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Construction Services

February 9, 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
July – December 2000
BPU Permit No. 26
Radian Project No. 801419**

Dear Mr. Peterson:

This submittal represents the July through December 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 July through January 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

M. Moore
DSS
907015
RECEIVED
FEB 12 2001
NYSDEC - REG. 9
REL - UNREL



Construction Services

Discharge flow rates for the reporting period ranged from 92,705 to 123,845 gallons per month for July, August and September and from 168,220 to 233,400 gallons per month for October, November and December. Groundwater extraction rates at the site were increased during the 4th Quarter of 2000 as part of a subsurface recovery test completed during that period. 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 1269.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Dodrill", written over a horizontal line.

Keith A. Dodrill
Project Manager

Attachment

cc: Ben Baker
Maurice Moore (NYSDEC)
John Ross

Table 1
Average Daily Flows
Essex/Hope Site Discharge
July – December 2000

Reporting Requirements for Pre-treated Discharge	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000	Discharge Limit
VOCs (ppb)	254 ug/L (Vinyl Chloride, Methylene Chloride*, TCE and Toluene)	47.9 ug/L (Vinyl Chloride, Acetone*, Methylene Chloride* and TCE)	3 ug/L (Methylene Chloride)	103 ug/L (Vinyl Chloride, Acetone, Methylene Chloride*, and 2-Butanone*)	235.05 ug/L (Vinyl Chloride, Methylene Chloride*, and TCE)	5 ug/L (Vinyl Chloride, and Methylene Chloride)	2,130 ug/L Total Toxic Organics
pH (Standard Units)	6.44	7.27	7.25	6.48	7.30	7.65	>6 and <9
Monthly Total Flow (gallons)	92,705	123,845	110,310	233,400	168,220	185,875	NA
Average Daily Flow (gallons)	2,990	3,995	3,804	7,294	5,607	6,638	NA
Maximum Daily Flow (gallons)	3,588	4,794	4,565	8,753	6,728	7,966	NA

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

JULY LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

October 24, 2000

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

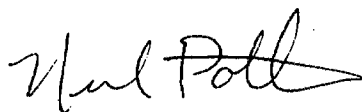
Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of Radian International, Jamestown, NY Essex/Hope Project, Project No. 801419, SDG No. 73100. The 3 water samples were taken from the field on July 31, 2000 and were received at Ceimic Corporation on August 1, 2000.

These samples are reported under Ceimic Project Number 200600, 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

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POSTCARB73100

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 73100

Matrix: (soil/water) WATER

Lab Sample ID: 200600-02A

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

Lab File ID: GAK24

Level: (low/med) LOW

Date Received: 08/01/00

% Moisture: not dec. _____

Date Analyzed: 08/13/00

GC Column: DB624 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	210	E
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	27	
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	3	
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	4	
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

RADIAN SAMPLE NO.

POSTCARB73100

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 73100

Matrix: (soil/water) WATER

Lab Sample ID: 200600-02A

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

Lab File ID: GAK24

Level: (low/med) LOW

Date Received: 08/01/00

% Moisture: not dec. _____

Date Analyzed: 08/13/00

GC Column: DB624 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

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

POSTCARB73100DL

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 73100

Matrix: (soil/water) WATER

Lab Sample ID: 200600-02ADL

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

Lab File ID: GAK77

Level: (low/med) LOW

Date Received: 08/01/00

% Moisture: not dec. _____

Date Analyzed: 08/17/00

GC Column: DB624 ID: 0.53 (mm)

Dilution Factor: 2.0

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	2	U
75-01-4	-----Vinyl Chloride	220	D
74-83-9	-----Bromomethane	2	U
75-00-3	-----Chloroethane	2	U
75-69-4	-----Trichlorofluoromethane	2	U
67-64-1	-----Acetone	10	U
75-35-4	-----1,1-Dichloroethene	2	U
75-09-2	-----Methylene Chloride	69	D
156-60-5	-----trans-1,2-Dichloroethene	2	U
75-34-3	-----1,1-Dichloroethane	2	U
78-93-3	-----2-Butanone	10	U
67-66-3	-----Chloroform	2	U
71-55-6	-----1,1,1-Trichloroethane	2	U
56-23-5	-----Carbon Tetrachloride	2	U
107-06-2	-----1,2-Dichloroethane	2	U
71-43-2	-----Benzene	2	U
79-01-6	-----Trichloroethene	2	U
78-87-5	-----1,2-Dichloropropane	2	U
75-27-4	-----Bromodichloromethane	2	U
10061-01-5	-----cis-1,3-Dichloropropene	2	U
108-88-3	-----Toluene	2	U
10061-02-6	-----trans-1,3-Dichloropropene	2	U
79-00-5	-----1,1,2-Trichloroethane	2	U
127-18-4	-----Tetrachloroethene	2	U
124-48-1	-----Dibromochloromethane	2	U
108-90-7	-----Chlorobenzene	2	U
100-41-4	-----Ethylbenzene	2	U
1330-20-7	-----Xylenes (total)	6	U
108-38-3	-----m,p-Xylenes	4	U
95-47-6	-----o-Xylene	2	U
75-25-2	-----Bromoform	2	U
98-82-8	-----Isopropylbenzene	2	U
79-34-5	-----1,1,2,2-Tetrachloroethane	2	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

POSTCAR373100DL

Lab Name: CEIMIC CORP

Contract: RADIANT

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 73100

Matrix: (soil/water) WATER

Lab Sample ID: 200600-02ADL

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

Lab File ID: GAK77

Level: (low/med) LOW

Date Received: 08/01/00

% Moisture: not dec. _____

Date Analyzed: 08/17/00

GC Column: DB624 ID: 0.53 (mm)

Dilution Factor: 2.0

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

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 73100

Matrix: (soil/water) WATER

Lab Sample ID: 200600-06A

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

Lab File ID: GAK23

Level: (low/med) LOW

Date Received: 08/01/00

% Moisture: not dec. _____

Date Analyzed: 08/13/00

GC Column: DB624 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	5	U	
75-35-4	1,1-Dichloroethene	1	U	
75-09-2	Methylene Chloride	26		
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

RADIAN SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 73100

Matrix: (soil/water) WATER

Lab Sample ID: 200600-06A

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

Lab File ID: GAK23

Level: (low/med) LOW

Date Received: 08/01/00

% Moisture: not dec. _____

Date Analyzed: 08/13/00

GC Column: DB624 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

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 73100

	CLIENT SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	VBKGG	84	96	84	92	0
02	TRIP BLANK	90	100	80	90	0
03	POSTCARB7310	94	90	80	88	0
04	PRECARB73100	88	86	82	88	0
05	VBKGR	92	86	82	92	0
06	PRECARB73100	88	98	82	92	0
07	VBKGT	86	76	80	88	0
08	POSTCARB7310	88	78	80	86	0
09	VBKPB	127	114	121	117	0
10	VBKPC	119	124	124	124	0
11	VBKPD	89	89	89	82	0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

SMC1 = Dibromofluoromethane (75-125)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (62-139)
 SMC3 (TOL) = Toluene-d8 (75-125)
 OTHER (BFB) = Bromofluorobenzene (75-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 73100

Matrix Spike - Sample No.: VLCSEQ

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Chloromethane	50		45	90	65-135
Vinyl Chloride	50		46	92	36-144
Bromomethane	50		50	100	62-135
Chloroethane	50		47	94	55-135
Trichlorofluoromethane	50		36	72	57-135
1,1-Dichloroethene	50		47	94	60-128
Methylene Chloride	50		18	36*	65-135
trans-1,2-Dichloroethen	50		48	96	65-135
1,1-Dichloroethane	50		49	98	62-135
Chloroform	50		50	100	64-135
1,1,1-Trichloroethane	50		51	102	65-135
Carbon Tetrachloride	50		51	102	52-135
1,2-Dichloroethane	50		51	102	58-137
Benzene	50		48	96	72-124
Trichloroethene	50		49	98	57-145
1,2-Dichloropropane	50		48	96	60-135
Bromodichloromethane	50		50	100	65-135
cis-1,3-Dichloropropene	50		50	100	64-135
Toluene	50		49	98	71-135
trans-1,3-Dichloroprope	50		50	100	56-135
1,1,2-Trichloroethane	50		46	92	65-135
Tetrachloroethene	50		51	102	61-135
Dibromochloromethane	50		52	104	63-135
Chlorobenzene	50		49	98	72-135
Ethylbenzene	50		51	102	65-135
m,p-Xylenes	100		100	100	65-135
o-Xylene	50		52	104	65-135
Bromoform	50		56	112	65-135

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

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 73100

Matrix Spike - Sample No.: VLCSCQ

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Isopropylbenzene	50		49	98	65-135
1,1,2,2-Tetrachloroetha	50		51	102	64-135
1,3-Dichlorobenzene	50		50	100	65-135
1,4-Dichlorobenzene	50		49	98	65-135
1,2-Dichlorobenzene	50		49	98	65-135

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 1 out of 33 outside limits

COMMENTS: ..

Chain-of-Custody

Chain of Custody
Original Chain of Custody goes to Laboratory

0221
Page 1 of 1

Project # 801419.0090			Project Name Essex Hope			Cooler Temp. 3°		Analyses										Remarks
Samplers (please print) Rachel Rupiper						Cooler # 1		VOCs 8260	pH	pH	pH	pH	pH	pH	pH			
Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers												
1	7-31-00	1600	Grab	Pre-Carb	AQ	2	✓											
2	7-31-00	1600	Grab	Post-Carb	AQ	2	✓											
3	7-31-00	1630	Grab	Post-Carb	AQ	2	✓											
4	7-31-00	1700	Grab	Post-Carb	AQ	2	✓											
5	7-31-00	1730	Grab	Post-Carb	AQ	2	✓											
6				Trip Blank	AQ	2	✓											
Celmic Project # 200600			Relinquished by (signature) Rachel Rupiper				Date/Time 07/31/00 1800hrs		Received by (signature) Federal Express # 821774036046				Date/Time 07/31/00 1800hrs					
Storage Location VOA			Relinquished by (signature)				Date/Time		Received by (signature) Kath McShaw				Date/Time					
Remarks: Combine 4 Post-Carb samples into one for analysis																		

AUGUST LABORATORY RESULTS

CEIMIC
Corporation

"Analytical Chemistry for Environmental Management"

September 25, 2000

Mr. Keith Dodrill
Radian International
Twin Towers Suite 250
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. RW-1D. The 11 water samples were taken from the field on August 24 and 31, 2000 and were received at Ceimic Corporation on August 25 and September 1, 2000.

These samples are reported under Ceimic Project Number 200660, 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

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.: RW-1D

Matrix: (soil/water) WATER

Lab Sample ID: 200660-10A

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

Lab File ID: P0205

Level: (low/med) LOW

Date Received: 09/01/00

% Moisture: not dec. _____

Date Analyzed: 09/08/00

GC Column: DB624 ID: 0.32 (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	0.9	J
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
67-64-1-----	Acetone	16	B
75-35-4-----	1,1-Dichloroethene	1	U
75-09-2-----	Methylene Chloride	30	B
156-60-5-----	trans-1,2-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	1	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)	1	U
108-38-3-----	m,p-Xylenes	1	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

Radian SAMPLE NO.

POST-CARB

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: RW-1D

Matrix: (soil/water) WATER

Lab Sample ID: 200660-10A

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

Lab File ID: P0205

Level: (low/med) LOW

Date Received: 09/01/00

% Moisture: not dec. _____

Date Analyzed: 09/08/00

GC Column: DB624 ID: 0.32 (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 BLANK2

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: RW-1D

Matrix: (soil/water) WATER

Lab Sample ID: 200660-11A

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

Lab File ID: P0203

Level: (low/med) LOW

Date Received: 09/01/00

% Moisture: not dec. _____

Date Analyzed: 09/08/00

GC Column: DB624 ID: 0.32 (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	13	B
75-35-4-----	1,1-Dichloroethene	1	U
75-09-2-----	Methylene Chloride	21	B
156-60-5-----	trans-1,2-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	1	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	
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	U
108-38-3-----	m,p-Xylenes	1	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

Radian SAMPLE NO.

TRIP BLANK2

Lab Name: CEIMIC

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: RW-1D

Matrix: (soil/water) WATER

Lab Sample ID: 200660-11A

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

Lab File ID: P0203

Level: (low/med) LOW

Date Received: 09/01/00

% Moisture: not dec. _____

Date Analyzed: 09/08/00

GC Column: DB624 ID: 0.32 (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 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CEIMIC

Contract: RADIANT

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: RW-1D

	CLIENT SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	VBLKLA	86	86	90	92	0
02	RW-1D	82	80	90	88	0
03	RW-2D	78	78	88	88	0
04	RW-3S	80	78	86	82	0
05	RW-4S	78	78	86	94	0
06	VBLKPD	106	104	110	116	0
07	VLCSPD	100	100	100	108	0
08	RW-1S	110	112	108	110	0
09	RW-3SDL	110	114	104	112	0
10	RW-4SDL	110	116	106	110	0
11	RW-5S	110	116	106	108	0
12	TRIP BLANK1	110	112	106	110	0
13	VBLKPA	92	92	88	84	0
14	RW-2S	94	94	88	84	0
15	RW-1SDL	94	94	90	88	0
16	VBLKPB	90	90	88	84	0
17	RW-2DDL	92	98	88	84	0
18	TRIP BLANK2	92	96	88	84	0
19	PRE-CARB	94	96	86	82	0
20	POST-CARB	92	94	88	84	0
21	VBLKPC	90	90	88	80	0
22	PRE-CARBDL	92	94	86	82	0
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

SMC1 = Dibromofluoromethane (75-125)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (62-139)
 SMC3 (TOL) = Toluene-d8 (75-125)
 OTHER(BFB) = Bromofluorobenzene (75-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC

Contract: RADIANT

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: RW-1D

Matrix Spike - Sample No.: VLCSPD

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	50		43	86	68-124
Benzene	50		52	104	78-127
Trichloroethene	50		49	98	75-120
Toluene	50		49	98	71-132
Chlorobenzene	50		49	98	77-128

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

CHAIN OF CUSTODY

Chain of Custody

Original Chain of Custody goes to Laboratory

Page 1 of 1

Project # 801419.0090			Project Name Essex- Hope			Cooler Temp. 4°C		Analyses										Remarks		
Samplers (please print) John Ross						Cooler # 1														
Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers		pH		pH		pH		pH		pH		pH		Remarks
9	8-31-00	1600	Carb	Pre-Carb	AQ	2	1065 8260													
10		1600		Post-Carb																
10		1630		Post-Carb																
10		1700		Post-Carb																
10		1730		Post-Carb																
11				Trip Blank																
Ceimic Project # 200660			Relinquished by (signature) John S. Ross				Date/Time 8-31-00 1815		Received by (signature) Fed Ex # 8213 6026 4559				Date/Time 1815 8-31-00							
Storage Location VOA			Relinquished by (signature)				Date/Time		Received by (signature)				Date/Time							
			Relinquished by (signature)				Date/Time		Received by Ceimic (signature) Robert Davis				Date/Time 9/1/00 1000							
Remarks: Combine 4 post-Carb samples into 1 for analysis																				

 = Lab Use Only

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

SEPTEMBER LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

October 18, 2000

Mr. Keith Dodrill
Radian International
Twin Towers Suite 250
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. 092900. The 3 water samples were taken from the field on September 29, 2000 and were received at Ceimic Corporation on September 30, 2000.

These samples are reported under Ceimic Project Number 200727, 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

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

POST-CARB
09/29/00

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 092900

Matrix: (soil/water) WATER

Lab Sample ID: 200727-02A

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

Lab File ID: Q0581

Level: (low/med) LOW

Date Received: 09/30/00

% Moisture: not dec. _____

Date Analyzed: 10/12/00

GC Column: DB624 ID: 0.32 (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	3	
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

Radian SAMPLE NO.

POST-CARB
09/29/00

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 092900

Matrix: (soil/water) WATER

Lab Sample ID: 200727-02A

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

Lab File ID: Q0581

Level: (low/med) LOW

Date Received: 09/30/00

% Moisture: not dec. _____

Date Analyzed: 10/12/00

GC Column: DB624 ID: 0.32 (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: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 092900

Matrix: (soil/water) WATER

Lab Sample ID: 200727-03A

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

Lab File ID: Q0594

Level: (low/med) LOW

Date Received: 09/30/00

% Moisture: not dec. _____

Date Analyzed: 10/13/00

GC Column: DB624 ID: 0.32 (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

Radian SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 092900

Matrix: (soil/water) WATER

Lab Sample ID: 200727-03A

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

Lab File ID: Q0594

Level: (low/med) LOW

Date Received: 09/30/00

% Moisture: not dec. _____

Date Analyzed: 10/13/00

GC Column: DB624 ID: 0.32 (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 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: RADIAN

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 092900

Matrix Spike - Sample No.: VLCSQE

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Chloromethane	50		50	100	63-123
Vinyl Chloride	50		52	104	70-128
Bromomethane	50		52	104	69-122
Chloroethane	50		51	102	69-129
Acetone	250		240	96	27-160
1,1-Dichloroethene	50		46	92	68-124
Methylene Chloride	50		32	64*	65-125
trans-1,2-Dichloroethen	50		49	98	75-132
1,1-Dichloroethane	50		46	92	73-120
2-Butanone	250		250	100	56-148
Chloroform	50		49	98	68-124
1,1,1-Trichloroethane	50		49	98	68-128
Carbon Tetrachloride	50		52	104	64-124
1,2-Dichloroethane	50		50	100	65-125
Benzene	50		48	96	78-127
Trichloroethene	50		50	100	75-120
1,2-Dichloropropane	50		49	98	72-121
Bromodichloromethane	50		51	102	66-125
cis-1,3-Dichloropropene	50		60	120	68-126
Toluene	50		57	114	71-132
trans-1,3-Dichloroprope	50		62	124	62-133
1,1,2-Trichloroethane	50		57	114	74-125
Tetrachloroethene	50		52	104	76-118
Dibromochloromethane	50		59	118	62-122
Chlorobenzene	50		53	106	77-128
Ethylbenzene	50		60	120	69-129
Xylenes (total)	150		180	120	68-133
m,p-Xylenes	100		120	120	67-127

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

* Values outside of QC limits

COMMENTS:

Chain-of-Custody

[illegible]

OCTOBER LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

November 20, 2000

Mr. Keith Dodrill
Radian International
Twin Towers Suite 250
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. 103100. The 3 water samples were taken from the field on October 31, 2000 and were received at Ceimic Corporation on November 1, 2000.

These samples are reported under Ceimic Project Number 200779, 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

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

POST-CARB 10/31/00

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 103100

Matrix: (soil/water) WATER

Lab Sample ID: 200779-02A

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

Lab File ID: EF905

Level: (low/med) LOW

Date Received: 11/01/00

% Moisture: not dec. _____

Date Analyzed: 11/08/00

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	52	
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
67-64-1-----	Acetone	11	
75-35-4-----	1,1-Dichloroethene	1	U
75-09-2-----	Methylene Chloride	34	B
156-60-5-----	trans-1,2-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
78-93-3-----	2-Butanone	6	B
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

Radian SAMPLE NO.

POST-CARB
10/31/00

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 103100

Matrix: (soil/water) WATER

Lab Sample ID: 200779-02A

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

Lab File ID: EF905

Level: (low/med) LOW

Date Received: 11/01/00

% Moisture: not dec. _____

Date Analyzed: 11/08/00

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

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

TRIP BLAN K 10/31/00

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 103100

Matrix: (soil/water) WATER

Lab Sample ID: 200779-03A

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

Lab File ID: EF904

Level: (low/med) LOW

Date Received: 11/01/00

% Moisture: not dec. _____

Date Analyzed: 11/08/00

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	5 U	
75-35-4-----	1,1-Dichloroethene	1 U	
75-09-2-----	Methylene Chloride	30 B	
156-60-5-----	trans-1,2-Dichloroethene	1 U	
75-34-3-----	1,1-Dichloroethane	1 U	
78-93-3-----	2-Butanone	4 JB	
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 B	
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

Radian SAMPLE NO.

TRIP BLAN
K 10/31/00

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 103100

Matrix: (soil/water) WATER

Lab Sample ID: 200779-03A

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

Lab File ID: EF904

Level: (low/med) LOW

Date Received: 11/01/00

% Moisture: not dec. _____

Date Analyzed: 11/08/00

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

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 103100

	CLIENT SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	VBLKEG	94	88	94	92	0
02	VLCSEG	94	94	100	94	0
03	TRIP BLANK 1	92	84	96	94	0
04	POST-CARB 10	96	90	96	94	0
05	PRE-CARB 10/	94	92	94	90	0
06	PRE-CARB 10/	98	90	96	96	0
07						
08						
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QC LIMITS

SMC1 = Dibromofluoromethane (75-125)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (62-139)
 SMC3 (TOL) = Toluene-d8 (75-125)
 OTHER (BFB) = Bromofluorobenzene (75-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC Case No.: 801419 SAS No.:

SDG No.: 103100

Matrix Spike - Sample No.: VLCSEG

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Chloromethane	50		48	96	63-123
Vinyl Chloride	50		47	94	70-128
Bromomethane	50		48	96	69-122
Chloroethane	50		49	98	69-129
Trichlorofluoromethane	50		51	102	69-124
Acetone	100		99	99	27-160
1,1-Dichloroethene	50		50	100	68-124
Methylene Chloride	50		46	92	65-125
trans-1,2-Dichloroethen	50		47	94	75-132
1,1-Dichloroethane	50		48	96	73-120
2-Butanone	100		97	97	56-148
Chloroform	50		47	94	68-134
1,1,1-Trichloroethane	50		46	92	68-128
Carbon Tetrachloride	50		46	92	64-124
1,2-Dichloroethane	50		48	96	65-125
Benzene	50		47	94	78-127
Trichloroethene	50		47	94	75-120
1,2-Dichloropropane	50		46	92	72-121
Bromodichloromethane	50		48	96	66-125
cis-1,3-Dichloropropene	50		47	94	68-126
Toluene	50		47	94	71-132
trans-1,3-Dichloroprope	50		48	96	62-133
1,1,2-Trichloroethane	50		49	98	74-125
Tetrachloroethene	50		48	96	76-118
Dibromochloromethane	50		51	102	62-122
Chlorobenzene	50		50	100	77-128
Ethylbenzene	50		49	98	69-129
Xylenes (total)	150		150	100	67-133

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

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 103100

Matrix Spike - Sample No.: VLCSEG

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
m,p-Xylenes	100		100	100	67-127
o-Xylene	50		50	100	73-133
Bromoform	50		53	106	70-122
Isopropylbenzene	50		46	92	76-118
1,1,2,2-Tetrachloroetha	50		50	100	72-121
1,3-Dichlorobenzene	50		47	94	77-125
1,4-Dichlorobenzene	50		47	94	78-120
1,2-Dichlorobenzene	50		47	94	63-123

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 36 outside limits

COMMENTS:

Chain-of-Custody

Original Chain of Custody goes to Laboratory

Page 1 of 1

Lab Use Only

NOVEMBER LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

December 19, 2000

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

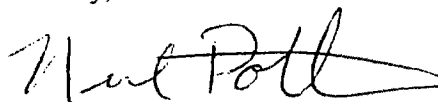
Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian, Project Jamestown, NY Essex/Hope, Case No. 801419, SDGs No. 113000 and 120700. The 6 aqueous samples were taken from the field on November 30 and December 6, 2000 and received at Ceimic Corporation on December 1 and 7, 2000.

These samples are reported under the Ceimic Project Numbers 200844 and 200860, 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 Director

HL/djj

Enclosures

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POST-CARB

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-02A

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG331

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/02/00

GC Column: VOCOL ID: 0.53 (mm)

Dilution Factor: 2.0

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	2.00	U
75-01-4-----	Vinyl Chloride	230	
74-83-9-----	Bromomethane	2.00	U
75-00-3-----	Chloroethane	2.00	U
75-69-4-----	Trichlorofluoromethane	2.00	U
67-64-1-----	Acetone	2.00	U
75-35-4-----	1,1-Dichloroethene	2.00	U
75-09-2-----	Methylene Chloride	1.85	J
156-60-5-----	trans-1,2-Dichloroethene	2.00	U
75-34-3-----	1,1-Dichloroethane	2.00	U
78-93-3-----	2-Butanone	2.00	U
67-66-3-----	Chloroform	2.00	U
71-55-6-----	1,1,1-Trichloroethane	2.00	U
56-23-5-----	Carbon Tetrachloride	2.00	U
107-06-2-----	1,2-Dichloroethane	2.00	U
71-43-2-----	Benzene	2.00	U
79-01-6-----	Trichloroethene	3.20	
78-87-5-----	1,2-Dichloropropane	2.00	U
75-27-4-----	Bromodichloromethane	2.00	U
10061-01-5-----	cis-1,3-Dichloropropene	2.00	U
108-88-3-----	Toluene	2.00	U
10061-02-6-----	trans-1,3-Dichloropropene	2.00	U
79-00-5-----	1,1,2-Trichloroethane	2.00	U
127-18-4-----	Tetrachloroethene	2.00	U
124-48-1-----	Dibromochloromethane	2.00	U
108-90-7-----	Chlorobenzene	2.00	U
100-41-4-----	Ethylbenzene	2.00	U
1330-20-7-----	Xylenes (total)	2.00	U
108-38-3-----	m,p-Xylenes	2.00	U
95-47-6-----	o-Xylene	2.00	U
75-25-2-----	Bromoform	2.00	U
98-82-8-----	Isopropylbenzene	2.00	U
79-34-5-----	1,1,2,2-Tetrachloroethane	2.00	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POST-CARB

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-02A

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG331

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/02/00

GC Column: VOCOL ID: 0.53 (mm)

Dilution Factor: 2.0

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	2.00	U
106-46-7-----1,4-Dichlorobenzene	2.00	U
95-50-1-----1,2-Dichlorobenzene	2.00	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POST-CARBDL

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-02ADL

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG334

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/02/00

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

74-87-3-----	Chloromethane	5.00	U
75-01-4-----	Vinyl Chloride	130	D
74-83-9-----	Bromomethane	5.00	U
75-00-3-----	Chloroethane	5.00	U
75-69-4-----	Trichlorofluoromethane	5.00	U
67-64-1-----	Acetone	5.00	U
75-35-4-----	1,1-Dichloroethene	5.00	U
75-09-2-----	Methylene Chloride	5.00	U
156-60-5-----	trans-1,2-Dichloroethene	5.00	U
75-34-3-----	1,1-Dichloroethane	5.00	U
78-93-3-----	2-Butanone	5.00	U
67-66-3-----	Chloroform	5.00	U
71-55-6-----	1,1,1-Trichloroethane	5.00	U
56-23-5-----	Carbon Tetrachloride	5.00	U
107-06-2-----	1,2-Dichloroethane	5.00	U
71-43-2-----	Benzene	5.00	U
79-01-6-----	Trichloroethene	5.00	U
78-87-5-----	1,2-Dichloropropane	5.00	U
75-27-4-----	Bromodichloromethane	5.00	U
10061-01-5-----	cis-1,3-Dichloropropene	5.00	U
108-88-3-----	Toluene	5.00	U
10061-02-6-----	trans-1,3-Dichloropropene	5.00	U
79-00-5-----	1,1,2-Trichloroethane	5.00	U
127-18-4-----	Tetrachloroethene	5.00	U
124-48-1-----	Dibromochloromethane	5.00	U
108-90-7-----	Chlorobenzene	5.00	U
100-41-4-----	Ethylbenzene	5.00	U
1330-20-7-----	Xylenes (total)	5.00	U
108-38-3-----	m,p-Xylenes	5.00	U
95-47-6-----	o-Xylene	5.00	U
75-25-2-----	Bromoform	5.00	U
98-82-8-----	Isopropylbenzene	5.00	U
79-34-5-----	1,1,2,2-Tetrachloroethane	5.00	U

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POST-CARBDL

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-02ADL

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG334

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/02/00

GC Column: VOCOL ID: 0.53 (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

541-73-1-----1,3-Dichlorobenzene	5.00	U
106-46-7-----1,4-Dichlorobenzene	5.00	U
95-50-1-----1,2-Dichlorobenzene	5.00	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-03A

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG456

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/07/00

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
---------	----------	--	---

75-71-8-----	Dichlorodifluoromethane	1.00	U
74-87-3-----	Chloromethane	1.00	U
75-01-4-----	Vinyl Chloride	1.00	U
74-83-9-----	Bromomethane	1.00	U
75-00-3-----	Chloroethane	1.00	U
75-69-4-----	Trichlorofluoromethane	1.00	U
67-64-1-----	Acetone	5.00	U
75-35-4-----	1,1-Dichloroethene	1.00	U
75-09-2-----	Methylene Chloride	1.02	
75-15-0-----	Carbon Disulfide	1.00	U
1634-04-4-----	Methyl tert-Butyl Ether	1.00	U
156-60-5-----	trans-1,2-Dichloroethene	1.00	U
75-34-3-----	1,1-Dichloroethane	1.00	U
78-93-3-----	2-Butanone	5.00	U
594-20-7-----	2,2-Dichloropropane	1.00	U
156-59-2-----	cis-1,2-Dichloroethene	1.00	U
540-59-0-----	1,2-Dichloroethene (total)	2.00	U
67-66-3-----	Chloroform	1.00	U
74-97-5-----	Bromochloromethane	1.00	U
71-55-6-----	1,1,1-Trichloroethane	1.00	U
563-58-6-----	1,1-Dichloropropene	1.00	U
56-23-5-----	Carbon Tetrachloride	1.00	U
107-06-2-----	1,2-Dichloroethane	1.00	U
71-43-2-----	Benzene	1.00	U
79-01-6-----	Trichloroethene	1.00	U
78-87-5-----	1,2-Dichloropropane	1.00	U
75-27-4-----	Bromodichloromethane	1.00	U
74-95-3-----	Dibromomethane	1.00	U
10061-01-5-----	cis-1,3-Dichloropropene	1.00	U
108-88-3-----	Toluene	1.00	U
10061-02-6-----	trans-1,3-Dichloropropene	1.00	U
79-00-5-----	1,1,2-Trichloroethane	1.00	U
127-18-4-----	Tetrachloroethene	1.00	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-03A

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG456

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/07/00

GC Column: VOCOL ID: 0.53 (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

108-10-1-----4-Methyl-2-Pentanone	5.00	U
591-78-6-----2-Hexanone	5.00	U
142-28-9-----1,3-Dichloropropane	1.00	U
124-48-1-----Dibromochloromethane	1.00	U
106-93-4-----1,2-Dibromoethane	1.00	U
544-10-5-----1-Chlorohexane	1.00	U
108-90-7-----Chlorobenzene	1.00	U
630-20-6-----1,1,1,2-Tetrachloroethane	1.00	U
100-41-4-----Ethylbenzene	1.00	U
1330-20-7-----Xylenes (total)	3.00	U
108-38-3-----m,p-Xylenes	2.00	U
95-47-6-----o-Xylene	1.00	U
100-42-5-----Styrene	1.00	U
75-25-2-----Bromoform	1.00	U
98-82-8-----Isopropylbenzene	1.00	U
79-34-5-----1,1,2,2-Tetrachloroethane	1.00	U
96-18-4-----1,2,3-Trichloropropane	1.00	U
106-65-1-----n-Propylbenzene	1.00	U
108-86-1-----Bromobenzene	1.00	U
108-67-8-----1,3,5-Trimethylbenzene	1.00	U
95-49-8-----2-Chlorotoluene	1.00	U
106-43-4-----4-Chlorotoluene	1.00	U
98-06-6-----tert-Butylbenzene	1.00	U
95-63-6-----1,2,4-Trimethylbenzene	1.00	U
135-98-8-----sec-Butylbenzene	1.00	U
99-87-6-----p-Isopropyltoluene	1.00	U
541-73-1-----1,3-Dichlorobenzene	1.00	U
106-46-7-----1,4-Dichlorobenzene	1.00	U
104-51-8-----n-Butylbenzene	1.00	U
95-50-1-----1,2-Dichlorobenzene	1.00	U
96-12-8-----1,2-Dibromo-3-Chloropropane	1.00	U
120-82-1-----1,2,4-Trichlorobenzene	1.00	U
87-68-3-----Hexachlorobutadiene	1.00	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Radian SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 113000

Matrix: (soil/water) WATER

Lab Sample ID: 200844-03A

Sample wt/vol: 20.00 (g/mL) ML

Lab File ID: EG456

Level: (low/med) LOW

Date Received: 12/01/00

% Moisture: not dec. _____

Date Analyzed: 12/07/00

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
91-20-3-----	Naphthalene	1.00	U
87-61-6-----	1,2,3-Trichlorobenzene	1.00	U

91-20-3-----Naphthalene

1.00 U

87-61-6-----1,2,3-Trichlorobenzene

1.00 U

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

	CLIENT SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLKEK	99	88	101	106	0
02	VLCSEK	97	90	109	97	0
03	PRE-CARB	97	85	101	102	0
04	PRE-CARBDL	97	83	102	103	0
05	POST-CARB	95	83	103	108	0
06	POST-CARBDL	100	91	100	100	0
07	VBLKEA	94	85	101	103	0
08	VLCSEA	96	89	111	103	0
09	TRIP BLANK	94	82	113	110	0
10						
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QC LIMITS

SMC1 = Dibromofluoromethane (75-125)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (75-125)
 SMC3 (TOL) = Toluene-d8 (75-125)
 OTHER (BFB) = Bromofluorobenzene (75-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 113000

Matrix Spike - Sample No.: VLCSEA

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	5.00		5.36	107	75-125
Chloromethane	5.00		5.15	103	75-125
Vinyl Chloride	5.00		5.34	107	46-134
Bromomethane	5.00		5.10	102	72-125
Chloroethane	5.00		5.15	103	65-125
Trichlorofluoromethane	5.00		5.52	110	67-125
1,1-Dichloroethene	5.00		5.35	107	75-125
Methylene Chloride	5.00		5.41	108	75-125
Methyl tert-Butyl Ether	5.00		4.62	92	60-135
trans-1,2-Dichloroethen	5.00		5.54	111	75-125
1,1-Dichloroethane	5.00		5.30	106	72-125
2,2-Dichloropropane	5.00		5.31	106	75-125
cis-1,2-Dichloroethene	5.00		5.32	106	75-125
Chloroform	5.00		5.26	105	74-125
Bromochloromethane	5.00		4.81	96	73-125
1,1,1-Trichloroethane	5.00		5.29	106	75-125
1,1-Dichloropropene	5.00		5.48	110	75-125
Carbon Tetrachloride	5.00		5.40	108	62-125
1,2-Dichloroethane	5.00		4.82	96	68-127
Benzene	5.00		5.37	107	75-125
Trichloroethene	5.00		5.40	108	75-125
1,2-Dichloropropane	5.00		5.09	102	70-125
Bromodichloromethane	5.00		4.87	97	75-125
Dibromomethane	5.00		4.77	95	69-127
cis-1,3-Dichloropropene	5.00		4.90	98	74-125
Toluene	5.00		5.40	108	74-125
trans-1,3-Dichloroprope	5.00		4.77	95	66-125
1,1,2-Trichloroethane	5.00		4.87	97	75-127

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

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 113000

Matrix Spike - Sample No.: VLCSEA

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS %, REC #	QC. LIMITS REC.
Tetrachloroethene	5.00		5.40	108	71-125
1,3-Dichloropropane	5.00		5.20	104	75-125
Dibromochloromethane	5.00		5.14	103	73-125
1,2-Dibromoethane	5.00		5.27	105	75-125
1-Chlorohexane	5.00		6.20	124	75-125
Chlorobenzene	5.00		5.69	114	75-125
1,1,1,2-Tetrachloroetha	5.00		5.54	111	72-125
Ethylbenzene	5.00		5.81	116	75-125
Xylenes (total)	15		18	120	75-125
m,p-Xylenes	10		12	120	75-125
o-Xylene	5.00		5.82	116	75-125
Styrene	5.00		5.69	114	75-125
Bromoform	5.00		5.28	106	75-125
Isopropylbenzene	5.00		5.87	117	75-125
1,1,2,2-Tetrachloroetha	5.00		5.04	101	74-125
1,2,3-Trichloropropane	5.00		4.59	92	75-125
n-Propylbenzene	5.00		5.79	116	75-125
Bromobenzene	5.00		5.38	108	75-125
1,3,5-Trimethylbenzene	5.00		5.74	115*	72-112
2-Chlorotoluene	5.00		5.91	118	73-125
4-Chlorotoluene	5.00		5.15	103	74-125
tert-Butylbenzene	5.00		5.76	115	71-125
1,2,4-Trimethylbenzene	5.00		5.67	113	75-125
sec-Butylbenzene	5.00		5.79	116	75-125
p-Isopropyltoluene	5.00		5.83	117	75-125
1,3-Dichlorobenzene	5.00		5.44	109	75-125
1,4-Dichlorobenzene	5.00		5.44	109	75-125
n-Butylbenzene	5.00		5.83	117	75-125

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

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC Case No.: 801419 SAS No.: SDG No.: 113000

Matrix Spike - Sample No.: VLCSEA

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
1,2-Dichlorobenzene	5.00		5.34	107	75-125
1,2-Dibromo-3-Chloropro	5.00		4.64	93	59-125
1,2,4-Trichlorobenzene	5.00		5.33	107	75-135
Hexachlorobutadiene	5.00		5.92	118	75-125
Naphthalene	5.00		5.20	104	75-125
1,2,3-Trichlorobenzene	5.00		5.20	104	75-137

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 1 out of 62 outside limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 113000

Matrix Spike - Sample No.: VLCSEK

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Chloromethane	5.00		4.04	81	63-123
Vinyl Chloride	5.00		4.58	92	63-123
Bromomethane	5.00		4.69	94	63-123
Chloroethane	5.00		4.59	92	63-123
Trichlorofluoromethane	5.00		4.86	97	63-123
Acetone	25		19	76	63-123
1,1-Dichloroethene	5.00		4.91	98	63-123
Methylene Chloride	5.00		3.57	71	63-123
trans-1,2-Dichloroethen	5.00		5.16	103	63-123
1,1-Dichloroethane	5.00		5.02	100	63-123
2-Butanone	25		22	88	63-123
Chloroform	5.00		4.97	99	63-123
1,1,1-Trichloroethane	5.00		4.99	100	63-123
Carbon Tetrachloride	5.00		4.99	100	63-123
1,2-Dichloroethane	5.00		4.67	93	63-123
Benzene	5.00		5.12	102	63-123
Trichloroethene	5.00		5.01	100	63-123
1,2-Dichloropropane	5.00		4.85	97	63-123
Bromodichloromethane	5.00		4.82	96	63-123
cis-1,3-Dichloropropene	5.00		4.77	95	63-123
Toluene	5.00		5.17	103	63-123
trans-1,3-Dichloroprope	5.00		4.43	89	63-123
1,1,2-Trichloroethane	5.00		4.61	92	63-123
Tetrachloroethene	5.00		5.16	103	63-123
Dibromochloromethane	5.00		5.14	103	63-123
Chlorobenzene	5.00		5.49	110	63-123
Ethylbenzene	5.00		6.03	121	63-123
Xylenes (total)	15		17	113	63-123

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

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419.4230

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 113000

Matrix Spike - Sample No.: VLCSEK

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
m,p-Xylenes	10		12	120	63-123
o-Xylene	5.00		5.68	114	63-123
Bromoform	5.00		5.05	101	63-123
Isopropylbenzene	5.00		5.14	103	63-123
1,1,2,2-Tetrachloroetha	5.00		4.57	91	63-123
1,3-Dichlorobenzene	5.00		4.90	98	63-123
1,4-Dichlorobenzene	5.00		4.79	96	63-123
1,2-Dichlorobenzene	5.00		4.90	98	63-123

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 36 outside limits

COMMENTS:

Chain-of-Custody

Chain of Custody

Original Chain of Custody goes to Laboratory

Page 1 of 1

Project # 801419.0090			Project Name Essex-Hope			Cooler Temp. 4°C		Analyses											
Samplers (please print) John Ross						Cooler # 1		VOCs 8260 pH pH pH pH pH pH pH pH											
Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers													
1	11-30-00	1500	Grab	Pre-Carb	AQ	2	2												
2		1500		Post-Carb															
2		1530		Post-Carb															
2		1600		Post-Carb															
2		1630		Post-Carb															
3				Trip Blank															
Celmic Project # 200844			Relinquished by (signature) <i>John S. Ross</i>				Date/Time 11-30-00 1700		Received by (signature) <i>Fed Ex</i>				Date/Time 812889838350 11-30-00 1700						
Storage Location V0A			Relinquished by (signature)				Date/Time		Received by (signature)				Date/Time						
			Relinquished by (signature)				Date/Time		Received by Celmic (signature) <i>Robert D...</i>				Date/Time 12/1/00 10:00						
Remarks: Combine 4 post-Carb samples into 1 for Analysis																			

DECEMBER LABORATORY RESULTS

**CEIMIC
Corporation**

"Analytical Chemistry for Environmental Management"

January 15, 2001

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

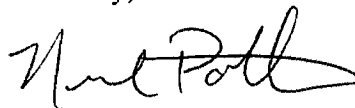
Dear Mr. Dodrill:

Enclosed are the results for the analyses performed in support of the Radian, Project Jamestown, NY Essex/Hope, Case No. 801419, SDG No. 122800. The 3 aqueous samples were taken from the field on December 28, 2000 and received at Ceimic Corporation on December 29, 2000.

These samples are reported under the Ceimic Project Numbers 200904, 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 Director

HL/djj

Enclosures

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

RADIAN SAMPLE NO.

POST-CARB

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 122800

Matrix: (soil/water) WATER

Lab Sample ID: 200904-02A

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

Lab File ID: LA591

Level: (low/med) LOW

Date Received: 12/29/00

% Moisture: not dec. _____

Date Analyzed: 01/02/01

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	3	
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	2	
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

RADIAN SAMPLE NO.

POST-CARB

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 122800

Matrix: (soil/water) WATER

Lab Sample ID: 200904-02A

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

Lab File ID: LA591

Level: (low/med) LOW

Date Received: 12/29/00

% Moisture: not dec. _____

Date Analyzed: 01/02/01

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: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 122800

Matrix: (soil/water) WATER

Lab Sample ID: 200904-03A

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

Lab File ID: LA590

Level: (low/med) LOW

Date Received: 12/29/00

% Moisture: not dec. _____

Date Analyzed: 01/02/01

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

RADIAN SAMPLE NO.

TRIP BLANK

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 122800

Matrix: (soil/water) WATER

Lab Sample ID: 200904-03A

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

Lab File ID: LA590

Level: (low/med) LOW

Date Received: 12/29/00

% Moisture: not dec. _____

Date Analyzed: 01/02/01

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 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 122800

	CLIENT SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLKLM	104	108	102	112	0
02	VLCSLM	106	104	100	118	0
03	PRE-CARB	106	110	100	118	0
04	TRIP BLANK	104	102	100	108	0
05	POST-CARB	106	102	100	112	0
06	PRE-CARBDL	104	100	100	114	0
07						
08						
09						
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QC LIMITS

SMC1 = Dibromofluoromethane (75-125)
 SMC2 (DCE) = 1,2-Dichloroethane-d4 (62-139)
 SMC3 (TOL) = Toluene-d8 (75-125)
 OTHER (BFB) = Bromofluorobenzene (75-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419

SAS No.:

SDG No.: 122800

Matrix Spike - Sample No.: VLCSLM

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Chloromethane	50		44	88	63-123
Vinyl Chloride	50		45	90	63-123
Bromomethane	50		49	98	63-123
Chloroethane	50		49	98	63-123
Trichlorofluoromethane	50		46	92	63-123
Acetone	250		170	68	63-123
1,1-Dichloroethene	50		48	96	63-123
Methylene Chloride	50		53	106	63-123
trans-1,2-Dichloroethen	50		55	110	63-123
1,1-Dichloroethane	50		56	112	63-123
2-Butanone	250		200	80	63-123
Chloroform	50		60	120	63-123
1,1,1-Trichloroethane	50		66	132*	63-123
Carbon Tetrachloride	50		60	120	63-123
1,2-Dichloroethane	50		63	126*	63-123
Benzene	50		57	114	63-123
Trichloroethene	50		59	118	63-123
1,2-Dichloropropane	50		61	122	63-123
Bromodichloromethane	50		60	120	63-123
cis-1,3-Dichloropropene	50		53	106	63-123
Toluene	50		57	114	63-123
trans-1,3-Dichloroprope	50		56	112	63-123
1,1,2-Trichloroethane	50		55	110	63-123
Tetrachloroethene	50		55	110	63-123
Dibromochloromethane	50		54	108	63-123
Chlorobenzene	50		50	100	63-123
Ethylbenzene	50		53	106	63-123
Xylenes (total)	150		160	107	63-123

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

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: CEIMIC CORP

Contract: 801419

Lab Code: CEIMIC

Case No.: 801419 SAS No.:

SDG No.: 122800

Matrix Spike - Sample No.: VLCSLM

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
m,p-Xylenes	100		110	110	63-123
o-Xylene	50		54	108	63-123
Bromoform	50		51	102	63-123
Isopropylbenzene	50		55	110	63-123
1,1,2,2-Tetrachloroetha	50		49	98	63-123
1,3-Dichlorobenzene	50		50	100	63-123
1,4-Dichlorobenzene	50		49	98	63-123
1,2-Dichlorobenzene	50		49	98	63-123

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 2 out of 36 outside limits

COMMENTS:

CHAIN OF CUSTODY

Page 1 of 1

24 = Lab Use Only