49	102.8
38516-1	MSD	< 0.05	1.45	1.40	96.2
					RPD= 6.586

NC = Not calculable due to result below detection limit.

QUALITY CONTROL

Nitrate plus Nitrite Nitrogen (combined)  
 Method: 353.2 EPA-600/4-84-017

QC Batch: 531  
 Matrix: WATER

METHOD BLANK: Result  
mg/L  
 -----  
< 0.05

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
	-----	-----	-----
LCS1	2.0	1.927	96.4
LCS2	2.0	1.908	95.4
			1.0

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
-----	-----	-----	-----	-----
38533-37	0.33	0.34	0.33	2.1

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
-----	-----	-----	-----	-----
38533-37 MS	0.33	1	1.31	98.4
38533-37 MSD	0.33	1	1.30	97.4
				RPD= 1.021

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QUALITY CONTROL DATA

December 09, 1993  
 PACE Project Number: 131117500

Client Reference: N31111524 SEN10

Total Organic Halogen  
 Batch: 97 33684  
 Samples: 97 0105433, 97 0105450

METHOD BLANK AND SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>	970105433 38384-10 <u>MW42D</u>	Duplicate of 97 0105433	<u>RPD</u>
Total Organic Halogen	mg/L	0.01	ND	ND	ND	NC

SPIKE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	970105433 38384-10 <u>MW42D</u>	<u>Spike</u>	<u>Spike Recv</u>
Total Organic Halogen	mg/L	0.02	ND	0.10	80%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recv</u>	<u>Dupl Recv</u>	<u>RPD</u>
Total Organic Halogen	mg/L	0.01	0.05	100%	100%	0%

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QUALITY CONTROL DATA

December 09, 1993  
 PACE Project Number: 131117500

Client Reference: N31111524 SEN10

Total Organic Halogen  
 Batch: 97 33686  
 Samples: 97 0105425, 97 0105441, 97 0105468

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	970105441 38384-11 MW37	Duplicate of 97 0105441	RPD
Total Organic Halogen	mg/L	0.01	ND	ND	ND	NC

SPIKE:

Parameter	Units	MDL	970105441 38384-11 MW37	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	ND	0.10	110%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	100%	100%	0%



# REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

December 09, 1993  
PACE Project Number: 131117500

Client Reference: N31111524 SEN10

Total Organic Halogen

Batch: 97 33723

Samples: 97 0105484, 97 0110496, 97 0110518, 97 0110534

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	970105484 38384-15 MW40	Duplicate of 97 0105484	RPD
Total Organic Halogen	mg/L	0.01	ND	ND	ND	NC

SPIKE:

Parameter	Units	MDL	970105484 38384-15 MW40	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	ND	0.10	80%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dup1 Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	100%	100%	0%

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QUALITY CONTROL DATA

December 09, 1993  
 PACE Project Number: 131117500

Client Reference: N31111524 SEN10

Total Organic Halogen

Batch: 97 33724

Samples: 97 0105476, 97 0105492, 97 0110500, 97 0110526

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	970105476	Duplicate	RPD
Total Organic Halogen	mg/L	0.01	Blank	38384-14 MW39 ASH	of 97 0105476	NC
			ND	0.02	ND	

SPIKE:

Parameter	Units	MDL	970105476	Spike	Spike
Total Organic Halogen	mg/L	0.02	38384-14 MW39 ASH	Spike	Recv
			0.02	0.10	80%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference	Recv	Dupl	RPD
Total Organic Halogen	mg/L	0.01	Value	80%	Recv	0%
			0.05	80%	80%	

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QUALITY CONTROL DATA

December 09, 1993  
 PACE Project Number: 131117500

Client Reference: N31111524 SEN10

Total Organic Halogen

Batch: 97 33770

Samples: 97 0110542, 97 0110550, 97 0110763, 97 0110771

METHOD BLANK AND SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>	970110534	Duplicate	<u>RPD</u>
				PT-24 38533-19	of 97 0110534	
Total Organic Halogen	mg/L	0.01	ND	0.04	0.04	0%

SPIKE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	970110534	<u>Spike</u>	Spike
			PT-24 38533-19		Recv
Total Organic Halogen	mg/L	0.02	0.04	0.10	100%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	Reference	<u>Recv</u>	Dupl	<u>RPD</u>
			Value		Recv	
Total Organic Halogen	mg/L	0.01	0.05	120%	120%	0%

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FOOTNOTES  
for pages 8 through 12

December 09, 1993  
PACE Project Number: 131117500

Client Reference: N31111524 SEN10

MDL Method Detection Limit  
NC No calculation due to value below detection limit.  
ND Not detected at or above the MDL.  
RPD Relative Percent Difference



QUALITY CONTROL

Total Organic Carbon

Method: 415.1 EPA-600/4-84-017

QC Batch: 812 For: 38548

Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
	-----	-----	-----
LCS1	5.0	4.410	88.2
LCS2	5.0	4.670	93.4
			5.7

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
-----	-----	-----	-----	-----
38467-9	20.60	20.90	20.75	1.4

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
-----	-----	-----	-----	-----
38467-9 MS	20.60	50	76.20	111.2
38467-9 MSD	20.60	50	76.50	111.8
			RPD=	0.538

500011

QUALITY CONTROL  
 Total Organic Carbon  
 Method: 415.1 EPA-600/4-84-017

QC Batch: 814  
 Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
	-----	-----	-----	-----
LCS1	5.0	4.470	89.4	3.1
LCS2	5.0	4.610	92.2	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
Lab No.	-----	-----	-----	-----
38619-8	1.47	1.12	1.30	27.0

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.		-----	-----	-----	-----
38619-8	MS	1.47	5	6.51	100.8
38619-8	MSD	1.47	5	6.23	95.2
					RPD= 5.714

500014

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 255

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.03
LCS2	7.0	7.03

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 Units	Replicate 2 Units
-----	-----	-----
38619-20	7.17	7.24

500080

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 251

Matrix: Water

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.03
LCS2	7.0	7.03

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 Units	Replicate 2 Units
-----	-----	-----
38548-33	7.07	7.12

500031

QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 557 For: 38548

Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	200.0	197.782	98.9	0.5
LCS2	200.0	198.794	99.4	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
-----	-----	-----	-----	-----
38591-1	3.79	3.80	3.79	0.2

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.					
-----	-----	-----	-----	-----	-----
38591-1	MS	3.79	50	54.56	101.5
38591-1	MSD	3.79	50	57.17	106.8
				RPD=	5.018

500087

QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 560

Matrix: WATER

METHOD BLANK:

Result  
mg/L

-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	200.0	197.994	99.0	0.5
LCS2	200.0	198.948	99.5	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
38619-26	42.10	42.48	42.29	0.9

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery
				%
38619-26 MS	42.10	50	95.89	107.6
38619-26 MSD	42.10	50	93.86	103.5
			RPD=	3.843

500088

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 547 For: 38548

Matrix: WATER

METHOD BLANK:

Result  
mg/L

-----  
< 1.00

LABORATORY CONTROL SAMPLES:

Accuracy

Precision

	True Value mg/L	Observed Value mg/L	Recovery %	Relative Percent Difference %
	-----	-----	-----	-----
LCS1	50.0	47.500	95.0	0.4
LCS2	50.0	47.300	94.6	

500028

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 548 For: 38548

Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
LCS1	50.0	48.100	96.2
LCS2	50.0	49.200	98.4

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
38467-15	190.00	173.00	181.50	9.4

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
38467-15 MS	190.00	100	304.00	114.0
38467-15 MSD	190.00	100	334.00	144.0
				RPD= 23.256

500080



QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 551 For: 38619

Matrix: SOLID

METHOD BLANK: Result  
ug/g  
-----  
< 10.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value ug/g	Observed Value ug/g	Recovery %
			Relative Percent Difference %
LCS1	500.0	493.000	98.6
LCS2	500.0	489.000	97.8

FIELD SAMPLE:

Precision	Replicate 1	Replicate 2	Average	Relative Percent Difference
Lab No.	ug/g	ug/g	ug/g	%
38562-1	6536.01	6675.29	6605.65	2.1

FIELD SAMPLE:

Accuracy	Replicate 1	Spike Added	Spike Found	Recovery
Lab No.	ug/g	ug/g	ug/g	%
38562-1 MS SNR	6536.01	1000	7570.63	103.5
38562-1 MSD SNR	6536.01	1000	7520.89	98.5
			RPD=	4.926

QUALITY CONTROL QUALIFIER STATEMENT

The sample results used to generate quality control information for solid samples are uncorrected for dry weight. This does not affect the results reported for percent of spike recovery and relative percent difference.

SNR=Spike not required. Sample greater than four times spike level.

500081

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 553

Matrix: WATER

METHOD BLANK:

Result  
mg/L

< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	50.0	51.800	103.6	3.1
LCS2	50.0	50.200	100.4	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
38619-26	40.90	42.10	41.50	2.9

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
38619-26 MS SNR	40.90	10	50.60	97.0
38619-26 MSD SNR	40.90	10	50.00	91.0

RPD= 6.383

SNR=Spike not required. Sample greater than four times spike level.

500002

QUALITY CONTROL  
 Specific Conductance  
 Method: 120.1 EPA-600/4-84-017

QC Batch: 181  
 Matrix: WATER

METHOD BLANK:                      Result  
    mg/L  
    -----  
    1.72

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	141.3	146.000	103.3	0.7
LCS2	141.3	145.000	102.6	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent
				Difference %
Lab No.				
-----	-----	-----	-----	-----
38548-43	944.00	946.00	945.00	0.2

500092

QUALITY CONTROL

Specific Conductance

Method: 120.1 EPA-600/4-84-017

QC Batch: 182

Matrix: WATER

METHOD BLANK:

Result  
mg/L

-----  
1.18

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
	-----	-----	-----	-----
LCS1	141.3	144.7	102.4	1.7
LCS2	141.3	147.2	104.2	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
Lab No.	-----	-----	-----	-----
38619-26	583.00	575.00	579.00	1.4

500090

QUALITY CONTROL

Nitrate plus Nitrite Nitrogen (combined)  
 Method: 353.2 EPA-600/4-84-017

QC Batch: 531 For: 38548  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 0.05

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Relative Percent Difference %
	-----	-----	-----
LCS1	2.0	1.927	96.4
LCS2	2.0	1.908	95.4

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
-----	-----	-----	-----	-----
38533-37	0.33	0.34	0.33	2.1

FIELD SAMPLE:

Accuracy		Spike		
Lab No.	Replicate 1 mg/L	Added mg/L	Found mg/L	Recovery %
-----	-----	-----	-----	-----
38533-37 MS	0.33	1	1.31	98.4
38533-37 MSD	0.33	1	1.30	97.4
			RPD=	1.021

500098

QUALITY CONTROL

Nitrate plus Nitrite Nitrogen (combined)  
 Method: 353.2 EPA-600/4-84-017

QC Batch: 533  
 Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 0.05

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	2.0	2.172	108.6	0.6
LCS2	2.0	2.160	108.0	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
-----	-----	-----	-----	-----
38619-32	0.31	0.32	0.32	4.4

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.					
-----	-----	-----	-----	-----	-----
38619-32	MS	0.31	1	1.33	102.2
38619-32	MSD	0.31	1	1.34	102.6
				RPD=	0.391

500099



# REPORT OF LABORATORY ANALYSIS

## QUALITY CONTROL DATA

December 15, 1993  
 PACE Project Number: 131206502

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Client Reference: Seneca Army Depot SDG-SEN11

Total Organic Halogen

Batch: 97 33879

Samples: 97 0112960, 97 0112979, 97 0112987, 97 0112995, 97 0113002

### METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	970112979	Duplicate of	RPD
Total Organic Halogen	mg/L	0.01	Blank	38548-29	97 0112979	NC
			ND	ND	ND	

### SPIKE:

Parameter	Units	MDL	970112979	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	38548-29	0.10	80%
			ND		

### LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dup1 Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	120%	120%	0%

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QUALITY CONTROL DATA

December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

Total Organic Halogen

Batch: 97 33911

Samples: 97 0112928, 97 0112944, 97 0113010, 97 0113037, 97 0113053

METHOD BLANK AND SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method</u>	<u>970113010</u>	<u>Duplicate</u>	<u>RPD</u>
Total Organic Halogen	mg/L	0.01	Blank	38619-14	of 97 0113010	NC
			ND	ND	ND	

SPIKE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>970113010</u>	<u>Spike</u>	<u>Spike</u>
Total Organic Halogen	mg/L	0.02	38619-14	0.10	Recv 80%
			ND		

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference</u>	<u>Recv</u>	<u>Dup1</u>	<u>RPD</u>
Total Organic Halogen	mg/L	0.01	Value	80%	Recv 80%	0%
			0.05			



Page 10

QUALITY CONTROL DATA

December 15, 1993  
 PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

Total Organic Halogen

Batch: 97 33912

Samples: 97 0112936, 97 0112952, 97 0113029, 97 0113045, 97 0113061  
 97 0114289

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	970112952	Duplicate of	RPD
Total Organic Halogen	mg/L	0.01	Blank	38548-27	97 0112952	NC
			ND	ND	ND	NC

SPIKE:

Parameter	Units	MDL	970112952	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	38548-27	0.10	80%
			ND		

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	80%	80%	0%

Page 11 FOOTNOTES  
for pages 8 through 10

December 15, 1993  
PACE Project Number: 131206502

Client Reference: Seneca Army Depot SDG-SEN11

MDL Method Detection Limit  
NC No calculation due to value below detection limit.  
ND Not detected at or above the MDL.  
RPD Relative Percent Difference

QUALITY CONTROL  
 Total Organic Carbon  
 Method: 415.1 EPA-600/4-84-017

QC Batch: 815 For: 38635  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 1.00

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	5.0	4.650	93.0	7.5
LCS2	5.0	5.010	100.2	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
-----	-----	-----	-----	-----
38638-17	< 1.00	< 1.00	NC	NC

FIELD SAMPLE:

Accuracy	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery
				%
Lab No.				
-----	-----	-----	-----	-----
38638-17 MS	< 1.00	5	6.64	114.4
38638-17 MSD	< 1.00	5	6.84	118.4
			RPD=	3.436

NC = Not calculable due to result below detection limit.

500016

QUALITY CONTROL  
 Total Organic Carbon  
 Method: 415.1 EPA-600/4-84-017

QC Batch: 821  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 1.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
LCS1	5.0	4.800	96.0
LCS2	5.0	4.840	96.8

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
38668-6	2.99	2.51	2.75	17.5

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
38668-6 MS	2.99	5	7.10	82.2
38668-6 MSD	2.99	5	7.45	89.2
			RPD=	8.168

500017

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 257 For: 38642

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.02
LCS2	7.0	7.02

500118

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 258 For: 38656

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.03
LCS2	7.0	7.02

500119

QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 259

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.02
LCS2	7.0	7.02

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 Units	Replicate 2 Units
-----	-----	-----
38668-21	7.02	7.05

500120

QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 560 For: 38635

Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	200.0	197.994	99.0	0.5
LCS2	200.0	198.948	99.5	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
-----	-----	-----	-----	-----
38619-26	42.10	42.48	42.29	0.9

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.					
-----	-----	-----	-----	-----	-----
38619-26	MS	42.10	50	95.89	107.6
38619-26	MSD	42.10	50	93.86	103.5
				RPD=	3.843

500039



QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 561

Matrix: WATER

METHOD BLANK:

Result  
mg/L

< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
LCS1	200.0	197.953	99.0	0.5
LCS2	200.0	197.024	98.5	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
38668-11	26.55	26.45	26.50	0.4

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
38668-11 MS	26.55	50	77.42	101.7
38668-11 MSD	26.55	50	76.84	100.6

RPD= 1.157

500040

QUALITY CONTROL

Chloride

Method: 325.1 EPA-600/4-84-017

QC Batch: 562

Matrix: WATER

METHOD BLANK:

Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	200.0	201.844	100.9	2.2
LCS2	200.0	197.370	98.7	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
38668-12	3.80	3.51	3.66	8.2

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
38668-12 MS	3.80	50	53.50	99.4
38668-12 MSD	3.80	50	54.08	100.5
			RPD=	1.152

500041

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 552 For: 38635

Matrix: WATER

METHOD BLANK: Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %
			Relative Percent Difference %
LCS1	50.0	47.100	94.2
LCS2	50.0	46.800	93.6

FIELD SAMPLE:

Precision		Relative Percent Difference		
Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	%
38619-26	40.90	42.10	41.50	2.9

FIELD SAMPLE:

Accuracy		Recovery		
Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	%
38619-26 MS SNR	40.90	10	50.60	97.0
38619-26 MSD SNR	40.90	10	50.00	91.0
			RPD=	6.383

SNR=Spike not required. Sample greater than four times spike level.

500055

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 553 For: 38642

Matrix: WATER

METHOD BLANK:

Result  
mg/L  
-----  
< 1.00

LABORATORY CONTROL SAMPLES:

	True Value mg/L	Observed Value mg/L	Accuracy Recovery %	Precision Relative Percent Difference %
	-----	-----	-----	-----
LCS1	50.0	51.800	103.6	3.1
LCS2	50.0	50.200	100.4	

FIELD SAMPLE:

Precision

Lab No.	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
-----	-----	-----	-----	-----
38619-26	40.90	42.10	41.50	2.9

FIELD SAMPLE:

Accuracy

Lab No.	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
-----	-----	-----	-----	-----
38619-26 MS SNR	40.90	10	50.60	97.0
38619-26 MSD SNR	40.90	10	50.00	91.0
			RPD=	6.383

SNR=Spike not required. Sample greater than four times spike level.

500056

QUALITY CONTROL

Sulfate

Method: EPA-600 300.0 / SW846 9056

QC Batch: 554

Matrix: WATER

METHOD BLANK:                      Result  
    mg/L  
    -----  
    < 1.00

LABORATORY CONTROL SAMPLES:		Accuracy	Precision	
	True Value mg/L	Observed Value mg/L	Recovery %	Relative Percent Difference %
LCS1	50.0	51.100	102.2	1.0
LCS2	50.0	50.600	101.2	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference %
Lab No.	-----	-----	-----	-----
38668-11	247.00	247.00	247.00	0.0

FIELD SAMPLE:

Accuracy	Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.	-----	-----	-----	-----
38668-11 MS	247.00	100	336.00	89.0
38668-11 MSD	247.00	100	338.00	91.0
			RPD=	2.222

NC = Not calculable due to result below detection limit.

500057

QUALITY CONTROL  
 Specific Conductance  
 Method: 120.1 EPA-600/4-84-017

QC Batch: 182 For: 38635  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 1.18

	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	141.3	144.7	102.4	1.7
LCS2	141.3	147.2	104.2	

FIELD SAMPLE:

Lab No.	Precision		Average mg/L	Relative Percent Difference
	Replicate 1 mg/L	Replicate 2 mg/L		%
38619-26	583.00	575.00	579.00	1.4

500098

QUALITY CONTROL  
 Specific Conductance  
 Method: 120.1 EPA-600/4-84-017

QC Batch: 183  
 Matrix: WATER

METHOD BLANK:	Result mg/L
	----- 1.59

LABORATORY CONTROL SAMPLES:		Accuracy	Precision
	True Value mg/L	Observed Value mg/L	Recovery %      Relative Percent Difference %
	-----	-----	-----
LCS1	141.3	145.400	102.9      0.1
LCS2	141.3	145.600	103.0

FIELD SAMPLE:				
Precision	Replicate 1	Replicate 2	Average	Relative Percent
Lab No.	mg/L	mg/L	mg/L	Difference %
	-----	-----	-----	-----
38668-11	1025.00	1027.00	1026.00	0.2

500099

QUALITY CONTROL  
 Nitrate plus Nitrite Nitrogen (combined)  
 Method: 353.2 EPA-600/4-84-017

QC Batch: 535  
 Matrix: WATER

METHOD BLANK: Result  
 mg/L  
 -----  
 < 0.05

LABORATORY CONTROL SAMPLES:	True Value mg/L	Observed Value mg/L	Accuracy	Precision
			Recovery %	Relative Percent Difference %
LCS1	2.0	2.253	112.7	0.5
LCS2	2.0	2.241	112.1	

FIELD SAMPLE:

Precision	Replicate 1 mg/L	Replicate 2 mg/L	Average mg/L	Relative Percent Difference
				%
Lab No.				
-----	-----	-----	-----	-----
38668-16	0.45	0.46	0.46	1.8

FIELD SAMPLE:

Accuracy		Replicate 1 mg/L	Spike Added mg/L	Spike Found mg/L	Recovery %
Lab No.					
-----	-----	-----	-----	-----	-----
38668-16 MS	0.45	1	1.62	117.0	
38668-16 MSD	0.45	1	1.61	115.4	
			RPD=	1.377	

500104



QUALITY CONTROL

pH

Method: 150.1 EPA-600/4-84-017

QC Batch: 256 For: 38635

Matrix: WATER

LABORATORY CONTROL SAMPLES:

	True Value Units	Observed Value Units
	-----	-----
LCS1	7.0	7.03
LCS2	7.0	7.03

500117

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QUALITY CONTROL DATA

December 17, 1993  
 PACE Project Number: 131207502

Client Reference: N31204502/N31206503

Total Organic Halogen

Batch: 97 33956

Samples: 97 0114300, 97 0114327, 97 0114343, 97 0114360, 97 0116176

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	970114327	of	RPD
Total Organic Halogen	mg/L	0.01	Blank	38635-16	97 0114327	NC
			ND	ND	ND	

SPIKE:

Parameter	Units	MDL	970114327	Spike	Spike
Total Organic Halogen	mg/L	0.02	38635-16	0.10	Recv
			ND		100%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference	Recv	Dupl	RPD
Total Organic Halogen	mg/L	0.01	Value	100%	Recv	0%
			0.05		100%	

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QUALITY CONTROL DATA

December 17, 1993  
PACE Project Number: 131207502

Client Reference: N31204502/N31206503

Total Organic Halogen

Batch: 97 33957

Samples: 97 0114297, 97 0114319, 97 0114335, 97 0114351, 97 0114378

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	970114319 38635-15	Duplicate of 97 0114319	RPD
Total Organic Halogen	mg/L	0.01	Blank	0.02	ND	NC

SPIKE:

Parameter	Units	MDL	970114319 38635-15	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	0.02	0.10	90%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	100%	100%	0%

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QUALITY CONTROL DATA

December 17, 1993  
 PACE Project Number: 131207502

Client Reference: N31204502/N31206503

Total Organic Halogen

Batch: 97 33993

Samples: 97 0116184, 97 0116206, 97 0116222, 97 0116249, 97 0116265

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method	970116222	Duplicate of	RPD
Total Organic Halogen	mg/L	0.01	Blank	38668-1	97 0116222	NC
			ND	0.02	ND	

SPIKE:

Parameter	Units	MDL	970116222	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	38668-1	0.10	100%
			0.02		

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	80%	80%	0%

QUALITY CONTROL DATA

December 17, 1993  
 PACE Project Number: 131207502

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Client Reference: N31204502/N31206503

Total Organic Halogen

Batch: 97 33994

Samples: 97 0116192, 97 0116214, 97 0116230, 97 0116257

METHOD BLANK AND SAMPLE DUPLICATE:

Parameter	Units	MDL	Method Blank	970116214 38656-7	Duplicate of 97 0116214	RPD
Total Organic Halogen	mg/L	0.01	ND	ND	ND	NC

SPIKE:

Parameter	Units	MDL	970116214 38656-7	Spike	Spike Recv
Total Organic Halogen	mg/L	0.02	ND	0.10	90%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Organic Halogen	mg/L	0.01	0.05	80%	80%	0%



