

01952

**PARSONS ENGINEERING SCIENCE, INC.**

Box 127

Prudential Center • Boston, Massachusetts 02199-7697 • (617) 859-2000 • Fax: (617) 859-2043

January 24, 1995  
725980-01003

Mr. Randall Battaglia  
ATTN: SDSSE-HE  
Seneca Army Depot  
Romulus, New York, 14541-5001

**SUBJECT: Fourth Quarter Groundwater Monitoring for 1994,  
OB/OD Grounds, Seneca Army Depot Activity, Romulus, New York**

Dear Mr. Battaglia:

Enclosed are the analytical results for the fourth quarter 1994 groundwater monitoring for selected monitoring wells at the Open Burning (OB) and Open Detonation (OD) grounds at the Seneca Army Depot (SEDA). The analytical results are divided into two major groups: indicator parameters and QA/QC data (Sections 1 and 2 in the attached document). This is the third quarter of groundwater monitoring that has been performed under the new Scope of Work (SOW) issued as Annex AC, Delivery Order 0029, to the current Parsons Engineering Science, Inc. (Parsons ES) Contract DACA87-92-D-0022.

This quarter reflects the modifications to the groundwater monitoring program, proposed by Parsons ES in 1993, and approved by the New York State Department of Environmental Conservation (NYSDEC) on December 6, 1993. The proposed changes were based upon the requirements of 6 NYCRR Part 373 which pertain to groundwater monitoring at units operating under interim status and included installation of eight (8) new wells, four (4) at the OB grounds and four (4) at the OD grounds. Under this plan, indicator parameters (pH, specific conductance, Total Organic Carbon (TOC) and Total Organic Halogens (TOX), sampled semi-annually, are statistically compared using the Student's t-Test between the downgradient and upgradient concentrations to identify whether a release at a unit has occurred.

The Students t-Test statistical analysis was performed in accordance with EPA Solid Waste guidelines outlined in "Groundwater Monitoring Guidance for Owners and Operators of Interim Status Facilities" pages 75 thru 81. The results of the analysis concluded that there has been a statistically significant increase in the specific conductance in the one upgradient and three downgradient wells at the OB Grounds and in downgradient well MW45-3 at the OD Grounds. These data continue to show that potential releases may have occurred between the background and downgradient wells at both the OB and OD Grounds. These potential releases were first identified during the second quarter 1994 groundwater sampling event and confirmed with groundwater samples that were obtained in September 1994. The results of the confirmatory sampling and the actions required by New York State regulations were described in a Parsons ES letter to you dated November 3, 1994.

In accordance with 6 NYCRR Part 373-3.7(d)(3)(ii), we suggest that you authorize us to sample groundwater from the following wells: MW-12, MW-13, MW-14, MW-27, and MW45-3 and analyze these samples for specific conductance to eliminate the possibility of laboratory error.

Mr. Randall Battaglia  
January 24, 1995  
Page 2

As a reminder, New York State regulations require an annual groundwater monitoring report. Information for this report can be found in the four quarterly groundwater monitoring reports for 1994. The regulations also require groundwater elevation data for each well each time it is sampled. These data are in the table attached to this letter.

Please do not hesitate to call me at (617) 859-2492 if you have any questions.

Sincerely,

ENGINEERING-SCIENCE, INC.



Michael Duchesneau, P.E.  
Project Manager

MD/cmf/D#12

Enclosure

cc: Ms. L. Percifield, MRD-Lab, 1 copy  
Ms. D. Richards, USACOE, 2 copies  
Mr. J. Biernacki, DESCOM, 1 copy  
Mr. Naughton, CENAN, 1 copy

**GROUNDWATER ELEVATION DATA  
OB/OD GROUNDS**

		GROUNDWATER ELEVATION		GROUNDWATER ELEVATION	
DATE	MONITORING WELL	(FT)	DATE	MONITORING WELL	(FT)
First Quarter		Second Quarter			
01-Mar-94	MW-1	626.55	29-Jun-94	MW-12	622.22
02-Mar-94	MW-2	NA	29-Jun-94	MW-13	624.88
01-Mar-94	MW-3	NA	29-Jun-94	MW-14	621.45
01-Mar-94	MW-4	NA	29-Jun-94	MW-27	622.6
02-Mar-94	MW-5	Frozen	29-Jun-94	MW45-1	<617.1 (Dry Well)
02-Mar-94	MW-6	Frozen	29-Jun-94	MW45-2	616.44
28-Feb-94	MW-7	619.5	29-Jun-94	MW45-3	618.47
02-Mar-94	MW-8	Frozen	29-Jun-94	MW45-4	626.1
02-Mar-94	MW-9	Frozen	Third Quarter		
02-Mar-94	MW-10	Frozen	29-Sep-94	MW-12	618.84
02-Mar-94	MW-11	Frozen	29-Sep-94	MW-13	620.76
02-Mar-94	MW-12	Frozen	30-Sep-94	MW-14	617.65
02-Mar-94	MW-13	Frozen	30-Sep-94	MW-27	618.88
02-Mar-94	MW-14	Frozen	30-Sep-94	MW45-1	617.03
03-Mar-94	MW-15	Frozen	30-Sep-94	MW45-2	615.31
28-Feb-94	MW-16	620.23	30-Sep-94	MW45-3	615.19
02-Mar-94	MW-17	Frozen	30-Sep-94	MW45-4	623.74
02-Mar-94	MW-18	Frozen	Fourth Quarter		
02-Mar-94	MW-19	Frozen	06-Dec-94	MW-12	622.34
02-Mar-94	MW-21	Frozen	06-Dec-94	MW-13	624.79
02-Mar-94	MW-22	Frozen	06-Dec-94	MW-14	621.45
03-Mar-94	MW-23	619.48	06-Dec-94	MW-27	622.78
03-Mar-94	MW-24	623.49	06-Dec-94	MW45-1	616.55
03-Mar-94	MW-25	619.07	06-Dec-94	MW45-2	<614.34 (Dry Well)
03-Mar-94	MW-26	619.47	06-Dec-94	MW45-3	615.89
02-Mar-94	MW-27	622.62	06-Dec-94	MW45-4	626.79
01-Mar-94	MW-28	628.01			
01-Mar-94	MW-29	627.97			
02-Mar-94	MW-30	624.38			
08-Mar-94	MW-31	Frozen			
02-Mar-94	MW-32	Frozen			
02-Mar-94	MW-34	Frozen			
02-Mar-94	MW-35	Frozen			

**NOTES:**

NA = Top of casing elevation was not available.

**GROUNDWATER MONITORING  
VALIDATED ANALYTICAL RESULTS FOR THE FOURTH QUARTER 1994  
OB/OD GROUNDS, SENECA ARMY DEPOT**

**PREPARED FOR:**

**U.S. Army Corps of Engineers  
Huntsville, Alabama**

**PREPARED BY:**

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

**January 1995  
D#12**

## TABLE OF CONTENTS

- 1.0 Indicator Parameters
  - 1.1 Indicator Parameters Results
  - 1.2 Statistical Analysis
- 2.0 QA/QC Data
  - 2.1 Laboratory Control Samples and Duplicates for Indicator Parameters
  - 2.2 Indicator Parameter Data

**Section 1.0**  
**Indicator Parameters**

## **1.1 Indicator Parameters Results**

**OB GROUNDS FOURTH QUARTER 1994 MONITORING**

**INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX	WATER			WATER		
		SITE	DATE SAMPLED	OB	SITE	DATE SAMPLED	OB
ES ID		12/6/94			12/6/94		
LAB ID	MW-12A		MW-12B		MW-12C		MW-13A
UNITS	243640		243641		243642		243643
units	umhos/cm	7.35	7.37	7.40	7.36	7.04	7.03
	mg/L	907	915	907	915	888	861
	mg/L	1.2	1.2	1.3	1.2	1.2	1.2
		0.09	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

NOTE:

No groundwater samples were obtained from wells MW45-1 and MW45-2 because the wells were dry.

**OB GROUNDS FOURTH QUARTER 1994 MONITORING  
INDICATOR ANALYSIS RESULTS**

MATRIX	WATER	WATER	WATER
SITE	OB	OB	OB
DATE SAMPLED	12/6/94	12/6/94	12/6/94
ES ID	MW-13D	MW-14A	MW-14C
LAB ID	243647	243648	243650
PARAMETER			
UNITS	units	units	units
Conductivity	7.02	7.11	7.11
Total Organic Carbon	897	1090	1090
Total Organic Halides	1.3	1.1	1.0
	0.07	0.02 U	0.02 U

**OB GROUNDS FOURTH QUARTER 1994 MONITORING  
INDICATOR ANALYSIS RESULTS**

MATRIX	WATER	WATER	WATER	WATER
SITE	OB	OB	OD	OD
DATE SAMPLED	12/6/94	12/6/94	12/6 & 7/94	12/6 & 7/94
ES ID	MW-27C	MW-27D	MW-453A	MW-453C
LAB ID	243655	243656	243657	243659
PARAMETER				
units	7.36	7.32	7.19	7.18
umhos/cm	954	954	1460	1310
mg/L	1	1	0.8	0.8
mg/L	0.02 U	0.02 U	0.02 U	0.02 U
Conductivity				
Total Organic Carbon				
Total Organic Halides				

**OB GROUNDS FOURTH QUARTER 1994 MONITORING  
INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX	WATER	WATER	WATER
	SITE	OD	OD	OD
DATE SAMPLED	12/6/94	12/6/94	12/6/94	12/6/94
ES ID	MW-454B	MW-454C	MW-454R	MW-453R
LAB ID	243673	243674	243675	243671
UNITS	units	7.10	7.09	(MW-14 Rinsate)
	umhos/cm	1020	1030	(MW-14 Rinsate)
	mg/L	1	1	(MW-14 Rinsate)
	mg/L	0.02 U	0.02 U	(MW-14 Rinsate)
<sup>1</sup> Conductivity				
Total Organic Carbon				
Total Organic Halides				

## 1.2 Statistical Analysis

Students t – Test for wells in the OB area  
 TOC – Year 1994, 4th quarter

Well MW -5			
	TOC	pH	Specific Cond.
=	30.0	7.575	689.7
TOC =	302.3	0.034	2669.5
e =	16	16	16
5			
 GANIC CARBON (TOC)			
Well MW -12	Background Well MW -13	Compliance Well MW -14	Compliance
-6.62	-6.62	-6.67	t* =
2.60	2.60	2.60	tc =
No Change	No Change	No Change	No Change
 CONDUCTANCE			
Well MW -12	Background Well MW -13	Compliance Well MW -14	Compliance
-4.33	-11.60	-10.09	t* =
3.10	2.96	2.95	tc =
No Change	No Change	No Change	No Change
 GANIC HALIDES (TOX)			
Well MW -12	Background Well MW -13	Compliance Well MW -14	Compliance
-1.05	-1.49	-3.50	t* =
4.31	4.21	3.75	tc =
No Change	No Change	No Change	No Change

Most likely an increase in the indicator parameter

Most likely no change in the indicator parameter

**Well in the OB area**  
**Background Upgradient Concentrations**

<b>Background well MW-5</b>					
pH	jan-82	apr-82	jun-82	sep-82	
	7.3	7.6	7.8	7.6	
	7.3	7.6	7.8	7.6	
	7.3	7.6	7.8	7.6	
	7.3	7.6	7.8	7.6	
Average	7.58	Variance	0.034		
Spec Cond	jan-82	apr-82	jun-82	sep-82	
	730	719	620	795	
	730	718	620	790	
	730	719	620	795	
	730	720	620	795	
Average	689.67	Variance	2669.52		
TOC	jan-82	apr-82	jun-82	sep-82	
	1	39	43	37	
	1	39	42	38	
	1	40	42	37	
	1	39	42	38	
Average	30.00	Variance	302.27		
TOX	jan-82	apr-82	jun-82	sep-82	
	—	—	—	0.041	
	—	—	0.064	—	
	—	—	0.098	—	
	0.016	—	0.045	—	
Average	0.0528	Variance	0.0009307		

Students t – Test for wells in the OD area  
 TOC – Year 1994, 4th quarter

Well MW -4	TOC	pH	Spec Cond.	TOX
SANIC CARBON (TOC) Well MW -452	28.3125 379.3 t* = tc = e =	7.525 0.114 16	1007.8 98398.6 12	0.021 0.00056473 12
SANIC HALIDES (TOX) Well MW -453	Compliance Well MW -453			Compliance Well MW -454
	t* = tc =	-5.65 2.60	No Change	t* = tc = No Change
SANIC CARBON (TOC) Well MW -452	Compliance Well MW -453			Compliance Well MW -454
	t* = tc =	-3.96 2.95	No Change	t* = tc = No Change
SANIC HALIDES (TOX) Well MW -452	Compliance Well MW -453			Compliance Well MW -454
	t* = tc =	4.24 3.03	Increase	t* = tc = No Change
SANIC CARBON (TOC) Well MW -453	Compliance Well MW -453			Compliance Well MW -454
	t* = tc =	-2.33 2.72	No Change	t* = tc = No Change

Most likely an increase in the indicator parameter  
 Most likely no change in the indicator parameter

cad1tobqmddat\va1494.wk3

**Well in the OD area**  
**Background Upgradient Concentrations**

<b>Backgroundwell MW-4</b>					
pH	jan-82	apr-82	jun-82	sep-82	
	7.2	7.2	7.8	7.9	
	7.2	7.2	7.8	7.9	
	7.2	7.2	7.8	7.9	
	7.2	7.2	7.8	7.9	
Average	7.53	Variance	0.114		
Spec Cond	jan-82	apr-82	jun-82	sep-82	
	1130	1300	590	—	
	1120	1302	590	—	
	1130	1301	600	—	
	1130	1300	600	—	
Average	1007.75	Variance	98398.57		
TOC	jan-82	apr-82	jun-82	sep-82	
	1	54	30	28	
	1	54	30	29	
	1	54	30	27	
	1	55	30	28	
Average	28.31	Variance	379.30		
TOX	jan-82	apr-82	jun-82	sep-82	
	0.06	0.005	0.005	—	
	0.05	0.005	0.005	—	
	0.05	0.005	0.005	—	
	0.052	0.005	0.005	—	
Average	0.021	Variance	0.000565		

**Section 2.0  
QA/QC Data**

**2.1     Laboratory Control Samples and  
Duplicates for Indicator Parameters**

**2.2     Indicator Parameter Data**

**2.1     Laboratory Control Samples and  
Duplicates for Indicator Parameters**

**Quality Control Summary**

Project No.: 93206      EIR No.: 48356      SDG No.: 48356

<u>Parameter</u>	Method Preparation Blank <u>Units: mg/L</u>	Laboratory Control Sample <u>Units: mg/L</u> <u>Found Value</u>	Laboratory Control Sample <u>Units: mg/L</u> <u>True Value</u>	Laboratory Control Sample <u>% Recovery</u>
Total Organic Carbon	<0.5	9.82	9.96	98.6
TAX	<0.02	10.57	10.00	105.7

**Inchcape Testing Services**  
**Aquatec Laboratories**

---

**Quality Control Summary**  
Project No.: 93206      EIR No.: 48358      SDG No.: 48358

<u>Parameter</u>	<u>Method Preparation Blank</u> <u>Units: mg/L</u>	<u>Laboratory Control Sample</u> <u>Units: mg/L</u> <u>Found Value</u>	<u>Laboratory Control Sample</u> <u>Units: mg/L</u> <u>True Value</u>	<u>Laboratory Control Sample</u> <u>% Recovery</u>
Total Organic Carbon	<0.5	9.71	9.96	97.5
TOX	<0.02	9.98	10.00	99.8

## **2.2 Indicator Parameter Data**



# Inchcape Testing Services

## Aquatec Laboratories

Laboratory Locations  
55 South Park Drive  
Colchester, VT 05446

75 Green Mountain Drive  
South Burlington, VT 05403

150 Herman Melville Boulevard  
New Bedford, MA 02740

## Analytical Report

Engineering Science  
Prudential Center  
Boston, MA 02199

Date : 12/19/94  
ETR Number : 48356  
Project No.: 93206  
No. Samples: 20  
Arrived : 12/08/94

Attention : Mike Duchesneau

Page 1

Case: 93206 SDG: 48356

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4-79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
243640	MW12A:12/06/94 @1600 (Water)	
9040	pH (std. units)	7.35
415.1	Organic Carbon, Total	1.2
450.1	Organic Halides, Total	0.09
120.1	Conductivity (umhos/cm)	907
243641	MW12B:12/06/94 @1600 (Water)	
9040	pH (std. units)	7.37
415.1	Organic Carbon, Total	1.2
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	915
243642	MW12C:12/06/94 @1600 (Water)	
9040	pH (std. units)	7.40
415.1	Organic Carbon, Total	1.3
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	907
243643	MW12D:12/06/94 @1600 (Water)	
9040	pH (std. units)	7.36
415.1	Organic Carbon, Total	1.2
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	915
243644	MW13A:12/06/94 @1440 (Water)	
9040	pH (std. units)	7.04
415.1	Organic Carbon, Total	1.2
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	888

< Cont. Next Page >





# Inchcape Testing Services

Aquatec Laboratories

Laboratory Locations  
55 South Park Drive  
Colchester, VT 05446

75 Green Mountain Drive  
South Burlington, VT 05403

150 Herman Melville Boulevard  
New Bedford, MA 02740

## Analytical Report

Engineering Science  
Prudential Center  
Boston, MA 02199

Date : 12/19/94  
ETR Number : 48356  
Project No.: 93206  
No. Samples: 20  
Arrived : 12/08/94

Attention : Mike Duchesneau

Page 2

Case:93206 SDG:48356

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4-79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
243645 MW13B:12/06/94 @1440(Water)		
9040	pH (std. units)	7.03
415.1	Organic Carbon, Total	1.2
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	861
243646 MW13C:12/06/94 @1440(Water)		
9040	pH (std. units)	7.05
415.1	Organic Carbon, Total	1.2
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	896
243647 MW13D:12/06/94 @1440(Water)		
9040	pH (std. units)	7.02
415.1	Organic Carbon, Total	1.3
450.1	Organic Halides, Total	0.07
120.1	Conductivity (umhos/cm)	897
243648 MW14A:12/06/94 @1450(Water)		
9040	pH (std. units)	7.11
415.1	Organic Carbon, Total	1.1
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1090
243649 MW14B:12/06/94 @1450(Water)		
9040	pH (std. units)	7.11
415.1	Organic Carbon, Total	1.0
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1090

< Cont. Next Page >





# Inchcape Testing Services

## Aquatec Laboratories

Laboratory Locations  
35 South Park Drive  
Colchester, VT 05446

75 Green Mountain Drive  
South Burlington, VT 05403

150 Herman Melville Boulevard  
New Bedford, MA 02740

## Analytical Report

Engineering Science  
Prudential Center  
Boston, MA 02199

Date : 12/19/94  
ETR Number : 48356  
Project No.: 93206  
No. Samples: 20  
Arrived : 12/08/94

Attention : Mike Duchesneau

Page 3

Case:93206 SDG:48356

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/	Parameter	Result
243650	MW14C:12/06/94 @1450(Water)		
9040	pH (std. units)	7.11	
415.1	Organic Carbon, Total	1.0	
450.1	Organic Halides, Total	<0.02	
120.1	Conductivity (umhos/cm)	1090	
243651	MW14D:12/06/94 @1450(Water)		
9040	pH (std. units)	7.11	
415.1	Organic Carbon, Total	1.0	
450.1	Organic Halides, Total	<0.02	
120.1	Conductivity (umhos/cm)	1060	
243652	MW14R:12/06/94 @0845(Water)		
9040	pH (std. units)	6.46	
415.1	Organic Carbon, Total	<0.5	
450.1	Organic Halides, Total	<0.02	
120.1	Conductivity (umhos/cm)	5.1	
243653	MW27A:12/06/94 @1625(Water)		
9040	pH (std. units)	7.34	
415.1	Organic Carbon, Total	1.0	
450.1	Organic Halides, Total	0.04	
120.1	Conductivity (umhos/cm)	950	
243654	MW27B:12/06/94 @1625(Water)		
9040	pH (std. units)	7.34	
415.1	Organic Carbon, Total	1.0	
450.1	Organic Halides, Total	0.03	
120.1	Conductivity (umhos/cm)	954	

< Cont. Next Page >





# Inchcape Testing Services

## Aquatec Laboratories

Laboratory Locations  
55 South Park Drive  
Colchester, VT 05446

75 Green Mountain Drive  
South Burlington, VT 05403

150 Herman Melville Boulevard  
New Bedford, MA 02740

## Analytical Report

Engineering Science  
Prudential Center  
Boston, MA 02199

Date : 12/19/94  
ETR Number : 48356  
Project No.: 93206  
No. Samples: 20  
Arrived : 12/08/94

Attention : Mike Duchesneau

Page 4

Case:93206 SDG:48356

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
243655 MW27C:12/06/94 @1625(Water)		
9040	pH (std. units)	7.36
415.1	Organic Carbon, Total	1.0
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	954
243656 MW27D:12/06/94 @1625(Water)		
9040	pH (std. units)	7.32
415.1	Organic Carbon, Total	1.0
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	954
243657 MW453A:(Water)		
9040	pH (std. units)	7.19
415.1	Organic Carbon, Total	0.8
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1460
243658 MW453B:(Water)		
9040	pH (std. units)	7.20
415.1	Organic Carbon, Total	0.8
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1310
243659 MW453C:(Water)		
9040	pH (std. units)	7.18
415.1	Organic Carbon, Total	0.8
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1500

< Last Page >

Submitted By :

Aquatec Inc.





# Inchcape Testing Services

## Aquatec Laboratories

Laboratory Locations  
55 South Park Drive  
Colchester, VT 05446

75 Green Mountain Drive  
South Burlington, VT 05403

150 Herman Melville Boulevard  
New Bedford, MA 02740

## Analytical Report

Engineering Science  
Prudential Center  
Boston, MA 02199

Date : 12/19/94  
ETR Number : 48358  
Project No.: 93206  
No. Samples: 6  
Arrived : 12/08/94

Attention : Mike Duchesneau

Page 1

Case:93206 SDG:48358

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
243670 MW453D: (Water)		
9040	pH (std. units)	7.19
415.1	Organic Carbon, Total	0.8
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1450
243671 MW453R:12/06/94 @0830 (Water)		
9040	pH (std. units)	6.45
415.1	Organic Carbon, Total	<0.5
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	5.3
243672 MW454A:12/06/94 @1300 (Water)		
9040	pH (std. units)	7.06
415.1	Organic Carbon, Total	1.0
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1050
243673 MW454B:12/06/94 @1300 (Water)		
9040	pH (std. units)	7.13
415.1	Organic Carbon, Total	1.0
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1020
243674 MW454C:12/06/94 @1300 (Water)		
9040	pH (std. units)	7.10
415.1	Organic Carbon, Total	1.0
450.1	Organic Halides, Total	<0.02
120.1	Conductivity (umhos/cm)	1020

< Cont. Next Page >



Laboratory Locations

55 South Park Drive  
Colchester, VT 05446

75 Green Mountain Drive  
South Burlington, VT 05403

150 Herman Melville Boulevard  
New Bedford, MA 02740

## Analytical Report

Engineering Science  
Prudential Center  
Boston, MA 02199

Date : 12/19/94  
ETR Number : 48358  
Project No.: 93206  
No. Samples: 6  
Arrived : 12/08/94

Attention : Mike Duchesneau

Page 2

Case:93206 SDG:48358

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/	Parameter	Result
243675	MW454D:12/06/94 @1300 (Water)		
9040	pH (std. units)	7.09	
415.1	Organic Carbon, Total	1.0	
450.1	Organic Halides, Total	<0.02	
120.1	Conductivity (umhos/cm)	1030	

< Last Page >

Submitted By :

Aquatec Inc.

