
The electronic version of this file/report should have the file name:

report.hw907015.2000-01-01.SemiAnnSelfMonitorRptJan-June2000.pdf



14 August 2000

Mr. Randall Peterson, P.E.
Engineering & Operations Manager
Division of Wastewater/Solid Waste
Jamestown Board of Public Utilities
P.O. Box 700
Jamestown, NY 14702-0700

**Subject: Essex/Hope Site
Semi-Annual Self-Monitoring Report
January – June 2000
BPU Permit No. 26
Radian Project No. 801419**

Dear Mr. Peterson:

This submittal represents the January through June 2000 monitoring report in accordance with the City of Jamestown Board of Public Utilities Industrial Wastewater Discharge Permit Number 26 for the Essex Specialty Products, Inc facility referenced above. For reporting purposes, Essex Specialty Products, Inc., is classified as a Significant Industrial User subject to Categorical Pretreatment Standards. As such, this report has been developed in accordance with the requirements of 40 CFR 403.12(e).

Specific requirements included in this report as shown on Table 1 are as follows:

Concentrations of Total Toxic organic compounds (TTOs) in discharge to POTW as measured monthly. Note: The Baseline Monitoring conducted for the discharge identified volatile organic compounds (VOCs) as approximately 98% of the influent TTO component. Non-volatile components historically were not a major component of chemical usage at the site. Based on these conditions, the permit requires sampling of VOCs to measure TTO concentration.

pH of discharge to POTW as measured monthly.

Flow rate of discharge to POTW as measured monthly.

Estimated daily average and maximum flow rates.

This Semi-Annual Report contains effluent data for January through June 2000. No permit conditions were exceeded during this reporting period.

URS Corporation
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205
Tel: 412-788-2717
Fax: 412-788-1316
www.urscorp.com

S:\Projects\Essex_Hope\801419\SelfMonitorJan-Jun00.doc

907015 mfm
RECEIVED
AUG 18 2000
NYSDEC-REG.9
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REL UNREL
AUG 17 2000
NYSDEC-REG.9
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REL UNREL

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AUG 17 2000

NYSDEC-REG.9
FOIL
✓REL UNREL

Flow rates for the reporting period ranged from 79,480 to 197,830 gallons per month. The pumping system was shut down during the first half of February 2000 with approximately 79,480 gallons of water discharged during that month. Based on the nature of the waste stream source (extracted groundwater from recovery wells), flow rates do not vary significantly on a daily basis. Flow rates for each well are set at established settings and are only modified for system optimization. Other potential sources of variability include short duration system shutdowns, pumping malfunctions, and seasonal recharge to the aquifer.

The daily average flow rates shown on the attached table were estimated by averaging monthly usage. Daily maximum flow rates were estimated to be 20 percent greater than daily averages. The supporting laboratory data sheets for the reported concentrations of VOCs are also attached.

We trust that this submittal satisfies our reporting obligation pursuant to 40 CFR 403.12. If you have any questions or require additional information, please contact me at (412) 788-2717 Extension 518.

Sincerely,

URS


for Keith A. Dodrill
Project Manager

Attachment

cc: Ben Baker
Maurice Moore (NYSDEC)
John Ross

TABLES



**Table 1. Average Daily Flows
Essex/Hope Site Discharge
January – June 2000**

Reporting Requirements for Pre-treated Discharge	January 2000	February 2000	March 2000	April 2000	May 2000	June 2000	Discharge Limit
VOCs (ppb)	Non-Detect	28 ug/L (Vinyl Chloride and Acetone)	10 ug/L (Methylene Chloride* and Acetone*)	110 ug/L (Vinyl Chloride, Methylene Chloride* and Acetone*)	152 ug/L (Vinyl Chloride, Methylene Chloride, TCE and Xylenes)	222 ug/L (Vinyl Chloride, Acetone*, 1,1-Dichloroethene, Methylene Chloride*, trans-1,2-Dichloroethene, and TCE)	2,130 ug/L Total Toxic Organics
pH (Standard Units)	7.94	7.18	7.17	6.95	7.01	7.00	>6 and <9
Monthly Total Flow (gallons)	140,710	79,480	187,710	164,720	137,080	197,830	NA
Average Daily Flow (gallons)	5,025	5,677 (2 week period)	5,214	5,490	5,272	5,495	NA
Maximum Daily Flow (gallons)	6,030	6,812	6,256	6,588	6,326	6,594	NA

* Compound was also detected in blank sample(s) for this sampling event.



JANUARY LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

February 17, 2000

Mr. Keith Dodrill
Radian International
Penn Center West III
Suite 300
Pittsburgh, PA 15276

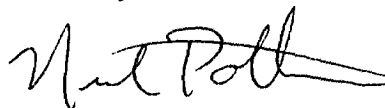
Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian International, Jamestown, NY Essex/Hope Project, Case No. ESSEX, SDG No. PRECAR. The 3 aqueous samples were taken from the field on January 27, 2000 and received at Ceimic Corporation on January 28, 2000.

These samples are reported under the Ceimic Project Number 200044, which can be referenced when inquiring about this project.

If you have any questions or concerns regarding this data, please call me at the telephone number listed below.

Sincerely,



Neil Pothier, Ph.D.
Laboratory Manager

NP/djj

Enclosures

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200044-02

Client Sample ID: POST-CARB

Date Sample Analyzed: 02/10/00

Date Sampled: 01/27/00

Associated Method Blank: V120210-B1

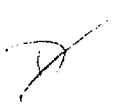
Date Sample Received: 1/28/00

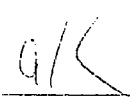
Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	ND	5
Chloroethane	ND	5
Methylene Chloride	ND	5
Trichlorofluoromethane	ND	5
Acetone	ND	10
1,1-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
trans-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Isopropylbenzene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
cis-1,3-Dichloropropene	ND	5
Bromoform	ND	5
Tetrachloroethene	ND	5

Reported by: 

Approved by: 

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200044-02

Client Sample ID: POST-CARB

Date Sample Analyzed: 02/10/00

Date Sampled: 01/27/00

Associated Method Blank: V120210-B1

Date Sample Received: 1/28/00

Dilution Factor: 1

Matrix: Aqueous

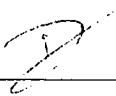
Concentration in: $\mu\text{g/L}$ (ppb)

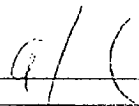
Target Analyte	Sample Concentration	Quantitation Limit
1,1,2,2-Tetrachloroethane	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethylbenzene	ND	5
Total Xylenes	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5

ND = Not detected

Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)
1,2-Dichloroethane-d4	70	62 - 139
Dibromofluoromethane	92	75 - 125
Toluene-d8	99	75 - 125
Bromofluorobenzene	103	75 - 125

Reported by: 

Approved by: 

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200044-03

Client Sample ID: TRIP BLANK

Date Sample Analyzed: 02/10/00

Date Sampled:

Associated Method Blank: V120210-B1

Date Sample Received: 1/28/00

Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	ND	5
Chloroethane	ND	5
Methylene Chloride	ND	5
Trichlorofluoromethane	ND	5
Acetone	ND	10
1,1-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
trans-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Isopropylbenzene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
cis-1,3-Dichloropropene	ND	5
Bromoform	ND	5
Tetrachloroethene	ND	5

Reported by: _____

Approved by: _____ 

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

**MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A**

Client: Radian International

Laboratory ID: 200044-03

Client Sample ID: TRIP BLANK

Date Sample Analyzed: 02/10/00

Date Sampled:

Associated Method Blank: V120210-B1

Date Sample Received: 1/28/00

Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
1,1,2,2-Tetrachloroethane	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethylbenzene	ND	5
Total Xylenes	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5

ND = Not detected

Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)
1,2-Dichloroethane-d4	71	62 - 139
Dibromofluoromethane	92	75 - 125
Toluene-d8	100	75 - 125
Bromofluorobenzene	101	75 - 125

Reported by: _____

Approved by: _____

Chain of Custody

Original Chain of Custody goes to Laboratory

200044
VCA

Page 1 of 1

Project #		Project Name		Cooler Temp.		Analyses												Remarks
Samplers (please print)		Cooler #																
Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers	pH	pH	pH	pH	pH	pH	pH	pH	pH			
01	1-27-00	1630	Grab	Pre-Carb	Ag	2	8260 VOCs											
02	1-27-00	1630	Grab	Post-Carb														
02	1-27-00	1650	Grab	Post-Carb														
02	1-27-00	1715	Grab	Post-Carb														
02	1-27-00	1745	Grab	Post-Carb														
03				Trip Blank	Ag	1												
Ceimic Project #				Relinquished by (signature)		Date/Time		Received by (signature)				Date/Time						
200044				John S. Ross		1-27-00 1815		Fed Ex Tracking # 810 161402160				18						
Storage Location				Relinquished by (signature)		Date/Time		Received by (signature)				Date/Time						
								Karen Williamson				1/28/00 10 AM						
Remarks:																		
Combine 4 post-carb samples into 1 for analysis																		

= Lab Use Only



FEBRUARY LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

March 15, 2000

Mr. Keith Dodrill
Radian International
Twin Tower, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian International, Jamestown, NY Essex/Hope Project, Project No. 801419, SDG No. PRECAR. The 3 aqueous samples were taken from the field on February 24, 2000 and received at Ceimic Corporation on February 25, 2000.

These samples are reported under the Ceimic Project Number 200124, which can be referenced when inquiring about this project.

If you have any questions or concerns regarding this data, please call me at the telephone number listed below.

Sincerely,



Alfred J. Kwolek, Jr.
GC/MS Specialist

NP/djj

Enclosures

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200124-02

Client Sample ID: POST-CARB

Date Sample Analyzed: 03/07/00

Date Sampled: 02/24/00

Associated Method Blank: V20306-B2

Date Sample Received: 2/25/00

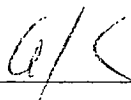
Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	17	5
Chloroethane	ND	5
Methylene Chloride	ND	5
Trichlorofluoromethane	ND	5
Acetone	11	10
1,1-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
trans-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Isopropylbenzene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
cis-1,3-Dichloropropene	ND	5
Bromoform	ND	5
Tetrachloroethene	ND	5

Reported by: 

Approved by: 

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200124-02

Client Sample ID: POST-CARB

Date Sample Analyzed: 03/07/00

Date Sampled: 02/24/00

Associated Method Blank: V20306-B2

Date Sample Received: 2/25/00

Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

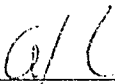
Target Analyte	Sample Concentration	Quantitation Limit
1,1,2,2-Tetrachloroethane	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethylbenzene	ND	5
Total Xylenes	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5

ND = Not detected

Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)
1,2-Dichloroethane-d4	98	62 - 139
Dibromofluoromethane	104	75 - 125
Toluene-d8	94	75 - 125
Bromofluorobenzene	99	75 - 125

Reported by: 

Approved by: 

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200124-03

Client Sample ID: TRIP BLANK

Date Sample Analyzed: 03/06/00

Date Sampled:

Associated Method Blank: V20306-B2

Date Sample Received: 2/25/00

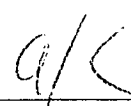
Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
Chloromethane	ND	5
Bromomethane	ND	5
Vinyl Chloride	ND	5
Chloroethane	ND	5
Methylene Chloride	ND	5
Trichlorofluoromethane	ND	5
Acetone	ND	10
1,1-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
trans-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Isopropylbenzene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
cis-1,3-Dichloropropene	ND	5
Bromoform	ND	5
Tetrachloroethene	ND	5

Reported by: 

Approved by: 

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200124-03

Client Sample ID: TRIP BLANK

Date Sample Analyzed: 03/06/00

Date Sampled:

Associated Method Blank: V20306-B2

Date Sample Received: 2/25/00

Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
1,1,2,2-Tetrachloroethane	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethylbenzene	ND	5
Total Xylenes	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5

ND = Not detected

Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)
1,2-Dichloroethane-d4	96	62 - 139
Dibromofluoromethane	103	75 - 125
Toluene-d8	96	75 - 125
Bromofluorobenzene	99	75 - 125

Reported by: 

Approved by: 

Page 1 of 1

☐ = Lab Use Only



MARCH LABORATORY RESULTS

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

April 12, 2000

Mr. Keith Dodrill
Penn Center West III
Suite 300
Pittsburgh, PA 15276

Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian International, Jamestown, NY Essex/Hope Project, Case No. 801419, SDG No. PRECAR. The 3 aqueous samples were taken from the field on March 31, 2000 and received at Ceimic Corporation on April 1, 2000.

These samples are reported under the Ceimic Project Number 200186, which can be referenced when inquiring about this project.

If you have any questions or concerns regarding this data, please call me at the telephone number listed below.

Sincerely,



Neil Pothier, Ph.D.
Laboratory Manager

NP/djj

Enclosures

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200186-02

Client Sample ID: POST-CARB

Date Sample Analyzed: 04/04/00

Date Sampled: 03/31/00

Associated Method Blank: V150404-B1

Date Sample Received: 4/1/00

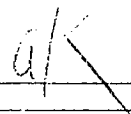
Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
Chloromethane	ND	1
Bromomethane	ND	1
Vinyl Chloride	100	1
Chloroethane	ND	1
Methylene Chloride	5	1
Trichlorofluoromethane	ND	1
Acetone	5	5
1,1-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,2-Dichloroethane	ND	1
2-Butanone	ND	5
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
Isopropylbenzene	ND	1
Dibromochloromethane	ND	1
1,1,2-Trichloroethane	ND	1
Benzene	ND	1
cis-1,3-Dichloropropene	ND	1
Bromoform	ND	1
Tetrachloroethene	ND	1

Reported by: 

Approved by: 

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200186-02

Client Sample ID: POST-CARB

Date Sample Analyzed: 04/04/00

Date Sampled: 03/31/00

Associated Method Blank: V150404-B1

Date Sample Received: 4/1/00

Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

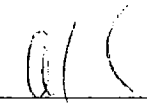
Target Analyte	Sample Concentration	Quantitation Limit
1,1,2,2-Tetrachloroethane	ND	1
Toluene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND = Not detected

Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)
1,2-Dichloroethane-d4	95	62 - 139
Dibromofluoromethane	97	75 - 125
Toluene-d8	99	75 - 125
Bromofluorobenzene	102	75 - 125

Reported by: 

Approved by: 

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A

Client: Radian International

Laboratory ID: 200186-03

Client Sample ID: TRIP BLANK

Date Sample Analyzed: 04/04/00

Date Sampled:

Associated Method Blank: V150404-B1

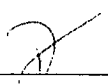
Date Sample Received: 4/1/00

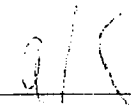
Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
Chloromethane	ND	1
Bromomethane	ND	1
Vinyl Chloride	ND	1
Chloroethane	ND	1
Methylene Chloride	7	1
Trichlorofluoromethane	ND	1
Acetone	6	5
1,1-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,2-Dichloroethane	ND	1
2-Butanone	ND	5
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
Bromodichloromethane	ND	1
1,2-Dichloropropane	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
Isopropylbenzene	ND	1
Dibromochloromethane	ND	1
1,1,2-Trichloroethane	ND	1
Benzene	ND	1
cis-1,3-Dichloropropene	ND	1
Bromoform	ND	1
Tetrachloroethene	ND	1

Reported by: 

Approved by: 

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

**MODIFIED COMPOUND LIST
VOLATILE ORGANICS ANALYSIS
SW846 METHOD 8260A**

Client: Radian International

Laboratory ID: 200186-03

Client Sample ID: TRIP BLANK

Date Sample Analyzed: 04/04/00

Date Sampled:

Associated Method Blank: V150404-B1

Date Sample Received: 4/1/00

Dilution Factor: 1

Matrix: Aqueous

Concentration in: $\mu\text{g/L}$ (ppb)

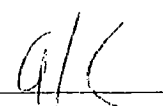
Target Analyte	Sample Concentration	Quantitation Limit
1,1,2,2-Tetrachloroethane	ND	1
Toluene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND = Not detected

Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)
1,2-Dichloroethane-d4	92	62 - 139
Dibromofluoromethane	99	75 - 125
Toluene-d8	96	75 - 125
Bromofluorobenzene	99	75 - 125

Reported by: 

Approved by: 

Chain of Custody
Original Chain of Custody goes to Laboratory

0980
Page 1 of 1

Project # 801419.0090			Project Name Essex-Hope			Cooler Temp. 6°C		Analyses										Remarks		
Samplers (please print) John Ross						Cooler #		VOCs 5701 8260 pH pH pH pH pH pH pH pH												
Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers														
01	3-31-00	1545	Grab	Pre-Carb	AQ	2	VOCs 5701 8260													
02	3-31-00	1545	Grab	Post-Carb	AQ	2														
02	3-31-00	1615	Grab	{ }	{ }	{ }														
02	3-31-00	1645	Grab																	
02	3-31-00	1715	Grab																	
03				Trip Blank																
Ceimic Project # 200186			Relinquished by (signature) <i>John D. Ross</i>				Date/Time 3-31-00 1730		Received by (signature) Fed. Ex # 810161402078								Date/Time			
Storage Location V0A			Relinquished by (signature)				Date/Time		Received by (signature)								Date/Time			
			Relinquished by (signature)				Date/Time		Received by Ceimic (signature) <i>Lawton D. Winter</i>								Date/Time 4/1/00 10:00			
Remarks: Combine 4 Post Carb Samples into 1 for Analysis.																				



APRIL LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

May 23, 2000

Mr. Keith Dodrill
Radian International
Twin Towers
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian International, Jamestown, NY Essex/Hope Project, Case No. 801419, SDG No. PRECAR. The 10 aqueous samples were taken from the field on April 30, 2000 and received at Ceimic Corporation on May 2, 2000.

These samples are reported under the Ceimic Project Number 200266, which can be referenced when inquiring about this project.

If you have any questions or concerns regarding this data, please call me at the telephone number listed below.

Sincerely,



Donald Tortorelli
Inorganic Laboratory Manager

DT/djj

Enclosures

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

POST-CARB

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: PRECAR

Matrix: (soil/water) WATER

Lab Sample ID: 200266-02A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OB314

Level: (low/med) LOW

Date Received: 05/02/00

% Moisture: not dec. _____

Date Analyzed: 05/09/00

GC Column: VOCOL ID: 0.53 (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	1	U
75-01-4-----	Vinyl Chloride	110	
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
67-64-1-----	Acetone	13	B
75-35-4-----	1,1-Dichloroethene	1	U
75-09-2-----	Methylene Chloride	43	B
156-60-5-----	trans-1,2-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
67-66-3-----	Chloroform	1	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
107-06-2-----	1,2-Dichloroethane	1	U
71-43-2-----	Benzene	1	U
79-01-6-----	Trichloroethene	36	
78-87-5-----	1,2-Dichloropropane	1	U
75-27-4-----	Bromodichloromethane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
108-88-3-----	Toluene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
127-18-4-----	Tetrachloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
108-90-7-----	Chlorobenzene	1	U
100-41-4-----	Ethylbenzene	1	U
1330-20-7-----	Xylenes (total)	12	
108-38-3-----	m,p-Xylenes	6	
95-47-6-----	o-Xylene	6	
75-25-2-----	Bromoform	1	U
98-82-8-----	Isopropylbenzene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U

FORM I
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POST-CARB

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: PRECAR

Matrix: (soil/water) WATER

Lab Sample ID: 200266-02A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OB314

Level: (low/med) LOW

Date Received: 05/02/00

% Moisture: not dec. _____

Date Analyzed: 05/09/00

GC Column: VOCOL ID: 0.53 (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
---------	----------	--	---

541-73-1-----	1,3-Dichlorobenzene		1 U
106-46-7-----	1,4-Dichlorobenzene		1 U
95-50-1-----	1,2-Dichlorobenzene		1 U

VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIANT SAMPLE NO.

FIELD BLANK

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: PRECAR

Matrix: (soil/water) WATER

Lab Sample ID: 200266-03A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OB313

Level: (low/med) LOW

Date Received: 05/02/00

% Moisture: not dec. _____

Date Analyzed: 05/09/00

GC Column: VOCOL ID: 0.53 (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	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
67-64-1	Acetone	14	B
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	35	B
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	15	
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
107-06-2	1,2-Dichloroethane	1	U
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	4	
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylenes (total)	1	J
108-38-3	m,p-Xylenes	1	J
95-47-6	o-Xylene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIANT SAMPLE NO.

FIELD BLANK

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: PRECAR

Matrix: (soil/water) WATER

Lab Sample ID: 200266-03A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OB313

Level: (low/med) LOW

Date Received: 05/02/00

% Moisture: not dec. _____

Date Analyzed: 05/09/00

GC Column: VOCOL ID: 0.53 (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

541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U

Chain of Custody

Original Chain of Custody goes to Laboratory

Page 1 of 2

Project # 801419.0090			Project Name Essex - Hope		Cooler Temp. 4°C		Analyses										Remarks			
Samplers (please print) John Ross					Cooler #		VOCs 8260	pH		pH		pH		pH		pH				
Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers														
01	4-30-00	1030	Grab	Pre-Carb	AQ	2	2													
02	4-30-00	1030	Grab	Post-Carb	↓	↓	↓													
02	4-30-00	1100	Grab	Post-Carb																
02	4-30-00	1130	Grab	Post-Carb																
02	4-30-00	1200	Grab	Post-Carb																
03	4-30-00	1200	Grab	Field Blank																
Ceimic Project # 200266			Relinquished by (signature) <i>John Ross</i>		Date/Time 5/1/00 1600		Received by (signature) <i>Fed Ex # 810161402067</i>		Date/Time 5/1/00 1600											
			Relinquished by (signature)		Date/Time		Received by (signature)		Date/Time											
Storage Location VCA			Relinquished by (signature)		Date/Time		Received by Ceimic (signature) <i>Lauren Dinites</i>		Date/Time 5/2/00 1020											
Remarks: Combine 4 Postcarb Samples into 1 for Analysis.																				

☐ = Lab Use Only



MAY LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

June 15, 2000

Mr. Keith Dodrill
Radian International
Twin Towers
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of Radian International, Jamestown, NY Essex/Hope Project, Project No. 801419, SDG No. 52600. The 3 aqueous samples were taken from the field on May 26, 2000 and were received at Ceimic Corporation on May 27, 2000.

These samples are reported under Ceimic Project Number 200354, which can be referenced when inquiring about this project.

If you have any questions or concerns regarding this data, please call me at the telephone number listed below.

Sincerely,



Neil Pothier, Ph.D.
Laboratory Manager

NP/djj

Enclosures

VOLATILE ORGANICS ANALYSIS DATA SHEET

POST-CARB

Lab Name: CEIMIC CORP

Contract: 751846

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 52600

Matrix: (soil/water) WATER

Lab Sample ID: 200354-02A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L7426

Level: (low/med) LOW

Date Received: 05/27/00

% Moisture: not dec. _____

Date Analyzed: 06/03/00

GC Column: DB624 ID: 0.18 (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	1	U
75-01-4-----	Vinyl Chloride	130	
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
67-64-1-----	Acetone	5	U
75-35-4-----	1,1-Dichloroethene	1	U
75-09-2-----	Methylene Chloride	5	
156-60-5-----	trans-1,2-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
67-66-3-----	Chloroform	1	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
107-06-2-----	1,2-Dichloroethane	1	U
71-43-2-----	Benzene	1	U
79-01-6-----	Trichloroethene	18	
78-87-5-----	1,2-Dichloropropane	1	U
75-27-4-----	Bromodichloromethane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
108-88-3-----	Toluene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
127-18-4-----	Tetrachloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
108-90-7-----	Chlorobenzene	1	U
100-41-4-----	Ethylbenzene	1	U
1330-20-7-----	Xylenes (total)	4	
108-38-3-----	m,p-Xylenes	1	J
95-47-6-----	o-Xylene	3	
75-25-2-----	Bromoform	1	J
98-82-8-----	Isopropylbenzene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

POST-CARB

Lab Name: CEIMIC CORP

Contract: 751846

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 52600

Matrix: (soil/water) WATER

Lab Sample ID: 200354-02A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L7426

Level: (low/med) LOW

Date Received: 05/27/00

% Moisture: not dec. _____

Date Analyzed: 06/03/00

GC Column: DB624 ID: 0.18 (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
---------	----------	--	---

541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: 751846

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 52600

Matrix: (soil/water) WATER

Lab Sample ID: 200354-03A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L7425

Level: (low/med) LOW

Date Received: 05/27/00

% Moisture: not dec. _____

Date Analyzed: 06/03/00

GC Column: DB624 ID: 0.18 (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	1	U
75-01-4-----	Vinyl Chloride	1	U
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
67-64-1-----	Acetone	5	U
75-35-4-----	1,1-Dichloroethene	1	U
75-09-2-----	Methylene Chloride	1	U
156-60-5-----	trans-1,2-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
67-66-3-----	Chloroform	1	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
107-06-2-----	1,2-Dichloroethane	1	U
71-43-2-----	Benzene	1	U
79-01-6-----	Trichloroethene	1	U
78-87-5-----	1,2-Dichloropropane	1	U
75-27-4-----	Bromodichloromethane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
108-88-3-----	Toluene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
127-18-4-----	Tetrachloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
108-90-7-----	Chlorobenzene	1	U
100-41-4-----	Ethylbenzene	1	U
1330-20-7-----	Xylenes (total)	3	U
108-38-3-----	m,p-Xylenes	2	U
95-47-6-----	o-Xylene	1	U
75-25-2-----	Bromoform	1	U
98-82-8-----	Isopropylbenzene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radial SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: 751846

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 52600

Matrix: (soil/water) WATER

Lab Sample ID: 200354-03A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: L7425

Level: (low/med) LOW

Date Received: 05/27/00

% Moisture: not dec. _____

Date Analyzed: 06/03/00

GC Column: DB624 ID: 0.18 (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

541-73-1-----1,3-Dichlorobenzene	1	U
106-46-7-----1,4-Dichlorobenzene	1	U
95-50-1-----1,2-Dichlorobenzene	1	U

Page 1 of 1

Ceimic Corporation, 10 Dean Knauss Drive, Narragansett, RI 02882 - Tel: (401) 782-8900, Fax: (401) 782-8905



JUNE LABORATORY RESULTS

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

July 28, 2000

Mr. Keith Dodrill
Radian
Penn Center West III
Suite 300
Pittsburgh, PA 15276

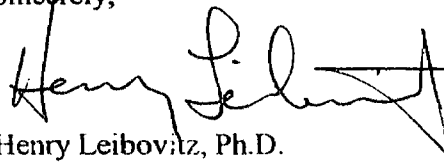
Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian, Project Jamestown, NY Essex/Hope, Case No. 801419, SDG No. 63000. The 3 aqueous samples were taken from the field on June 30, 2000 and received at Ceimic Corporation on July 1, 2000.

These samples are reported under the Ceimic Project Number 200454, which can be referenced when inquiring about this project.

If you have any questions or concerns regarding this data, please call me at the telephone number listed below.

Sincerely,



Henry Leibovitz, Ph.D.
Organic Laboratory Manager

HL/djj

Enclosures

POST-CAR
B 6/30/00

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 63000

Matrix: (soil/water) WATER

Lab Sample ID: 200454-01A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OC153

Level: (low/med) LOW

Date Received: 07/01/00

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: _____ (uL)

Date Analyzed: 07/10/00

Injection Volume: _____ (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.0

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

CAS NO.

COMPOUND

Q

74-87-3-----	Chloromethane	1	U
75-01-4-----	Vinyl Chloride	160	
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
67-64-1-----	Acetone	22	
75-35-4-----	1,1-Dichloroethene	2	
75-09-2-----	Methylene Chloride	15	
156-60-5-----	trans-1,2-Dichloroethene	2	
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
67-66-3-----	Chloroform	1	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
107-06-2-----	1,2-Dichloroethane	1	U
71-43-2-----	Benzene	1	U
79-01-6-----	Trichloroethene	21	
78-87-5-----	1,2-Dichloropropane	1	U
75-27-4-----	Bromodichloromethane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
108-88-3-----	Toluene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
127-18-4-----	Tetrachloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
108-90-7-----	Chlorobenzene	1	U
100-41-4-----	Ethylbenzene	1	U
1330-20-7-----	Xylenes (total)	3	U
108-38-3-----	m,p-Xylenes	2	U
95-47-6-----	o-Xylene	1	U
75-25-2-----	Bromoform	1	U
98-82-8-----	Isopropylbenzene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U

POST-CAR
B 6/30/00

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 63000

Matrix: (soil/water) WATER

Lab Sample ID: 200454-01A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OC153

Level: (low/med) LOW

Date Received: 07/01/00

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: _____ (uL)

Date Analyzed: 07/10/00

Injection Volume: _____ (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

541-73-1-----1,3-Dichlorobenzene	1	U
106-46-7-----1,4-Dichlorobenzene	1	U
95-50-1-----1,2-Dichlorobenzene	1	U

FORM I Radian International 101-001-2000 00.00
VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 63000

Matrix: (soil/water) WATER

Lab Sample ID: 200454-03A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OC147

Level: (low/med) LOW

Date Received: 07/01/00

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: _____ (uL)

Date Analyzed: 07/10/00

Injection Volume: _____ (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.0

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

CAS NO.	COMPOUND	Q
74-87-3	-----Chloromethane	1 U
75-01-4	-----Vinyl Chloride	1 U
74-83-9	-----Bromomethane	1 U
75-00-3	-----Chloroethane	1 U
75-69-4	-----Trichlorofluoromethane	1 U
67-64-1	-----Acetone	14
75-35-4	-----1,1-Dichloroethene	1 U
75-09-2	-----Methylene Chloride	19
156-60-5	-----trans-1,2-Dichloroethene	1 U
75-34-3	-----1,1-Dichloroethane	1 U
78-93-3	-----2-Butanone	5 U
67-66-3	-----Chloroform	1 U
71-55-6	-----1,1,1-Trichloroethane	1 U
56-23-5	-----Carbon Tetrachloride	1 U
107-06-2	-----1,2-Dichloroethane	1 U
71-43-2	-----Benzene	1 U
79-01-6	-----Trichloroethene	1 U
78-87-5	-----1,2-Dichloropropane	1 U
75-27-4	-----Bromodichloromethane	1 U
10061-01-5	-----cis-1,3-Dichloropropene	1 U
108-88-3	-----Toluene	1 U
10061-02-6	-----trans-1,3-Dichloropropene	1 U
79-00-5	-----1,1,2-Trichloroethane	1 U
127-18-4	-----Tetrachloroethene	1 U
124-48-1	-----Dibromochloromethane	1 U
108-90-7	-----Chlorobenzene	1 U
100-41-4	-----Ethylbenzene	1 U
1330-20-7	-----Xylenes (total)	3 U
108-38-3	-----m,p-Xylenes	2 U
95-47-6	-----o-Xylene	1 U
75-25-2	-----Bromoform	1 U
98-82-8	-----Isopropylbenzene	1 U
79-34-5	-----1,1,2,2-Tetrachloroethane	1 U

FORM I VOA

FORM I
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian International 101-501-2000 00:00

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 63000

Matrix: (soil/water) WATER

Lab Sample ID: 200454-03A

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: OC147

Level: (low/med) LOW

Date Received: 07/01/00

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: _____ (uL)

Date Analyzed: 07/10/00

Injection Volume: _____ (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U

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 = Lab Use Only