

# Letter Of Transmittal

To: Program Assistant  
Remediation & Redevelopment Program  
Wisconsin Dept. of Natural Resources  
2300 N. Dr. Martin Luther King Jr., Dr.  
Milwaukee, WI 53212

Please check the type(s) of documents you have enclosed. Submittals will be tracked and filed based on the information you provide. **Be sure to include the FID and BRTS numbers, which have been assigned to this site, and identify the intent of the document(s) you are submitting in order to speed processing. Please attach required fees to this form.**

From: Company  
Name  
Address  
Phone  
Date  
Site Name  
Address

E2M Environmental and Engineering Mgt  
Christian A Mielke  
W223 N7343 Carole Court  
Sussex, WI 53089  
(262) 820-3719  
January 31, 2012  
Cermatic  
10014 N. Wasauke Rd  
Mequon, WI

FID# 246046350 BRTS# 02-46-529481

## IS THIS RELEASE PECFA-ELIGIBLE?

☐ YES ☒ NO ☐ UNKNOWN AT THIS TIME

## Type of Submittal:

☐ LUST ☒ ERP ☐ VPLE ☐ other

CHECK	TYPE OF DOCUMENT/REPORT	FEE	DNR ofc use only \$
<input checked="" type="checkbox"/>	Notification of Release	None	01
	Tank Closure/Site Assessment where release(s) have been detected*	None	33
	Site Investigation Workplan	\$500 if review is requested	35, 135~
	Site Investigation Report <u>Please Provide the Following Information</u> <input type="checkbox"/> petroleum constituents detected <input type="checkbox"/> non-petroleum constituents detected <input type="checkbox"/> groundwater impacts <input type="checkbox"/> above PAL <input type="checkbox"/> above ES <input type="checkbox"/> free product <input type="checkbox"/> contamination in fractured bedrock or within 1 meter of fractured bedrock <input type="checkbox"/> pal exceedance in potable well <input type="checkbox"/> groundwater impacts >ES, within <input type="checkbox"/> 100' of private well or <input type="checkbox"/> 1000' of public well	\$750 if review is requested	37~ 137~ 96~ (if SI is incomplete)
	Request to Transfer Case to Department of Commerce	None	76
	Off-Site Determination Request	\$500 mandatory	638~
	Request for No Further Action Letter, under ch. NR 708	\$250 if review is requested	68, 67~
	NR 718 Landspreading Request	\$250 mandatory	183~
	Copy of Notification to Treat / Dispose of Contaminated Soil / Water	None	99
	Injection/Infiltration Request	\$500 mandatory	63~
	Status Report	\$500 if review is requested	43
	O & M Form 4400-194	\$300 if review is requested	92, 192~
	Remedial Action Options Report	\$750 if review is requested	39, 143~
	Construction Documentation Reports	\$250 if review is requested	151, 152~
	Remedial Design Report	\$750 if review is requested	147, 148~
	Copy of Draft Deed Affidavit or Restriction required for close-out	None	99
	Well Abandonment Form	None	99
	NR 720.19 Site Specific Clean-Up Goal Proposed	\$500 mandatory	61~
	Long Term Monitoring Plan	\$300 if review is requested	24, 25~
<input checked="" type="checkbox"/>	Closure Review Request	\$750 mandatory	79~
	Voluntary Party Liability Exemption (VPLE) Application	\$250 mandatory	662
	VPLE Phase I /II Assessments or Additional Reports	fee for review computed hourly	As appropriate
	Tax Cancellation Agreement	\$500 mandatory	654~
	Negotiated Agreement	\$1000 mandatory	630~
	Lender Assessment	\$500 mandatory	686~
	General Liability Clarification Request	\$500 mandatory	683~
	Lease Letter Request - <input type="checkbox"/> Single Property (\$500) <input type="checkbox"/> Multiple Properties (\$1000)	\$500 - \$1000 mandatory	646~
	Request for Other Technical Assistance	\$500 mandatory	97~
	Other (please describe)		

Remarks:

\*Tank closure reports for sites where no releases have been detected should be sent to "Clean Closures" c/o DNR Remediation & Redevelopment, Wisconsin DNR, P.O. Box 7921, Madison, WI 53707-7921



**Environmental and Engineering Management LLC**

W223 N7343 Carole Court, Sussex, Wisconsin 53089

Phone/Fax: 262.820.3719

Email: camielkee2m@wi.rr.com

January 31, 2012

Ms. Nancy Ryan  
WDNR – Southeast Region Headquarters  
2300 N. Dr. M. L. King, Jr. Dr  
Milwaukee, Wisconsin 53212

RE: **Additional Site Investigation/Request for Closure**, Cermatics Inc, 10014 N. Wasaukee Rd., Mequon, Wisconsin, FID#: 246046350

Dear Ms. Ryan:

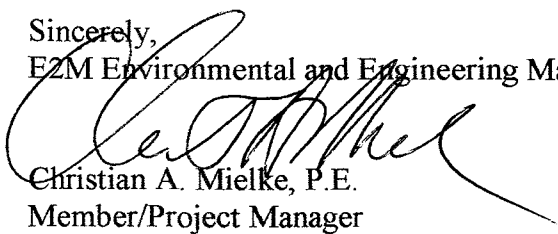
E2M Environmental and Engineering Management LLC (E2M) has completed the additional groundwater investigation activities requested in the WDNR letter dated April 21, 2011.

Review of the groundwater analytical data and the statistical analyses of MW 2, MW 5 and MW 7, further confirms the groundwater plume is decreasing. Therefore, on behalf of Mr. Luedtke, we request that no further action is required and that the WDNR considers the requirements of the default order as being met.

Included with this submittal are:

Figure A3:	Official Zoning Map (Site Layout - outlining boundaries of affected properties)
Table E1:	Monitoring Well Groundwater Contaminant Analytical Results
Table E2:	Historic Water Table Levels
Figure E2d:	Interpreted Groundwater Flow Direction – May 13, 2011
Figure E2e:	Interpreted Groundwater Flow Direction – September 12, 2011
Attachment 1:	Groundwater Analytical Reports
Attachment 2:	Statistical Analysis Test Results
Attachment 3:	Investigative Soil Disposal and Potable Well Status Affidavit

Sincerely,  
E2M Environmental and Engineering Management LLC



Christian A. Mielke, P.E.  
Member/Project Manager

c: Mr. James Luedte

**ATTACHMENT 1**  
Groundwater Analytical Reports

(Please Print Clearly)

Company Name: E2M  
 Branch/Location: Sussex  
 Project Contact: Chris Mielke  
 Phone: 262 820 3719  
 Project Number:  
 Project Name: Cermates  
 Project State: WI  
 Sampled By (Print): Chris Mielke  
 Sampled By (Sign): [Signature]  
 PO #:  
 Regulatory Program: ERP

## Data Package Options

(billable)

☐ EPA Level III☐ EPA Level IV

## MS/MSD

☐ On your sample  
(billable)☐ NOT needed on  
your sample

## Matrix Codes

A = Air W = Water  
 B = Biota DW = Drinking Water  
 C = Charcoal GW = Ground Water  
 O = Oil SW = Surface Water  
 S = Soil WW = Waste Water  
 Sl = Sludge WP = Wipe

PAGE LAB # CLIENT FIELD ID

PAGE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX
		DATE	TIME	
001	CM/MW2/0911	9/14/11	12:55	GW
002	CM/MW5/0911	1	13:14	1
003	CM/MW7/0911	1	13:25	1

FILTERED?  
(YES/NO)PRESERVATION  
(CODE)\*

\*Preservation Codes  
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?  
(YES/NO)PRESERVATION  
(CODE)\*

## CHAIN OF CUSTODY

\*Preservation Codes  
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED?  
(YES/NO)PRESERVATION  
(CODE)\*

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of 1

Quote #:

Mail To Contact:

Mail To Company:

Mail To Address:

Invoice To Contact:

Invoice To Company:

Invoice To Address:

Invoice To Phone:

CLIENT  
COMMENTSLAB COMMENTS  
(Lab Use Only)

Profile #

3-40 mL<sup>B</sup>

Rush Turnaround Time Requested - Prelims

(Rush TAT subject to approval/surcharge)

Date Needed: Normal

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

Samples on HOLD are subject to  
special pricing and release of liability

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

PACE Project No.

Receipt Temp = 16.1 °CSample Receipt pH  
OK / Adjusted

Cooler Custody Seal  
 Present / Not Present  
 Intact / Not Intact

Version 6.0 08/14/08

September 16, 2011

Chris Mielke  
E2M, LLC.  
W223 N7343 Carole Ct.  
Sussex, WI 53089

RE: Project: CERMATICS  
Pace Project No.: 4050799

Dear Chris Mielke:

Enclosed are the analytical results for sample(s) received by the laboratory on September 14, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Steven Mleczko

steve.mleczko@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: CERMATICS

Pace Project No.: 4050799

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 11888

North Carolina Certification #: 503

North Dakota Certification #: R-150

South Carolina Certification #: 83006001

US Dept of Agriculture #: S-76505

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: CERMATICS  
Pace Project No.: 4050799

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4050799001	CM/MW2/0911	Water	09/12/11 12:55	09/14/11 08:30
4050799002	CM/MW5/0911	Water	09/12/11 13:14	09/14/11 08:30
4050799003	CM/MW7/0911	Water	09/12/11 13:25	09/14/11 08:30

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: CERMATICS  
Pace Project No.: 4050799

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4050799001	CM/MW2/0911	EPA 8260	SMT	64	PASI-G
4050799002	CM/MW5/0911	EPA 8260	SMT	64	PASI-G
4050799003	CM/MW7/0911	EPA 8260	SMT	64	PASI-G

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4050799

Sample: CM/MW2/0911 Lab ID: 4050799001 Collected: 09/12/11 12:55 Received: 09/14/11 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260									
Benzene	<0.41 ug/L		1.0	0.41	1		09/15/11 20:08	71-43-2	
Bromobenzene	<0.82 ug/L		1.0	0.82	1		09/15/11 20:08	108-86-1	
Bromochloromethane	<0.97 ug/L		1.0	0.97	1		09/15/11 20:08	74-97-5	
Bromodichloromethane	<0.56 ug/L		1.0	0.56	1		09/15/11 20:08	75-27-4	
Bromoform	<0.94 ug/L		1.0	0.94	1		09/15/11 20:08	75-25-2	
Bromomethane	<0.91 ug/L		1.0	0.91	1		09/15/11 20:08	74-83-9	
n-Butylbenzene	<0.93 ug/L		1.0	0.93	1		09/15/11 20:08	104-51-8	
sec-Butylbenzene	<0.89 ug/L		5.0	0.89	1		09/15/11 20:08	135-98-8	
tert-Butylbenzene	<0.97 ug/L		1.0	0.97	1		09/15/11 20:08	98-06-6	
Carbon tetrachloride	<0.49 ug/L		1.0	0.49	1		09/15/11 20:08	56-23-5	
Chlorobenzene	<0.41 ug/L		1.0	0.41	1		09/15/11 20:08	108-90-7	
Chloroethane	<0.97 ug/L		1.0	0.97	1		09/15/11 20:08	75-00-3	
Chloroform	<1.3 ug/L		5.0	1.3	1		09/15/11 20:08	67-66-3	
Chloromethane	<0.24 ug/L		1.0	0.24	1		09/15/11 20:08	74-87-3	
2-Chlorotoluene	<0.85 ug/L		1.0	0.85	1		09/15/11 20:08	95-49-8	
4-Chlorotoluene	<0.74 ug/L		1.0	0.74	1		09/15/11 20:08	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7 ug/L		5.0	1.7	1		09/15/11 20:08	96-12-8	
Dibromochloromethane	<0.81 ug/L		1.0	0.81	1		09/15/11 20:08	124-48-1	
1,2-Dibromoethane (EDB)	<0.56 ug/L		1.0	0.56	1		09/15/11 20:08	106-93-4	
Dibromomethane	<0.60 ug/L		1.0	0.60	1		09/15/11 20:08	74-95-3	
1,2-Dichlorobenzene	<0.83 ug/L		1.0	0.83	1		09/15/11 20:08	95-50-1	
1,3-Dichlorobenzene	<0.87 ug/L		1.0	0.87	1		09/15/11 20:08	541-73-1	
1,4-Dichlorobenzene	<0.95 ug/L		1.0	0.95	1		09/15/11 20:08	106-46-7	
Dichlorodifluoromethane	<0.99 ug/L		1.0	0.99	1		09/15/11 20:08	75-71-8	
1,1-Dichloroethane	1.6 ug/L		1.0	0.75	1		09/15/11 20:08	75-34-3	
1,2-Dichloroethane	<0.36 ug/L		1.0	0.36	1		09/15/11 20:08	107-06-2	
1,1-Dichloroethene	<0.57 ug/L		1.0	0.57	1		09/15/11 20:08	75-35-4	
cis-1,2-Dichloroethene	37.5 ug/L		1.0	0.83	1		09/15/11 20:08	156-59-2	
trans-1,2-Dichloroethene	<0.89 ug/L		1.0	0.89	1		09/15/11 20:08	156-60-5	
1,2-Dichloropropane	<0.49 ug/L		1.0	0.49	1		09/15/11 20:08	78-87-5	
1,3-Dichloropropane	<0.61 ug/L		1.0	0.61	1		09/15/11 20:08	142-28-9	
2,2-Dichloropropane	<0.62 ug/L		1.0	0.62	1		09/15/11 20:08	594-20-7	
1,1-Dichloropropene	<0.75 ug/L		1.0	0.75	1		09/15/11 20:08	563-58-6	
cis-1,3-Dichloropropene	<0.20 ug/L		1.0	0.20	1		09/15/11 20:08	10061-01-5	
trans-1,3-Dichloropropene	<0.19 ug/L		1.0	0.19	1		09/15/11 20:08	10061-02-6	
Diisopropyl ether	<0.76 ug/L		1.0	0.76	1		09/15/11 20:08	108-20-3	
Ethylbenzene	<0.54 ug/L		1.0	0.54	1		09/15/11 20:08	100-41-4	
Hexachloro-1,3-butadiene	<0.67 ug/L		5.0	0.67	1		09/15/11 20:08	87-68-3	
Isopropylbenzene (Cumene)	<0.59 ug/L		1.0	0.59	1		09/15/11 20:08	98-82-8	
p-Isopropyltoluene	<0.67 ug/L		1.0	0.67	1		09/15/11 20:08	99-87-6	
Methylene Chloride	<0.43 ug/L		1.0	0.43	1		09/15/11 20:08	75-09-2	
Methyl-tert-butyl ether	<0.61 ug/L		1.0	0.61	1		09/15/11 20:08	1634-04-4	
Naphthalene	<0.89 ug/L		5.0	0.89	1		09/15/11 20:08	91-20-3	
n-Propylbenzene	<0.81 ug/L		1.0	0.81	1		09/15/11 20:08	103-65-1	
Styrene	<0.86 ug/L		1.0	0.86	1		09/15/11 20:08	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92 ug/L		1.0	0.92	1		09/15/11 20:08	630-20-6	

Date: 09/16/2011 11:32 AM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4050799

Sample: CM/MW2/0911 Lab ID: 4050799001 Collected: 09/12/11 12:55 Received: 09/14/11 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		09/15/11 20:08	79-34-5	
Tetrachloroethene	0.57J	ug/L	1.0	0.45	1		09/15/11 20:08	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		09/15/11 20:08	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		09/15/11 20:08	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:08	120-82-1	
1,1,1-Trichloroethane	1.6	ug/L	1.0	0.90	1		09/15/11 20:08	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		09/15/11 20:08	79-00-5	
Trichloroethene	15.1	ug/L	1.0	0.48	1		09/15/11 20:08	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		09/15/11 20:08	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		09/15/11 20:08	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:08	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:08	108-67-8	
Vinyl chloride	0.40J	ug/L	1.0	0.18	1		09/15/11 20:08	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		09/15/11 20:08	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:08	95-47-6	
4-Bromofluorobenzene (S)	92 %		70-130		1		09/15/11 20:08	460-00-4	
Dibromofluoromethane (S)	102 %		70-130		1		09/15/11 20:08	1868-53-7	pH
Toluene-d8 (S)	94 %		70-130		1		09/15/11 20:08	2037-26-5	

Sample: CM/MW5/0911 Lab ID: 4050799002 Collected: 09/12/11 13:14 Received: 09/14/11 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Benzene	<0.41	ug/L	1.0	0.41	1		09/15/11 20:30	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		09/15/11 20:30	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		09/15/11 20:30	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		09/15/11 20:30	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		09/15/11 20:30	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		09/15/11 20:30	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		09/15/11 20:30	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		09/15/11 20:30	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:30	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		09/15/11 20:30	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		09/15/11 20:30	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		09/15/11 20:30	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		09/15/11 20:30	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		09/15/11 20:30	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		09/15/11 20:30	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		09/15/11 20:30	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		09/15/11 20:30	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		09/15/11 20:30	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		09/15/11 20:30	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		09/15/11 20:30	74-95-3	

Date: 09/16/2011 11:32 AM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4050799

Sample: CM/MW5/0911 Lab ID: 4050799002 Collected: 09/12/11 13:14 Received: 09/14/11 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:30	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		09/15/11 20:30	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		09/15/11 20:30	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		09/15/11 20:30	75-71-8	
1,1-Dichloroethane	2.1	ug/L	1.0	0.75	1		09/15/11 20:30	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		09/15/11 20:30	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		09/15/11 20:30	75-35-4	
cis-1,2-Dichloroethene	70.2	ug/L	1.0	0.83	1		09/15/11 20:30	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		09/15/11 20:30	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		09/15/11 20:30	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		09/15/11 20:30	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		09/15/11 20:30	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		09/15/11 20:30	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		09/15/11 20:30	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		09/15/11 20:30	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		09/15/11 20:30	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		09/15/11 20:30	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		09/15/11 20:30	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		09/15/11 20:30	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		09/15/11 20:30	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		09/15/11 20:30	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		09/15/11 20:30	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		09/15/11 20:30	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		09/15/11 20:30	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		09/15/11 20:30	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		09/15/11 20:30	630-20-6	
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		09/15/11 20:30	79-34-5	
Tetrachloroethene	1.6	ug/L	1.0	0.45	1		09/15/11 20:30	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		09/15/11 20:30	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		09/15/11 20:30	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:30	120-82-1	
1,1,1-Trichloroethane	1.3	ug/L	1.0	0.90	1		09/15/11 20:30	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		09/15/11 20:30	79-00-5	
Trichloroethene	11.6	ug/L	1.0	0.48	1		09/15/11 20:30	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		09/15/11 20:30	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		09/15/11 20:30	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:30	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:30	108-67-8	
Vinyl chloride	2.7	ug/L	1.0	0.18	1		09/15/11 20:30	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		09/15/11 20:30	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:30	95-47-6	
4-Bromofluorobenzene (S)	94	%	70-130		1		09/15/11 20:30	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		09/15/11 20:30	1868-53-7	pH
Toluene-d8 (S)	96	%	70-130		1		09/15/11 20:30	2037-26-5	

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4050799

Sample: CM/MW7/0911 Lab ID: 4050799003 Collected: 09/12/11 13:25 Received: 09/14/11 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 8260							
Benzene	<0.41	ug/L	1.0	0.41	1		09/15/11 20:53	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		09/15/11 20:53	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		09/15/11 20:53	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		09/15/11 20:53	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		09/15/11 20:53	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		09/15/11 20:53	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		09/15/11 20:53	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		09/15/11 20:53	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:53	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		09/15/11 20:53	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		09/15/11 20:53	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		09/15/11 20:53	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		09/15/11 20:53	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		09/15/11 20:53	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		09/15/11 20:53	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		09/15/11 20:53	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		09/15/11 20:53	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		09/15/11 20:53	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		09/15/11 20:53	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		09/15/11 20:53	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:53	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		09/15/11 20:53	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		09/15/11 20:53	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		09/15/11 20:53	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		09/15/11 20:53	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		09/15/11 20:53	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		09/15/11 20:53	75-35-4	
cis-1,2-Dichloroethene	75.1	ug/L	1.0	0.83	1		09/15/11 20:53	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		09/15/11 20:53	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		09/15/11 20:53	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		09/15/11 20:53	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		09/15/11 20:53	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		09/15/11 20:53	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		09/15/11 20:53	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		09/15/11 20:53	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		09/15/11 20:53	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		09/15/11 20:53	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		09/15/11 20:53	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		09/15/11 20:53	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		09/15/11 20:53	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		09/15/11 20:53	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		09/15/11 20:53	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		09/15/11 20:53	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		09/15/11 20:53	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		09/15/11 20:53	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		09/15/11 20:53	630-20-6	

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4050799

Sample: CM/MW7/0911 Lab ID: 4050799003 Collected: 09/12/11 13:25 Received: 09/14/11 08:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		09/15/11 20:53	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		09/15/11 20:53	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		09/15/11 20:53	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		09/15/11 20:53	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:53	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		09/15/11 20:53	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		09/15/11 20:53	79-00-5	
Trichloroethene	13.0	ug/L	1.0	0.48	1		09/15/11 20:53	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		09/15/11 20:53	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		09/15/11 20:53	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		09/15/11 20:53	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:53	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		09/15/11 20:53	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		09/15/11 20:53	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		09/15/11 20:53	95-47-6	
4-Bromofluorobenzene (S)	91	%	70-130		1		09/15/11 20:53	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		09/15/11 20:53	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		09/15/11 20:53	2037-26-5	

## QUALITY CONTROL DATA

Project: CERMATICS  
Pace Project No.: 4050799

QC Batch: MSV/12573 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 4050799001, 4050799002, 4050799003

METHOD BLANK: 502994 Matrix: Water

Associated Lab Samples: 4050799001, 4050799002, 4050799003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	09/15/11 12:36	
1,1,1-Trichloroethane	ug/L	<0.90	1.0	09/15/11 12:36	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	1.0	09/15/11 12:36	
1,1,2-Trichloroethane	ug/L	<0.42	1.0	09/15/11 12:36	
1,1-Dichloroethane	ug/L	<0.75	1.0	09/15/11 12:36	
1,1-Dichloroethene	ug/L	<0.57	1.0	09/15/11 12:36	
1,1-Dichloropropene	ug/L	<0.75	1.0	09/15/11 12:36	
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	09/15/11 12:36	
1,2,3-Trichloropropane	ug/L	<0.99	1.0	09/15/11 12:36	
1,2,4-Trichlorobenzene	ug/L	<0.97	1.0	09/15/11 12:36	
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	09/15/11 12:36	
1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.0	09/15/11 12:36	
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.0	09/15/11 12:36	
1,2-Dichlorobenzene	ug/L	<0.83	1.0	09/15/11 12:36	
1,2-Dichloroethane	ug/L	<0.36	1.0	09/15/11 12:36	
1,2-Dichloropropane	ug/L	<0.49	1.0	09/15/11 12:36	
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	09/15/11 12:36	
1,3-Dichlorobenzene	ug/L	<0.87	1.0	09/15/11 12:36	
1,3-Dichloropropane	ug/L	<0.61	1.0	09/15/11 12:36	
1,4-Dichlorobenzene	ug/L	<0.95	1.0	09/15/11 12:36	
2,2-Dichloropropane	ug/L	<0.62	1.0	09/15/11 12:36	
2-Chlorotoluene	ug/L	<0.85	1.0	09/15/11 12:36	
4-Chlorotoluene	ug/L	<0.74	1.0	09/15/11 12:36	
Benzene	ug/L	<0.41	1.0	09/15/11 12:36	
Bromobenzene	ug/L	<0.82	1.0	09/15/11 12:36	
Bromochloromethane	ug/L	<0.97	1.0	09/15/11 12:36	
Bromodichloromethane	ug/L	<0.56	1.0	09/15/11 12:36	
Bromoform	ug/L	<0.94	1.0	09/15/11 12:36	
Bromomethane	ug/L	<0.91	1.0	09/15/11 12:36	
Carbon tetrachloride	ug/L	<0.49	1.0	09/15/11 12:36	
Chlorobenzene	ug/L	<0.41	1.0	09/15/11 12:36	
Chloroethane	ug/L	<0.97	1.0	09/15/11 12:36	
Chloroform	ug/L	<1.3	5.0	09/15/11 12:36	
Chloromethane	ug/L	<0.24	1.0	09/15/11 12:36	
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	09/15/11 12:36	
cis-1,3-Dichloropropene	ug/L	<0.20	1.0	09/15/11 12:36	
Dibromochloromethane	ug/L	<0.81	1.0	09/15/11 12:36	
Dibromomethane	ug/L	<0.60	1.0	09/15/11 12:36	
Dichlorodifluoromethane	ug/L	<0.99	1.0	09/15/11 12:36	
Diisopropyl ether	ug/L	<0.76	1.0	09/15/11 12:36	
Ethylbenzene	ug/L	<0.54	1.0	09/15/11 12:36	
Hexachloro-1,3-butadiene	ug/L	<0.67	5.0	09/15/11 12:36	
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	09/15/11 12:36	

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## QUALITY CONTROL DATA

Project: CERMATICS  
Pace Project No.: 4050799

METHOD BLANK: 502994

Matrix: Water

Associated Lab Samples: 4050799001, 4050799002, 4050799003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	<1.8	2.0	09/15/11 12:36	
Methyl-tert-butyl ether	ug/L	<0.61	1.0	09/15/11 12:36	
Methylene Chloride	ug/L	<0.43	1.0	09/15/11 12:36	
n-Butylbenzene	ug/L	<0.93	1.0	09/15/11 12:36	
n-Propylbenzene	ug/L	<0.81	1.0	09/15/11 12:36	
Naphthalene	ug/L	<0.89	5.0	09/15/11 12:36	
o-Xylene	ug/L	<0.83	1.0	09/15/11 12:36	
p-Isopropyltoluene	ug/L	<0.67	1.0	09/15/11 12:36	
sec-Butylbenzene	ug/L	<0.89	5.0	09/15/11 12:36	
Styrene	ug/L	<0.86	1.0	09/15/11 12:36	
tert-Butylbenzene	ug/L	<0.97	1.0	09/15/11 12:36	
Tetrachloroethene	ug/L	<0.45	1.0	09/15/11 12:36	
Toluene	ug/L	<0.67	1.0	09/15/11 12:36	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	09/15/11 12:36	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	09/15/11 12:36	
Trichloroethene	ug/L	<0.48	1.0	09/15/11 12:36	
Trichlorofluoromethane	ug/L	<0.79	1.0	09/15/11 12:36	
Vinyl chloride	ug/L	<0.18	1.0	09/15/11 12:36	
4-Bromofluorobenzene (S)	%	95	70-130	09/15/11 12:36	
Dibromofluoromethane (S)	%	101	70-130	09/15/11 12:36	
Toluene-d8 (S)	%	95	70-130	09/15/11 12:36	

LABORATORY CONTROL SAMPLE & LCSD: 502995

502996

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.1	51.2	104	102	70-133	2	20	
1,1,2,2-Tetrachloroethane	ug/L	50	45.2	44.8	90	90	70-130	.9	20	
1,1,2-Trichloroethane	ug/L	50	48.7	47.6	97	95	70-130	2	20	
1,1-Dichloroethane	ug/L	50	42.5	41.1	85	82	70-130	3	20	
1,1-Dichloroethene	ug/L	50	48.5	47.8	97	96	70-130	1	20	
1,2,4-Trichlorobenzene	ug/L	50	50.3	50.0	101	100	70-130	.6	20	
1,2-Dibromo-3-chloropropane	ug/L	50	40.8	40.4	82	81	50-150	1	20	
1,2-Dibromoethane (EDB)	ug/L	50	49.6	47.5	99	95	70-130	4	20	
1,2-Dichlorobenzene	ug/L	50	50.0	50.1	100	100	70-130	.08	20	
1,2-Dichloroethane	ug/L	50	49.1	48.6	98	97	70-145	1	20	
1,2-Dichloropropane	ug/L	50	49.7	47.4	99	95	70-130	5	20	
1,3-Dichlorobenzene	ug/L	50	49.6	49.9	99	100	70-130	.7	20	
1,4-Dichlorobenzene	ug/L	50	47.8	47.7	96	95	70-130	.2	20	
Benzene	ug/L	50	51.1	51.1	102	102	70-130	.2	20	
Bromodichloromethane	ug/L	50	49.3	47.9	99	96	70-130	3	20	
Bromoform	ug/L	50	44.9	44.6	90	89	70-130	.8	20	
Bromomethane	ug/L	50	28.5	34.2	57	68	52-155	18	20	
Carbon tetrachloride	ug/L	50	55.1	54.9	110	110	70-153	.4	20	
Chlorobenzene	ug/L	50	50.4	49.9	101	100	70-130	.9	20	
Chloroethane	ug/L	50	49.7	48.0	99	96	70-130	3	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CERMATICS

Pace Project No.: 4050799

LABORATORY CONTROL SAMPLE & LCSD: 502995

502996

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Chloroform	ug/L	50	51.7	49.7	103	99	70-130	4	20	
Chloromethane	ug/L	50	47.6	46.3	95	93	50-130	3	20	
cis-1,2-Dichloroethene	ug/L	50	46.8	43.7	94	87	70-130	7	20	
cis-1,3-Dichloropropene	ug/L	50	46.8	46.5	94	93	70-130	.6	20	
Dibromochloromethane	ug/L	50	51.6	51.8	103	104	70-130	.5	20	
Dichlorodifluoromethane	ug/L	50	48.3	46.6	97	93	50-150	3	20	
Ethylbenzene	ug/L	50	50.9	50.6	102	101	70-130	.6	20	
Isopropylbenzene (Cumene)	ug/L	50	51.4	51.2	103	102	70-130	.4	20	
m&p-Xylene	ug/L	100	102	100	102	100	70-130	1	20	
Methyl-tert-butyl ether	ug/L	50	44.4	43.0	89	86	70-130	3	20	
Methylene Chloride	ug/L	50	48.3	47.2	97	94	70-130	2	20	
o-Xylene	ug/L	50	50.6	50.3	101	101	70-130	.5	20	
Styrene	ug/L	50	49.9	49.9	100	100	70-130	.005	20	
Tetrachloroethene	ug/L	50	51.7	52.6	103	105	70-130	2	20	
Toluene	ug/L	50	51.1	50.3	102	101	70-130	2	20	
trans-1,2-Dichloroethene	ug/L	50	47.4	46.2	95	92	70-130	3	20	
trans-1,3-Dichloropropene	ug/L	50	45.9	45.5	92	91	70-130	.7	20	
Trichloroethene	ug/L	50	51.8	51.1	104	102	70-130	1	20	
Trichlorofluoromethane	ug/L	50	49.1	47.3	98	95	50-150	4	20	
Vinyl chloride	ug/L	50	47.6	46.1	95	92	66-130	3	20	
4-Bromofluorobenzene (S)	%				97	95	70-130			
Dibromofluoromethane (S)	%				99	99	70-130			
Toluene-d8 (S)	%				96	96	70-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 503178

503179

Parameter	Units	4050816008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.90	50	50	52.0	52.3	104	105	70-133	.6	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	50	50	43.9	45.3	88	91	70-130	3	20	
1,1,2-Trichloroethane	ug/L	<0.42	50	50	47.7	46.3	95	93	70-130	3	20	
1,1-Dichloroethane	ug/L	<0.75	50	50	40.6	43.3	81	87	70-133	6	20	
1,1-Dichloroethene	ug/L	<0.57	50	50	47.2	48.8	94	98	70-130	3	20	
1,2,4-Trichlorobenzene	ug/L	<0.97	50	50	52.8	52.4	106	105	70-130	.9	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.7	50	50	41.2	42.1	82	84	50-150	2	20	
1,2-Dibromoethane (EDB)	ug/L	<0.56	50	50	48.5	49.0	97	98	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.83	50	50	51.3	51.4	103	103	70-130	.1	20	
1,2-Dichloroethane	ug/L	<0.36	50	50	48.4	48.8	97	98	70-145	.9	20	
1,2-Dichloropropane	ug/L	<0.49	50	50	49.6	49.5	99	99	70-130	.05	20	
1,3-Dichlorobenzene	ug/L	<0.87	50	50	50.7	52.0	101	104	70-130	2	20	
1,4-Dichlorobenzene	ug/L	<0.95	50	50	48.7	48.8	97	98	70-130	.05	20	
Benzene	ug/L	4.3	50	50	55.6	55.6	102	103	70-130	.06	20	
Bromodichloromethane	ug/L	<0.56	50	50	48.8	48.7	98	97	70-130	.2	20	
Bromoform	ug/L	<0.94	50	50	44.3	44.6	89	89	70-130	.5	20	
Bromomethane	ug/L	<0.91	50	50	34.6	37.3	69	75	52-155	8	20	
Carbon tetrachloride	ug/L	<0.49	50	50	53.8	55.2	108	110	70-158	3	20	
Chlorobenzene	ug/L	<0.41	50	50	49.9	50.3	100	101	70-130	.9	20	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CERMATICS

Pace Project No.: 4050799

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 503178

503179

Parameter	Units	4050816008		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD	
Chloroethane	ug/L	<0.97	50	50	50	48.2	48.0	96	96	70-130	.5	20
Chloroform	ug/L	<1.3	50	50	50	50.8	50.9	102	102	70-130	.3	20
Chloromethane	ug/L	<0.24	50	50	50	44.2	45.5	88	91	46-130	3	20
cis-1,2-Dichloroethene	ug/L	14.7	50	50	50	59.7	62.0	90	95	70-130	4	20
cis-1,3-Dichloropropene	ug/L	<0.20	50	50	50	47.2	48.2	94	96	70-130	2	20
Dibromochloromethane	ug/L	<0.81	50	50	50	51.1	51.9	102	104	70-130	2	20
Dichlorodifluoromethane	ug/L	<0.99	50	50	50	44.4	45.2	89	90	50-150	2	20
Ethylbenzene	ug/L	2.4	50	50	50	53.6	53.8	102	103	70-130	.3	20
Isopropylbenzene (Cumene)	ug/L	6.7	50	50	50	58.6	58.6	104	104	70-130	.1	20
m&p-Xylene	ug/L	<1.8	100	100	100	102	103	101	102	70-130	1	20
Methyl-tert-butyl ether	ug/L	<0.61	50	50	50	42.5	43.7	85	87	70-130	3	20
Methylene Chloride	ug/L	<0.43	50	50	50	47.0	47.5	94	95	70-130	.9	20
o-Xylene	ug/L	<0.83	50	50	50	50.3	50.9	101	102	70-130	1	20
Styrene	ug/L	<0.86	50	50	50	50.2	50.6	100	101	19-157	.8	20
Tetrachloroethene	ug/L	76.5	50	50	50	132	135	110	117	70-130	2	20
Toluene	ug/L	<0.67	50	50	50	51.4	50.9	102	101	70-130	.9	20
trans-1,2-Dichloroethene	ug/L	8.9	50	50	50	53.8	55.0	90	92	70-130	2	20
trans-1,3-Dichloropropene	ug/L	<0.19	50	50	50	45.8	46.1	92	92	70-130	.6	20
Trichloroethene	ug/L	18.7	50	50	50	71.8	73.2	106	109	70-130	2	20
Trichlorofluoromethane	ug/L	<0.79	50	50	50	47.2	48.8	94	98	50-150	3	20
Vinyl chloride	ug/L	41.8	50	50	50	87.0	89.6	90	96	62-130	3	20
4-Bromofluorobenzene (S)	%							95	95	70-130		
Dibromofluoromethane (S)	%							98	98	70-130		
Toluene-d8 (S)	%							95	94	70-130		

## QUALIFIERS

Project: CERMATICS  
Pace Project No.: 4050799

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### ANALYTE QUALIFIERS

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

# Sample Condition Upon Receipt

Pace Analytical

Client Name: E2M

Project # 21050799

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☒ Commercial ☐ Pace Other \_\_\_\_\_

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None Other \_\_\_\_\_

Thermometer Used NA Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature 201 Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☐ no

Temp should be above freezing to 6°C for all sample except Biota.  
Biota Samples should be received ≤ 0°C.

Comments:

Person examining contents:  
Date: 9-14-11  
Initials: L

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: <u>VOA</u> coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lo: # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

Project Manager Review:

Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hot incorrect preservative, out of temp, incorrect containers)



## ANALYTICAL RESULTS

Project: CERMATICS  
Pace Project No.: 4045864

Sample: CM/MW2/0511 Lab ID: 4045864001 Collected: 05/13/11 12:45 Received: 05/17/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Benzene	<0.41	ug/L	1.0	0.41	1		05/18/11 16:21	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		05/18/11 16:21	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		05/18/11 16:21	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		05/18/11 16:21	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		05/18/11 16:21	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		05/18/11 16:21	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		05/18/11 16:21	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		05/18/11 16:21	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		05/18/11 16:21	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		05/18/11 16:21	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		05/18/11 16:21	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		05/18/11 16:21	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		05/18/11 16:21	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		05/18/11 16:21	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		05/18/11 16:21	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		05/18/11 16:21	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		05/18/11 16:21	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		05/18/11 16:21	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		05/18/11 16:21	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		05/18/11 16:21	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		05/18/11 16:21	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		05/18/11 16:21	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		05/18/11 16:21	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		05/18/11 16:21	75-71-8	
1,1-Dichloroethane	1.2	ug/L	1.0	0.75	1		05/18/11 16:21	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		05/18/11 16:21	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		05/18/11 16:21	75-35-4	
cis-1,2-Dichloroethene	28.4	ug/L	1.0	0.83	1		05/18/11 16:21	156-59-2	
trans-1,2-Dichloroethene	0.97J	ug/L	1.0	0.89	1		05/18/11 16:21	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		05/18/11 16:21	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		05/18/11 16:21	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		05/18/11 16:21	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		05/18/11 16:21	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		05/18/11 16:21	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		05/18/11 16:21	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		05/18/11 16:21	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		05/18/11 16:21	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		05/18/11 16:21	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		05/18/11 16:21	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		05/18/11 16:21	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		05/18/11 16:21	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		05/18/11 16:21	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		05/18/11 16:21	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		05/18/11 16:21	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		05/18/11 16:21	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		05/18/11 16:21	630-20-6	

Date: 05/19/2011 04:13 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4045864

Sample: CM/MW5/0511 Lab ID: 4045864002 Collected: 05/13/11 13:15 Received: 05/17/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		05/19/11 10:15	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		05/19/11 10:15	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		05/19/11 10:15	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		05/19/11 10:15	75-71-8	
1,1-Dichloroethane	1.3	ug/L	1.0	0.75	1		05/19/11 10:15	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		05/19/11 10:15	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		05/19/11 10:15	75-35-4	
cis-1,2-Dichloroethene	31.9	ug/L	1.0	0.83	1		05/19/11 10:15	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		05/19/11 10:15	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		05/19/11 10:15	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		05/19/11 10:15	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		05/19/11 10:15	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		05/19/11 10:15	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		05/19/11 10:15	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		05/19/11 10:15	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		05/19/11 10:15	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		05/19/11 10:15	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		05/19/11 10:15	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		05/19/11 10:15	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		05/19/11 10:15	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		05/19/11 10:15	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		05/19/11 10:15	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		05/19/11 10:15	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		05/19/11 10:15	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		05/19/11 10:15	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		05/19/11 10:15	630-20-6	
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		05/19/11 10:15	79-34-5	
Tetrachloroethene	0.82J	ug/L	1.0	0.45	1		05/19/11 10:15	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		05/19/11 10:15	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		05/19/11 10:15	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		05/19/11 10:15	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		05/19/11 10:15	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		05/19/11 10:15	79-00-5	
Trichloroethene	9.5	ug/L	1.0	0.48	1		05/19/11 10:15	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		05/19/11 10:15	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		05/19/11 10:15	96-18-4	
1,2,4-Trimethylbenzene	1.3	ug/L	1.0	0.97	1		05/19/11 10:15	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		05/19/11 10:15	108-67-8	
Vinyl chloride	1.5	ug/L	1.0	0.18	1		05/19/11 10:15	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		05/19/11 10:15	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		05/19/11 10:15	95-47-6	
4-Bromofluorobenzene (S)	102	%	69-130		1		05/19/11 10:15	460-00-4	
Dibromofluoromethane (S)	104	%	70-134		1		05/19/11 10:15	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		05/19/11 10:15	2037-26-5	

Date: 05/19/2011 04:13 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CERMATICS

Pace Project No.: 4045864

Sample: CM/MW7/0511 Lab ID: 4045864003 Collected: 05/13/11 13:25 Received: 05/17/11 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,1,2,2-Tetrachloroethane	<0.20	ug/L	1.0	0.20	1		05/19/11 10:39	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		05/19/11 10:39	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		05/19/11 10:39	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		05/19/11 10:39	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		05/19/11 10:39	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		05/19/11 10:39	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.0	0.42	1		05/19/11 10:39	79-00-5	
Trichloroethene	17.7	ug/L	1.0	0.48	1		05/19/11 10:39	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		05/19/11 10:39	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		05/19/11 10:39	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		05/19/11 10:39	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		05/19/11 10:39	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		05/19/11 10:39	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		05/19/11 10:39	179601-23-1	
o-Xylene	<0.83	ug/L	1.0	0.83	1		05/19/11 10:39	95-47-6	
4-Bromofluorobenzene (S)	104	%	69-130		1		05/19/11 10:39	460-00-4	
Dibromofluoromethane (S)	101	%	70-134		1		05/19/11 10:39	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		05/19/11 10:39	2037-26-5	

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## QUALITY CONTROL DATA

Project: CERMATICS

Pace Project No.: 4045864

METHOD BLANK: 450950

Matrix: Water

Associated Lab Samples: 4045864001, 4045864002, 4045864003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	<1.8	2.0	05/18/11 14:22	
Methyl-tert-butyl ether	ug/L	<0.61	1.0	05/18/11 14:22	
Methylene Chloride	ug/L	<0.43	1.0	05/18/11 14:22	
n-Butylbenzene	ug/L	<0.93	1.0	05/18/11 14:22	
n-Propylbenzene	ug/L	<0.81	1.0	05/18/11 14:22	
Naphthalene	ug/L	<0.89	5.0	05/18/11 14:22	
o-Xylene	ug/L	<0.83	1.0	05/18/11 14:22	
p-Isopropyltoluene	ug/L	<0.67	1.0	05/18/11 14:22	
sec-Butylbenzene	ug/L	<0.89	5.0	05/18/11 14:22	
Styrene	ug/L	<0.86	1.0	05/18/11 14:22	
tert-Butylbenzene	ug/L	<0.97	1.0	05/18/11 14:22	
Tetrachloroethene	ug/L	<0.45	1.0	05/18/11 14:22	
Toluene	ug/L	<0.67	1.0	05/18/11 14:22	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	05/18/11 14:22	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	05/18/11 14:22	
Trichloroethene	ug/L	<0.48	1.0	05/18/11 14:22	
Trichlorofluoromethane	ug/L	<0.79	1.0	05/18/11 14:22	
Vinyl chloride	ug/L	<0.18	1.0	05/18/11 14:22	
4-Bromofluorobenzene (S)	%	103	69-130	05/18/11 14:22	
Dibromofluoromethane (S)	%	106	70-134	05/18/11 14:22	
Toluene-d8 (S)	%	104	70-130	05/18/11 14:22	

LABORATORY CONTROL SAMPLE & LCSD: 450951

450952

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.5	57.4	115	115	70-132	.1	20	
1,1,2,2-Tetrachloroethane	ug/L	50	45.9	45.8	92	92	63-130	.2	20	
1,1,2-Trichloroethane	ug/L	50	50.8	51.9	102	104	70-130	2	20	
1,1-Dichloroethane	ug/L	50	54.2	54.4	108	109	70-132	.3	20	
1,1-Dichloroethene	ug/L	50	57.4	56.4	115	113	70-137	2	20	
1,2-Dichloroethane	ug/L	50	52.6	53.0	105	106	70-130	.7	20	
1,2-Dichloropropane	ug/L	50	51.3	52.0	103	104	70-130	1	20	
Benzene	ug/L	50	55.2	54.8	110	110	70-130	.7	20	
Bromodichloromethane	ug/L	50	50.5	51.8	101	104	70-131	3	20	
Bromoform	ug/L	50	46.5	47.5	93	95	70-130	2	20	
Bromomethane	ug/L	50	56.6	60.3	113	121	53-160	6	20	
Carbon tetrachloride	ug/L	50	55.0	54.7	110	109	70-130	.6	20	
Chlorobenzene	ug/L	50	53.9	52.6	108	105	70-130	2	20	
Chloroethane	ug/L	50	54.1	53.8	108	108	70-147	.5	20	
Chloroform	ug/L	50	51.9	52.4	104	105	70-130	1	20	
Chloromethane	ug/L	50	50.9	51.0	102	102	41-137	.3	20	
cis-1,2-Dichloroethene	ug/L	50	56.8	56.6	114	113	70-130	.4	20	
cis-1,3-Dichloropropene	ug/L	50	50.9	50.4	102	101	70-130	1	20	
Dibromochloromethane	ug/L	50	51.7	50.8	103	102	70-130	2	20	
Ethylbenzene	ug/L	50	53.2	53.1	106	106	70-130	.1	20	

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### QUALITY CONTROL DATA

Project: CERMATICS  
Pace Project No.: 4045864

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 451330 451331												
Parameter	Units	4045864001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Vinyl chloride	ug/L	0.55J	50	50	54.9	56.1	109	111	46-131	2	20	
4-Bromofluorobenzene (S)	%						102	100	69-130			
Dibromofluoromethane (S)	%						102	103	70-134			
Toluene-d8 (S)	%						103	104	70-130			

## **ATTACHMENT 2**

Statistical Analysis Test Results

**State of Wisconsin**  
**Department of Natural Resources**  
**Remediation and Redevelopment Program**

**Mann-Kendall Statistical Test**  
**Form 4400-215 (2/2001)**

**Notice:** This form is the DNR supplied spreadsheet referenced in Appendices A of Comm 46 and NR 746, Wis. Adm. Code. It is provided to consultants as an optional tool for groundwater contaminant trend analysis to support site closure requests under s. Comm 46.07, Comm 46.08, NR 746.07, NR 746.08, Wis. Adm. Code. Use this form or a manual method when seeking case closure under those rules. Earlier versions of this form should not be used.

**Instructions:** Do not change formulas or other information in cells with a blue background, only cells with a yellow background are used for data entry. To use the spreadsheet, provide at least four rounds and not more than ten rounds of data that is not seasonally affected. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" or "DATE ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at both 80 percent and 90 percent confidence levels. If a declining trend is present at 80 percent but not at 90 percent, a site is still eligible for closure under Comm 46 and NR 746 provided that other conditions in those rules are met. If an increasing or decreasing trend is not present, an additional coefficient of variation test is used to test for stability, as proposed by Wiedemeier et al, 1999. For additional information, refer to the Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

Site Name : Cermatics				FID No. = 246046350		Well Number = MW2	
Event Number	Compound -> Sampling Date (most recent last)	TCE Concentration (leave blank if no data)	VC Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	29-Mar-06	32.00	0.94				
2	14-Jun-06	46.00	0.94				
3	5-Sep-06	32.00	0.92				
4	27-Dec-06	46.00	0.99				
5	15-Aug-08	31.80	0.71				
6	17-Mar-09	28.40	0.57				
7	26-Aug-10	22.00	0.69				
8	13-May-11	24.70	0.55				
9	12-Sep-11	15.10	0.40				
10							
Mann Kendall Statistic (S) =		-26.0	-27.0	0.0	0.0	0.0	0.0
Number of Rounds (n) =		9	9	0	0	0	0
Average =		30.89	0.75	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =		10.203	0.212	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=		0.330	0.284	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected				n<4	n<4	n<4	n<4
Trend ≥ 80% Confidence Level		DECREASING	DECREASING	n<4	n<4	n<4	n<4
Trend ≥ 90% Confidence Level		DECREASING	DECREASING	n<4	n<4	n<4	n<4
Stability Test, If No Trend Exists at 80% Confidence Level		NA	NA	n<4	n<4	n<4	n<4
Data Entry By = CAM		Date = 8-Nov-11		Checked By =			

**State of Wisconsin  
Department of Natural Resources  
Remediation and Redevelopment Program**

**Mann-Kendall Statistical Test  
Form 4400-215 (2/2001)**

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Site Name : Cermatics			FID No. = 246046350			Well Number = MW5	
Event Number	Compound -> Sampling Date (most recent last)	Vinyl Chloride Concentration (leave blank if no data)	TCE Concentration (leave blank if no data)	1,2-DCE (cis) Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	29-Mar-06	5.00	220.00	260.00			
2	14-Jun-06	6.70	130.00	210.00			
3	5-Sep-06	14.00	880.00	860.00			
4	27-Dec-06	12.00	630.00	770.00			
5	15-Aug-08	4.40	18.60	66.60			
6	17-Mar-09	1.50	13.10	47.00			
7	26-Aug-10	3.60	10.90	51.00			
8	13-May-11	1.50	9.50	31.90			
9	12-Sep-11	2.70	11.60	70.20			
10							
Mann Kendall Statistic (S) =		-19.0	-24.0	-18.0	0.0	0.0	0.0
Number of Rounds (n) =		9	9	9	0	0	0
Average =		5.71	213.74	262.97	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =		4.478	321.380	323.463	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=		0.784	1.504	1.230	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected					n<4	n<4	n<4
Trend ≥ 80% Confidence Level		DECREASING	DECREASING	DECREASING	n<4	n<4	n<4
Trend ≥ 90% Confidence Level		DECREASING	DECREASING	DECREASING	n<4	n<4	n<4
Stability Test, If No Trend Exists at 80% Confidence Level		NA	NA	NA	n<4	n<4	n<4
Data Entry By = CAM			Date = 8-Nov-11		Checked By =		



**State of Wisconsin**  
**Department of Natural Resources**  
**Remediation and Redevelopment Program**

**Mann-Kendall Statistical Test**  
**Form 4400-215 (2/2001)**

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Site Name : Cermatics				FID No. = 246046350		Well Number = MW7	
Compound ->		1,2-DCE (cis)	TCE				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	17-Mar-09	95.00	16.70				
2	26-Aug-10	45.60	8.30				
3	13-May-11	76.40	17.70				
4	12-Sep-11	75.10	13.00				
5							
6							
7							
8							
9							
10							
Mann Kendall Statistic (S) =		-2.0	0.0	0.0	0.0	0.0	0.0
Number of Rounds (n) =		4	4	0	0	0	0
Average =		73.03	13.93	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Standard Deviation =		20.418	4.260	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Coefficient of Variation(CV)=		0.280	0.306	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Error Check, Blank if No Errors Detected				n<4	n<4	n<4	n<4
Trend ≥ 80% Confidence Level		No Trend	No Trend	n<4	n<4	n<4	n<4
Trend ≥ 90% Confidence Level		No Trend	No Trend	n<4	n<4	n<4	n<4
Stability Test, If No Trend Exists at 80% Confidence Level		CV ≤ 1 STABLE	CV ≤ 1 STABLE	n<4	n<4	n<4	n<4
Data Entry By = CAM			Date = 8-Nov-11		Checked By =		

## **ATTACHMENT 3**

Investigative Soil Disposal and Potable Well Status Affidavit

To whom it may concern;

I Richard Luedtke had put the dirt from the sample drillings into a number of steel barrels we had sitting around. A few years ago all of the barrels were coved and sealed, then put outside on the cement slab next to the building. A few months after they were put outside they were stolen along with a steel picnic table of mine and any other metal that was laying around. What they did with the dirt inside I don't know.

As far as the well goes it was not used since Waste Management disconnected it and got us hooked up to city water. They should have abandoned it properly at that time.

12/02/2011

Richard Luedtke  
James Luedtke