

00591



**GROUNDWATER MONITORING  
VALIDATED ANALYTICAL RESULTS FOR THE SECOND QUARTER 1994  
ASH LANDFILL, SENECA ARMY DEPOT**

**PREPARED FOR:  
U.S. Army Corps of Engineers  
Hunstville, Alabama**

**PREPARED BY:**

**Engineering-Science, Inc.  
Boston, Massachusetts**

**September 1994  
D#12**

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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)**

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

**ASH LANDFILL SECOND QUARTER 1994 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-11	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
PT-19	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
PT-27	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-30	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-36	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-45	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-47	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-48	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-56	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-59	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
MW-60	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND	
FH-S	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	ND	
FH-D	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	ND	
BRN-S	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	ND	

Notes:

1,2-DCE = 1,2-Dichloroethene (total)

TCE = Trichloroethene

1,2-DCA = 1,2-Dichloroethane

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 SECOND QUARTER 1994 MONITORING  
VALIDATED VOLATILE ANALYSIS RESULTS (TCL)**

AL294VOC.WK3	MATRIX	WATER						
	LOCATION	ASH						
	DATE SAMPLED	7/09/94	7/09/94	7/10/94	7/10/94	7/08/94	7/08/94	7/10/94
	DATE ANALYZED	7/16/94	7/14/94	7/16/94	7/19/94	7/15/94	7/14/94	7/18/94
	ES ID	PT-11	PT-19	PT-27	MW-30	MW-36	MW-40	MW-45
CAS NO.	COMPOUND	UNITS						
74-87-3	CHLOROMETHANE	ug/L	10 U					
74-83-9	BROMOMETHANE	ug/L	10 U					
75-01-4	VINYL CHLORIDE	ug/L	10 U					
75-00-3	CHLOROETHANE	ug/L	10 U					
75-09-2	METHYLENE CHLORIDE	ug/L	10 U					
87-64-1	ACETONE	ug/L	10 U					
75-15-0	CARBON DISULFIDE	ug/L	10 U					
75-35-4	1,1-DICHLOROETHENE	ug/L	10 U					
75-34-3	1,1-DICHLOROETHANE	ug/L	10 U					
540-59-0	1,2-DICHLOROETHENE	ug/L	10 U					
87-66-3	CHLOROFORM	ug/L	10 U					
107-06-2	1,2-DICHLOROETHANE	ug/L	10 U					
78-93-3	2-BUTANONE	ug/L	10 U					
71-55-8	1,1,1-TRICHLOROETHANE	ug/L	10 U					
56-23-5	CARBON TETRACHLORIDE	ug/L	10 U					
75-27-4	BROMODICHLOROMETHANE	ug/L	10 U					
78-87-5	1,2-DICHLOROPROPANE	ug/L	10 U					
10061-01-5	Cis-1,3-DICHLOROPROPENE	ug/L	10 U					
79-01-8	TRICHLOROETHENE	ug/L	10 U					
79-01-8	TRICHLOROETHENE (1)	ug/L	0.5 U	0.5 U	0.5 U	0.8	NS	NS
124-48-1	DIBROMOCHLOROMETHANE	ug/L	10 U					
79-00-5	1,1,2-TRICHLOROETHANE	ug/L	10 U					
71-43-2	BENZENE	ug/L	10 U					
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/L	10 U					
75-25-2	BROMOFORM	ug/L	10 U					
108-10-1	4-METHYL-2-PENTANONE	ug/L	10 U					
591-78-6	2-HEXANONE	ug/L	10 U					
127-18-4	TETRACHLOROETHENE	ug/L	10 U					
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/L	10 U					
108-88-3	TOLUENE	ug/L	10 U					
108-90-7	CHLOROBENZENE	ug/L	10 U					
100-41-4	ETHYLBENZENE	ug/L	10 U					
100-42-5	STYRENE	ug/L	10 U					
1330-20-7	XYLENES(TOTAL)	ug/L	10 U					

NOTES:

- (1) Water analysis performed by Headspace Analysis using the Photovac 10550 Portable Gas Chromatograph  
 (2) NS - Not Sampled

**ASH LANDFILL SECOND QUARTER 1994 MONITORING  
VALIDATED VOLATILE ANALYSIS RESULTS (TCL)**

AL294VOC.WK3	MATRIX	WATER						
	LOCATION	ASH						
	DATE SAMPLED	7/08/94	7/10/94	7/08/94	7/09/94	7/09/94	7/09/94	7/09/94
	DATE ANALYZED	7/15/94	7/15/94	7/14/94	7/14/94	7/14/94	7/14/94	7/14/94
	ES ID	MW-47	MW-48	MW-56	MW-59	MW-60	TB710	TB79ASH
CAS NO.	COMPOUND	UNITS						
74-87-3	CHLOROMETHANE	ug/L	10 U					
74-83-9	BROMOMETHANE	ug/L	10 U					
75-01-4	VINYL CHLORIDE	ug/L	10 U					
75-00-3	CHLOROETHANE	ug/L	10 U					
75-09-2	METHYLENE CHLORIDE	ug/L	10 U					
67-64-1	ACETONE	ug/L	10 U					
75-15-0	CARBON DISULFIDE	ug/L	10 U					
75-35-4	1,1-DICHLOROETHENE	ug/L	10 U					
75-34-3	1,1-DICHLOROETHANE	ug/L	10 U					
540-59-0	1,2-DICHLOROETHENE	ug/L	10 U					
67-66-3	CHLOROFORM	ug/L	10 U					
107-06-2	1,2-DICHLOROETHANE	ug/L	10 U					
78-93-3	2-BUTANONE	ug/L	10 U					
71-55-6	1,1,1-TRICHLOROETHANE	ug/L	10 U					
56-23-5	CARBON TETRACHLORIDE	ug/L	10 U					
75-27-4	BROMODICHLOROMETHANE	ug/L	10 U					
76-87-5	1,2-DICHLOROPROPANE	ug/L	10 U					
10061-01-5	Cis-1,3-DICHLOROPROPENE	ug/L	10 U					
79-01-8	TRICHLOROETHENE	ug/L	10 U					
79-01-6	TRICHLOROETHENE (1)	ug/L	NS	0.5 U	NS	0.5 U	0.5 U	0.5 U
124-48-1	DIBROMOCHLOROMETHANE	ug/L	10 U					
79-00-5	1,1,2-TRICHLOROETHANE	ug/L	10 U					
71-43-2	BENZENE	ug/L	10 U					
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/L	10 U					
75-25-2	BROMOFORM	ug/L	10 U					
108-10-1	4-METHYL-2-PENTANONE	ug/L	10 U					
591-78-6	2-HEXANONE	ug/L	10 U					
127-18-4	TETRACHLOROETHENE	ug/L	10 U					
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/L	10 U					
108-88-3	TOLUENE	ug/L	10 U					
108-90-7	CHLOROBENZENE	ug/L	10 U					
100-41-4	ETHYLBENZENE	ug/L	10 U					
100-42-5	STYRENE	ug/L	10 U					
1330-20-7	XYLENES(TOTAL)	ug/L	10 U					

NOTES:

- (1) Water analysis performed by Headspace Analysis using the Photovac 10550 Portable Gas Chromatograph  
(2) NS - Not Sampled

**ASH LANDFILL SECOND QUARTER 1994 MONITORING  
VALIDATED VOLATILE ANALYSIS RESULTS (TCL)**

CAS NO.	COMPOUND	UNITS	MATRIX	WATER	WATER
			LOCATION	ASH	ASH
74-87-3	CHLOROMETHANE	ug/L	DATE SAMPLED	7/09/94	7/09/94
74-83-9	BROMOMETHANE	ug/L	DATE ANALYZED	7/15/94	7/16/94
75-01-4	VINYL CHLORIDE	ug/L	ES ID	MW-45R	MW-65
75-00-3	CHLOROETHANE	ug/L	LAB ID	226401	226404
75-09-2	METHYLENE CHLORIDE	ug/L		(MW-45 Rinsate)	(Duplicate of MW-45)
67-64-1	ACETONE	ug/L			
75-15-0	CARBON DISULFIDE	ug/L			
75-35-4	1,1-DICHLOROETHENE	ug/L			
75-34-3	1,1-DICHLOROETHANE	ug/L			
540-59-0	1,2-DICHLOROETHENE	ug/L			
67-66-3	CHLOROFORM	ug/L			
107-06-2	1,2-DICHLOROETHANE	ug/L			
78-93-3	2-BUTANONE	ug/L			
71-55-6	1,1,1-TRICHLOROETHANE	ug/L			
56-23-5	CARBON TETRACHLORIDE	ug/L			
75-27-4	BROMODICHLOROMETHANE	ug/L			
78-67-5	1,2-DICHLOROPROPANE	ug/L			
10061-01-5	Cis-1,3-DICHLOROPROPENE	ug/L			
79-01-6	TRICHLOROETHENE	ug/L			
79-01-6	TRICHLOROETHENE (1)	ug/L		0.5 U	0.5 U
124-48-1	DIBROMOCHLOROMETHANE	ug/L			
79-00-5	1,1,2-TRICHLOROETHANE	ug/L			
71-43-2	BENZENE	ug/L			
10081-02-6	TRANS-1,3-DICHLOROPROPENE	ug/L			
75-25-2	BROMOFORM	ug/L			
108-10-1	4-METHYL-2-PENTANONE	ug/L			
591-78-6	2-HEXANONE	ug/L			
127-18-4	TETRACHLOROETHENE	ug/L			
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/L			
108-88-3	TOLUENE	ug/L			
108-90-7	CHLOROBENZENE	ug/L			
100-41-4	ETHYLBENZENE	ug/L			
100-42-5	STYRENE	ug/L			
1330-20-7	XYLENES(TOTAL)	ug/L		10 U	10 U

NOTES:

- (1) Water analysis performed by Headspace Analysis using the Photovac 10550 Portable Gas Chromatograph
- (2) NS- Not Sampled

**ASH LANDFILL SECOND QUARTER 1994 MONITORING  
VALIDATED VOLATILE ANALYSIS RESULTS (524.2)**

A294524.WK3	MATRIX	WATER	WATER	WATER	WATER	WATER	WATER
CAS No.	LOCATION	ASH	ASH	ASH	ASH	ASH	ASH
COMPOUND	DATE ANALYZED	7/19/94	7/13/94	7/13/94	7/13/94	7/13/94	7/13/94
VOLATILE ORGANIC COMPOUNDS	ES ID	FH-D	FH-S	BRN-S	TB-78	BRN-SR	BRN-SD
	LAB ID	226317	226318	226314	226323	226316	226315
	UNITS				(trip blank)	(BRN-S Rinsate)	(Duplicate of BRN-S)
74-87-3	Chloromethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
630-20-6	1,1,2-Tetrachloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
74-83-9	Bromomethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-71-8	Dichlorodifluoromethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
96-18-4	1,2,3-Trichloropropene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-01-4	Vinyl chloride	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-00-3	Chloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-09-2	Methylene chloride	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
87-68-3	Hexachlorobutadiene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-69-4	Trichlorofluoromethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
71-43-2	Benzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-35-4	1,1-Dichloroethene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
106-88-3	Toluene	ug/L	0.5 U	0.5 U	0.3 J	0.2 J	0.5 U
74-97-5	Bromochloromethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-34-3	1,1-Dichloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
100-41-4	Ethylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
108-38-3	m-&p-Xylene	ug/L	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U
95-47-6	o-Xylene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-15-0	Carbon Disulfide	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
156-59-4	1,2-Dichloroethene (cis)	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
108-86-1	Bromobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
156-60-5	1,2-Dichloroethene (trans)	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
98-82-8	Isopropylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
67-66-3	Chloroform	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1330-20-7	Xylene (total)	ug/L	0.5 U	0.5 U	0.6	0.5 U	0.5 U
74-95-3	Dibromoethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
103-66-1	n-Propylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
590-20-7	2,2-Dichloropropane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
98-06-6	tert-Butylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-Trichloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
95-49-8	2-Chlorotoluene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
56-23-5	Carbon Tetrachloride	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
106-43-4	4-Chlorotoluene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-27-4	Bromodichloromethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
135-98-8	sec-Butylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
78-87-5	1,2-Dichloropropane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
541-73-1	1,3-Dichlorobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
563-58-6	1,1-Dichloropropene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
95-50-1	1,2-Dichlorobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
99-87-6	p-Isopropyltoluene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
79-01-6	Trichloroethene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
108-67-8	1,3,5-Trimethylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
124-48-1	Dibromoethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
104-51-8	n-Butylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
79-00-5	1,1,2-Trichloroethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
95-63-6	1,2,4-Trimethylbenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
142-28-9	1,3-Dichloropropane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
75-25-2	Bromoform	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
91-20-3	Naphthalene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
67-64-1	Acetone	ug/L	5 U	5 U	5 U	5 U	5 U
78-93-3	2-Butanone	ug/L	5 U	5 U	5 U	5 U	5 U
108-10-1	4-Methyl-2-pentanone	ug/L	5 U	5 U	5 U	5 U	5 U
591-78-6	2-Hexanone	ug/L	5 U	5 U	5 U	5 U	5 U

**Section 2.0  
QA/QC Data**

- 2.1      Surrogate Spike Recoveries**
- 2.2      Matrix Spike/Matrix Spike Duplicates**
- 2.3      Method Blanks**

## **2.1 Surrogate Spike Recoveries**

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AQUATEC INC

Contract: 93206

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01 BRNS	95	92	94	0	0
02 BRNSD	96	89	97	0	0
03 BRNSR	92	90	94	0	0
04 FHD	98	93	99	0	0
05 FHS	96	90	100	0	0
06 LFB-KXT-A	98	91	95	0	0
07 LFB-KXW-B	95	92	101	0	0
08 TB78	97	92	88	0	0
09 VBLKM3	91	91	96	0	0
10 VBLKP1	97	95	110	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 ( 80-120)

SMC2 (BFB) = Bromofluorobenzene ( 80-120)

SMC3 (DCE) = 1,2-Dichloroethane-d4 ( 80-120)  
*benzene*

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

*JM*  
07/31/94

2A  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AQUATEC INC

Contract: 93206

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01 MSB	102	104	103	0	0
02 MW30	98	106	86	0	0
03 MW36	105	110	101	0	0
04 MW40	110	108	99	0	0
05 MW45	101	103	86	0	0
06 MW45R	102	106	100	0	0
07 MW47	103	107	102	0	0
08 MW48	102	108	101	0	0
09 MW56	109	114	100	0	0
10 MW59	104	104	97	0	0
11 MW60	102	103	98	0	0
12 MW65	105	107	102	0	0
13 PT11	102	106	99	0	0
14 PT19	107	105	99	0	0
15 PT27	102	106	100	0	0
16 TB710	104	104	96	0	0
17 TB79ASH	109	105	97	0	0
18 MW48MS	105	105	102	0	0
19 MW48MSD	94	97	94	0	0
20 VBLKM5	105	103	98	0	0
21 VBLKM8	108	106	96	0	0
22 VBLKM9	105	111	102	0	0
23 VBLKN3	104	108	101	0	0
24 VBLKN7	96	99	87	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

## **2.2 Matrix Spike/Matrix Spike Duplicates**

3A  
VOLATILE MATRIX SPIKE BLANK RECOVERY

Lab Name: AQUATEC, INC.

Contract: 93206

Lab Code: AQUAI

Case: ASH

Matrix Spike - Sample ID: MSB

SDG No.: 45256

COMPOUND	SPIKE ADDED (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS PERCENT RECOVERY	#	QC LIMITS REC.
1,1-Dichloroethene.....	50	49.63	99		61-145
Trichloroethene.....	50	48.99	98		71-120
Benzene.....	50	50.60	101		76-127
Toluene.....	50	52.06	104		76-125
Chlorobenzene.....	50	51.58	103		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:

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3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AQUATEC INC

Contract: 93206

Lab Code: AQUAI Case No.: ASH SAS No.: SDG No.: 45256

Matrix Spike - EPA Sample No.: MW48

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	50.82	102	61-145
Trichloroethene	50.00	0	50.05	100	71-120
Benzene	50.00	0	48.86	98	76-127
Toluene	50.00	0	51.73	104	76-125
Chlorobenzene	50.00	0	51.81	104	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.00	46.86	94	8	14	61-145
Trichloroethene	50.00	47.88	96	4	14	71-120
Benzene	50.00	48.38	97	1	11	76-127
Toluene	50.00	49.60	99	5	13	76-125
Chlorobenzene	50.00	50.05	100	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: L#226402 CLI#MW48 ETR#45272 100%  
GC/MS IN50S

### **2.3      Method Blanks**

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM3

Lab Code: AQUAI Case No.: ASH SAS No.: SDG No.: 45256

Lab File ID: KXTB002AV Lab Sample ID: VBLKM3

Date Analyzed: 07/13/94 Time Analyzed: 1235

GC Column: CAP ID: 0.530 (mm) Heated Purge: (Y/N) N

Instrument ID: IN50K

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BRNS	226314	K226314V	1546
02	BRNSD	226315	K226315V	1619
03	BRNSR	226316	K226316V	1650
04	FHS	226318	K226318V	1754
05	LFB-KXT-A	LFB	KXT002AQV	1349
06	TB78	226323	K226323V	1435

COMMENTS: BLANK SMO#VBLKM3  
GC/MS IN50K

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKP1

Lab Name: AQUATEC INC

Contract: 93206

Lab Code: AQUAI Case No.: ASH SAS No.: SDG No.: 45256

Lab File ID: KXWB002BV Lab Sample ID: VBLKP1

Date Analyzed: 07/19/94 Time Analyzed: 1125

GC Column: CAP ID: 0.530 (mm) Heated Purge: (Y/N) N

Instrument ID: IN50K

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FHD	226317	K226317I2V	1339
02	LFB-KXW-B	LFB	KXW002BQV	1245

COMMENTS: BLANK SMO#VBLKP1  
GC/MS IN50K

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM5

Lab Code: AQUAI Case No.: ASH SAS No.: SDG No.: 45256

Lab File ID: SAQB002V Lab Sample ID: VBLKM5

Date Analyzed: 07/14/94 Time Analyzed: 1151

GC Column: CAP ID: 0.530 (mm) Heated Purge: (Y/N) N

Instrument ID: IN50S

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW59	226379	S226379V	1317
02	MW60	226380	S226380V	1338
03	PT19	226381	S226381V	1358
04	TB79ASH	226382	S226382V	1240

COMMENTS: BLANK SMO#VBLKM5  
GC/MS IN50S

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM8

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Lab File ID: SAQ003AV

Lab Sample ID: VBLKM8

Date Analyzed: 07/14/94

Time Analyzed: 2158

GC Column: CAP ID: 0.530 (mm)

Heated Purge: (Y/N) N

Instrument ID: IN50S

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW40	226320	S226320V	2311
02	MW56	226322	S226322V	2351

COMMENTS: BLANK SMO#VBLKM8  
GC/MS IN50S

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM9

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Lab File ID: SAQB002BV

Lab Sample ID: VBLKM9

Date Analyzed: 07/15/94

Time Analyzed: 0839

GC Column: CAP ID: 0.530 (mm)

Heated Purge: (Y/N) N

Instrument ID: IN50S

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW36	226319	S226319I2V	1020
02	MW45R	226401	S226401V	1737
03	MW47	226321	S226321I2V	1040
04	MW48	226402	S226402V	1757

COMMENTS: BLANK SMO#VBLKM9  
GC/MS IN50S

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKN3

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Lab File ID:

SAQB002DV

Lab Sample ID: VBLKN3

Date Analyzed:

07/15/94

Time Analyzed: 2240

GC Column: CAP

ID: 0.530 (mm)

Heated Purge: (Y/N) N

Instrument ID:

IN50S

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MSB	226403	S226403V	0457
02	MW65	226404	S226404V	0111
03	PT11	226405	S226405V	0135
04	PT27	226406	S226406V	0206
05	TB710	226407	S226407V	0252
06	MW48MS	226402MS	S226402MS2V	2318
07	MW48MSD	226402MD	S226402MD2V	2352

COMMENTS: BLANK VBLKN3 WATER  
GC/MS IN50S

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKN7

Lab Code: AQUAI Case No.: ASH SAS No.: SDG No.: 45256

Lab File ID: SARB003DHV Lab Sample ID: VBLKN7

Date Analyzed: 07/18/94 Time Analyzed: 1820

GC Column: CAP ID: 0.530 (mm) Heated Purge: (Y/N) N

Instrument ID: IN50S

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW30	226399	S226399I2V	0004
02	MW45	226400	S226400I3V	1912

COMMENTS: BLANK VBLKN7 + WATER  
GC/MS IN50S

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM3

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKM3

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: KXTB002AV

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 07/13/94

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

Q

75-71-8-----	Dichlorodifluoromethane	0.5	U
74-87-3-----	Chloromethane	0.5	U
75-01-4-----	Vinyl Chloride	0.5	U
74-83-9-----	Bromomethane	0.5	U
75-00-3-----	Chloroethane	0.5	U
75-69-4-----	Trichlorofluoromethane	0.5	U
75-35-4-----	1,1-Dichloroethene	0.5	U
67-64-1-----	Acetone	5	U
75-15-0-----	Carbon Disulfide	0.5	U
75-09-2-----	Methylene Chloride	0.4	J
156-60-5-----	trans-1,2-Dichloroethene	0.5	U
75-34-3-----	1,1-Dichloroethane	0.5	U
590-20-7-----	2,2-Dichloropropane	0.5	U
156-59-4-----	cis-1,2-Dichloroethene	0.5	U
78-93-3-----	2-Butanone	5	U
74-97-5-----	Bromochloromethane	0.5	U
67-66-3-----	Chloroform	0.5	U
71-55-6-----	1,1,1-Trichloroethane	0.5	U
56-23-5-----	Carbon Tetrachloride	0.5	U
563-58-6-----	1,1-Dichloropropene	0.5	U
71-43-2-----	Benzene	0.5	U
107-06-2-----	1,2-Dichloroethane	0.5	U
79-01-6-----	Trichloroethene	0.5	U
78-87-5-----	1,2-Dichloropropane	0.5	U
74-95-3-----	Dibromomethane	0.5	U
75-27-4-----	Bromodichloromethane	0.5	U
10061-01-5-----	cis-1,3-Dichloropropene	0.5	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
108-88-3-----	Toluene	0.5	U
10061-02-6-----	trans-1,3-Dichloropropene	0.5	U
79-00-5-----	1,1,2-Trichloroethane	0.5	U
127-18-4-----	Tetrachloroethene	0.5	U
142-28-9-----	1,3-Dichloropropane	0.5	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM3

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKM3

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: KXTB002AV

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 07/13/94

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
591-78-6-----	2-Hexanone	5	U
124-48-1-----	Dibromochloromethane	0.5	U
106-93-4-----	1,2-Dibromoethane	0.5	U
108-90-7-----	Chlorobenzene	0.5	U
630-20-6-----	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4-----	Ethylbenzene	0.5	U
108-38-3-----	m- & p-Xylene	0.5	U
95-47-6-----	o-Xylene	0.5	U
100-42-5-----	Styrene	0.5	U
75-25-2-----	Bromoform	0.5	U
98-82-8-----	Isopropylbenzene	0.5	U
108-86-1-----	Bromobenzene	0.5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4-----	1,2,3-Trichloropropane	0.5	U
103-65-1-----	n-Propylbenzene	0.5	U
95-49-8-----	2-Chlorotoluene	0.5	U
106-43-4-----	4-Chlorotoluene	0.5	U
108-67-8-----	1,3,5-Trimethylbenzene	0.5	U
98-06-6-----	tert-Butylbenzene	0.5	U
95-63-6-----	1,2,4-Trimethylbenzene	0.5	U
135-98-8-----	sec-Butylbenzene	0.5	U
541-73-1-----	1,3-Dichlorobenzene	0.5	U
106-46-7-----	1,4-Dichlorobenzene	0.5	U
99-87-6-----	p-Isopropyltoluene	0.5	U
95-50-1-----	1,2-Dichlorobenzene	0.5	U
104-51-8-----	n-Butylbenzene	0.5	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	0.5	U
120-82-1-----	1,2,4-Trichlorobenzene	0.5	U
87-68-3-----	Hexachlorobutadiene	0.5	U
91-20-3-----	Naphthalene	0.5	U
87-61-6-----	1,2,3-Trichlorobenzene	0.5	U
1330-20-7-----	Xylene (total)	0.5	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKP1

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKP1

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: KXWB002BV

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 07/19/94

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

Q

CAS NO.	COMPOUND			
75-71-8-----	Dichlorodifluoromethane	0.5	U	
74-87-3-----	Chloromethane	0.5	U	
75-01-4-----	Vinyl Chloride	0.5	U	
74-83-9-----	Bromomethane	0.5	U	
75-00-3-----	Chloroethane	0.5	U	
75-69-4-----	Trichlorofluoromethane	0.5	U	
75-35-4-----	1,1-Dichloroethene	0.5	U	
67-64-1-----	Acetone	5	U	
75-15-0-----	Carbon Disulfide	0.5	U	
75-09-2-----	Methylene Chloride	0.5	U	
156-60-5-----	trans-1,2-Dichloroethene	0.5	U	
75-34-3-----	1,1-Dichloroethane	0.5	U	
590-20-7-----	2,2-Dichloropropane	0.5	U	
156-59-4-----	cis-1,2-Dichloroethene	0.5	U	
78-93-3-----	2-Butanone	5	U	
74-97-5-----	Bromochloromethane	0.5	U	
67-66-3-----	Chloroform	0.5	U	
71-55-6-----	1,1,1-Trichloroethane	0.5	U	
56-23-5-----	Carbon Tetrachloride	0.5	U	
563-58-6-----	1,1-Dichloropropene	0.5	U	
71-43-2-----	Benzene	0.5	U	
107-06-2-----	1,2-Dichloroethane	0.5	U	
79-01-6-----	Trichloroethene	0.5	U	
78-87-5-----	1,2-Dichloropropane	0.5	U	
74-95-3-----	Dibromomethane	0.5	U	
75-27-4-----	Bromodichloromethane	0.5	U	
10061-01-5-----	cis-1,3-Dichloropropene	0.5	U	
108-10-1-----	4-Methyl-2-Pentanone	5	U	
108-88-3-----	Toluene	0.5	U	
10061-02-6-----	trans-1,3-Dichloropropene	0.5	U	
79-00-5-----	1,1,2-Trichloroethane	0.5	U	
127-18-4-----	Tetrachloroethene	0.5	U	
142-28-9-----	1,3-Dichloropropene	0.5	U	

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKP1

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKP1

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: KXWB002BV

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 07/19/94

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

Q

591-78-6-----2-Hexanone	5	U
124-48-1-----Dibromochloromethane	0.5	U
106-93-4-----1,2-Dibromoethane	0.5	U
108-90-7-----Chlorobenzene	0.5	U
630-20-6-----1,1,1,2-Tetrachloroethane	0.5	U
100-41-4-----Ethylbenzene	0.5	U
108-38-3-----m- & p-Xylene	0.5	U
95-47-6-----o-Xylene	0.5	U
100-42-5-----Styrene	0.5	U
75-25-2-----Bromoform	0.5	U
98-82-8-----Isopropylbenzene	0.5	U
108-86-1-----Bromobenzene	0.5	U
79-34-5-----1,1,2,2-Tetrachloroethane	0.5	U
96-18-4-----1,2,3-Trichloropropane	0.5	U
103-65-1-----n-Propylbenzene	0.5	U
95-49-8-----2-Chlorotoluene	0.5	U
106-43-4-----4-Chlorotoluene	0.5	U
108-67-8-----1,3,5-Trimethylbenzene	0.5	U
98-06-6-----tert-Butylbenzene	0.5	U
95-63-6-----1,2,4-Trimethylbenzene	0.5	U
135-98-8-----sec-Butylbenzene	0.5	U
541-73-1-----1,3-Dichlorobenzene	0.5	U
106-46-7-----1,4-Dichlorobenzene	0.5	U
99-87-6-----p-Isopropyltoluene	0.5	U
95-50-1-----1,2-Dichlorobenzene	0.5	U
104-51-8-----n-Butylbenzene	0.5	U
96-12-8-----1,2-Dibromo-3-Chloropropane	0.5	U
120-82-1-----1,2,4-Trichlorobenzene	0.5	U
87-68-3-----Hexachlorobutadiene	0.5	U
91-20-3-----Naphthalene	0.5	U
87-61-6-----1,2,3-Trichlorobenzene	0.5	U
1330-20-7-----Xylene (total)	0.5	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM5

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKM5

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: SAQB002V

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 07/14/94

GC Column: CAP 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

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.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM8

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKM8

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: SAQ003AV

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 07/14/94

GC Column: CAP 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		0.9	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.

Lab Name: AQUATEC INC

Contract: 93206

VBLKM9

Lab Code: AQUAI Case No.: ASH SAS No.: SDG No.: 45256

Matrix: (soil/water) WATER Lab Sample ID: VBLKM9

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: SAQB002BV

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 07/15/94

GC Column: CAP 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

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.

Lab Name: AQUATEC INC

Contract: 93206

VBLKN3

Lab Code: AQUAI

Case No.: ASH

SAS No.:

SDG No.: 45256

Matrix: (soil/water) WATER

Lab Sample ID: VBLKN3

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: SAQB002DV

Level: (low/med) LOW

Date Received:

Moisture: not dec.

Date Analyzed: 07/15/94

GC Column: CAP 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	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.

Lab Name: AQUATEC INC

Contract: 93206

VBLKN7

Lab Code: AQUAI	Case No.: ASH	SAS No.:	SDG No.: 45256
Matrix: (soil/water) WATER		Lab Sample ID:	VBLKN7
Sample wt/vol: 5.0 (g/mL) ML		Lab File ID:	SARB003DHV
Level: (low/med) LOW		Date Received:	
Moisture: not dec.		Date Analyzed:	07/18/94
GC Column: CAP	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 _____	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