GROUNDWATER SAMPLING REPORT

JUNE 2000

21st Century Environmental Management, Inc.
Philip Services Corp.

25 Graystone Street
Warwick, RI 02886

AUG 3 - 2000

RDMS Doc ID 110106

PHILIP SERVICES
INDUSTRIAL SERVICES GROUP
Eastern Region

August 1, 2000

Mr. Mark Dennen
RIDEM/Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

Mr. Dennen:

Enclosed is a report of the groundwater monitoring event completed in **June 2000** at the 21st Century Environmental Management, Inc. (Philip Services Corp.) facility.

Sampling is completed on a quarterly schedule in the months of March, June, September, and December. The sampling program is described in Section 14.00 of the Part B permit application (rev. October 1998).

If you have any cuestions, please contact me at (401) 781-6340.

Respectfully,

John Stiller
Area Manager, Regulatory Affairs

Enclosures

AUG 3 - 2000

21gwrpt6-00.doc.jds

GROUNDWATER SAMPLING REPORT
JUNE 2000

1.0 INTRODUCTION

This report presents the results of groundwater sampling and analysis completed at the 21st Century Environmental Management, Inc. (Philip Services Corp.) facility in Warwick, RI on June 16, 2000. The sampling was performed by Levine-Fricke-Recon (L-F-R). The scope of work for this sampling event included the following tasks:

- gauge water levels and sample groundwater in the six existing on-site monitoring wells;
- analyze each groundwater sample for 13 priority pollutant dissolved metals, total cyanide, and volatile organic compounds (VOCs); and
- review and compare results to previous groundwater sampling events.

This report describes the sampling protocols and procedures, provides analytical results, and reviews the current sampling results in comparison to previous testing. A site plan showing the well locations is provided as Figure 1.

2.0 BACKGROUND

21st Century Environmental Management, Inc. (21 EMI) is a RCRA-permitted hazardous and non-hazardous waste treatment and storage facility. The groundwater monitoring program is described in Section 14.00 of the Part B permit application (rev. October 1998).

The RI Department of Environmental Management (RIDEM) classifies groundwater at the facility as GB. The GB designation indicates groundwater resources not suitable for public or private drinking water use such as those found in highly urbanized areas of the state with dense concentrations of industrial and commercial activity.

Groundwater-monitoring wells (ESS-1 through ESS-4) were installed in January 1995 by Environmental Science Services (ESS) of Providence, RI as part of a groundwater investigation. Well MW-1 was installed prior to the ESS wells. Well MW-2 was installed in April 1997 by XCG. All six wells were used for the current groundwater sampling event and will continue to be used on a quarterly schedule.

3.0 GROUNDWATER SAMPLING PROTOCOLS AND PROCEDURES

The depth to groundwater in each of the six monitoring wells was gauged to the nearest 0.01 foot using a Slope Indicator Co. Model 51453 water level indicator (or equivalent).

Groundwater samples were collected from the six monitoring wells using standard procedures and protocols, which include using a new polyethylene pre-cleaned and disposable bailer for each individual well. Prior to sampling, approximately three well volumes of water were purged from each well and the wells were allowed to recover.

Collected groundwater samples were placed in laboratory-cleaned bottles and were maintained in an iced cooler for delivery to the laboratory. The samples were delivered to ESS Laboratory for analysis for 13 priority pollutant dissolved metals, total cyanide, and VOCs. Laboratory data sheets are provided in Appendix A.

4.0 GROUNDWATER GAUGING RESULTS

Groundwater was detected at depths ranging from 30.6 feet in MW-1 to 25.01 feet in ESS-3. All measurements were made from the tops of the PVC well casings, except for MW-1, which was measured from the top of the metal riser. Relative groundwater surface elevations were determined based the measuring point elevation survey completed by L-F-R in March 2000.

The results of the groundwater elevation measurements are provided in Table 1. Based on the well gauging data, groundwater flow was determined to be in a west-northwesterly direction. Groundwater elevations and contours are depicted on the Site Plan included as Figure 1.

5.0 GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

Low levels of cadmium, copper, and zinc were detected in various wells, most consistently were copper and zinc. Cyanide was detected at the method detection limit (MDL) in wells ESS-3 and ESS-4.

Four VOCs (1,1,1-trichloroethane, 1,1-dichloroethene, tetrachloroethene, trichloroethene) were detected in various wells slightly above the method detection limit and far below the RIDEM's Method 1 Groundwater Objectives for GB classified groundwater. All other VOCs were non-detectable (below the MDL) in each well.

Table 2 presents those compounds detected with the current groundwater-sampling event at or above the method detection limit.

6.0 COMPARISON OF CURRENT RESULTS TO HISTORICAL DATA

Six previous groundwater sampling events have been completed (January 1995, June 1998, December 1998, June 1999, December 1999, and March 2000). A summary of the previous analytical results for each monitoring well, as well as the current sampling results is provided in Table 3, Historical Groundwater Data.

Comparisons of the current results to the previous sampling results are as follows:

- Dissolved metals detected during the current sampling were generally at or below the previously detected levels, or not detected in this sampling event. The only dissolved metals consistently detected are copper and zinc. The variations in the metals concentrations do not appear to be significant or indicate evidence of a release.

- VOCs detected in the current sampling were detected in previous events, and conversely VOCs detected in previous events were not detected in the current event. In all cases the VOCs were detected at very low levels and do not exceed the RIDEM GB groundwater objectives.

- The results of the current sampling round were generally within the range of results of the previous sampling round. Future trends will be evaluated to determine whether significant variations are occurring.

7.0 CONCLUSIONS

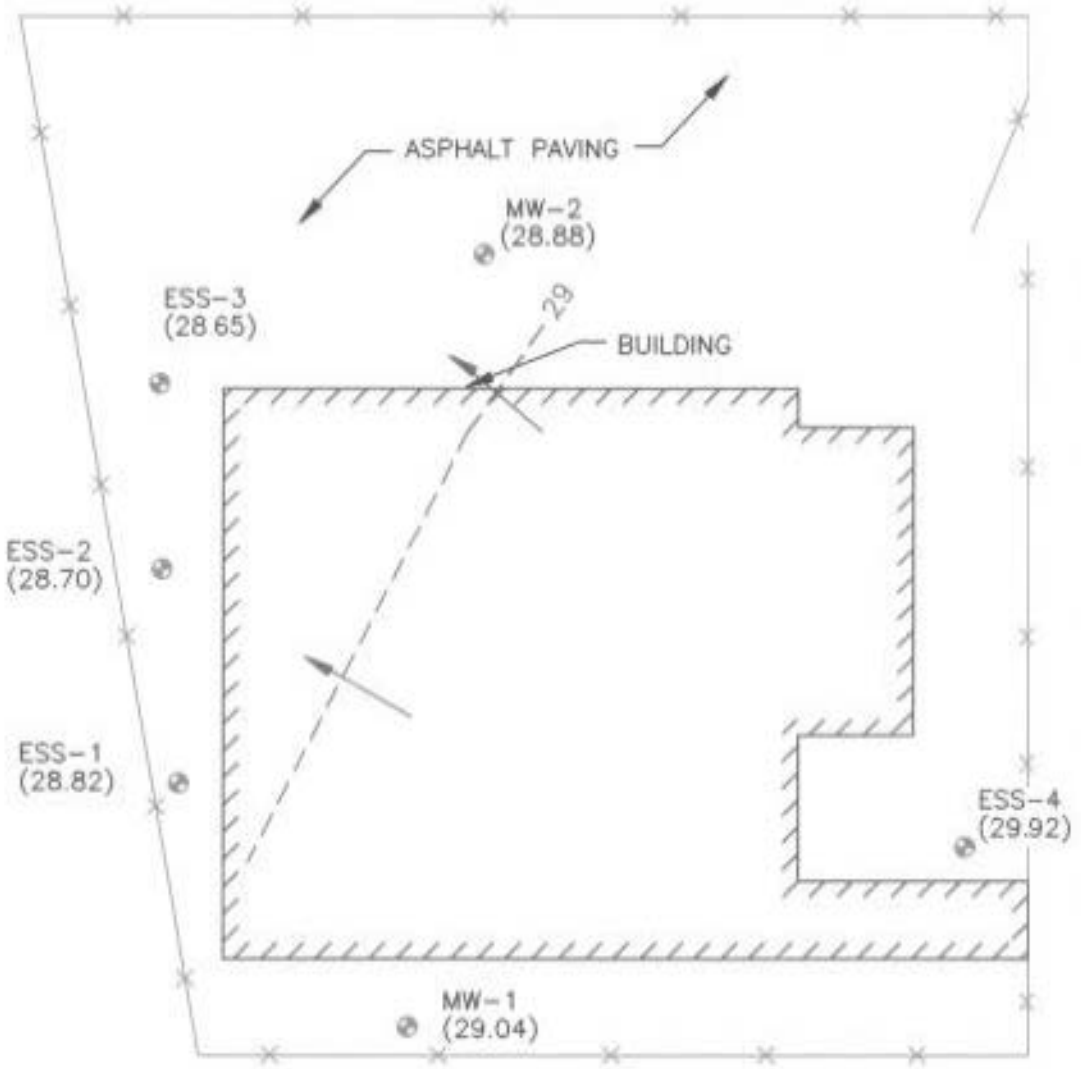
Based upon well gauging data and the previous well elevation survey, groundwater was determined to be flowing in a west-northwesterly direction.

Low levels of dissolved metals and VOCs were detected in the groundwater samples however, the levels detected do not exceed RIDEM GB groundwater objectives and do not appear indicative of a release from on-site operations.

The results of the current sampling round were generally within the range of results of the previous sampling round. Future trends will be evaluated to determine whether significant variations are occurring.

LEGEND:

ESS-3 (27.36) — MONITORING WELL
GROUNDWATER ELEVATION (MARCH 30,2000)
GROUNDWATER FLOW DIRECTION
GROUNDWATER CONTOUR
FENCE



NOTES:

1. BASE MAP DEVELOPED FROM A PLAN BY ENVIRONMENTAL SCIENCE SERVICES, TITLED GROUNDWATER CONTOUR MAP, DATED FEBRUARY 1995.

2. WATER TABLE ELEVATIONS BASED ON WELL ELEVATION SURVEY CONDUCTED BY LFR, INC. IN MARCH 2000.

LFR LEVINE • FRICKE
250 CENTERVILLE ROAD
BUILDING E, SUITE 12
WARWICK, RHODE ISLAND
02886-4353
phone (401) 738-3887
fax (401) 732-1686

SCALE: 1" = 50'

DESCRIPTION	BY	DATE

PROJ MGR: TD
DESIGNED BY: TD
DRAWN BY: SD
REVIEWED BY: TD
DATE: 7/24/00

PHILIP SERVICES CORPORATION
25 GRAYSTONE STREET, WARWICK, RHODE ISLAND

SITE PLAN

FILE NO.
801-00040

FIGURE NO.
1

TABLES

TABLE 1

Groundwater Elevation Measurements
June 2000

Parameter	Well Number					
	MW-1	MW-2	ESS-1	ESS-2	ESS-3	ESS-4
Depth To Water	30.6'	26.49'	28.24'	25.93'	25.01'	27.62'
Depth to Product	nd	nd	nd	nd	nd	nd
M.P. Elevation	60.00'	55.37'	57.06'	54.63'	53.66'	57.54'
Water Table Elevation	29.4'	28.88'	28.82'	28.70'	28.65'	29.92'
Total Well Depth	39.69'	33.56'	37.87'	35.48'	37.14'	36.97'

Notes: nd = not detected.

See Figure 1 for well locations.

The measuring point (M.P.) elevation for all wells is based on survey conducted by L-F-R on 3/30/00.

MW-1 measuring point elevation is top of casing, all others are top of PVC.

TABLE 2

Groundwater Sampling Results *
June 2000

Parameter	Well Number					
	MW-1	MW-2	ESS-1	ESS-2	ESS-3	ESS-4
Total Cyanide (mg/l)	<0.01	<0.01	<0.01	<0.01	0.02	0.02
Dissolved Metals						
Cadmium (mg/l)	0.005	0.01	0.005	0.006	<0.005	<0.005
Copper (mg/l)	0.06	<0.02	0.16	0.23	0.1	0.02
Zinc (mg/l)	0.16	<0.05	0.21	0.35	0.12	<0.05
Volatile Organic Compounds						
1,1,1-Trichloroethane (ug/l)	<1	<1	<1	7.1	2.3	3.2
1,1-Dichloroethene (ug/l)	<1	<1	<1	<1	<1	1.3
Tetrachloroethene (ug/l)	<1	<1	<1	5.3	1.6	2.4
Trichloroethene (ug/l)	<1	<1	<1	<1	3.4	6.3

* Only those compounds detected at or above the method detection limits are presented.

APPENDIX A

Laboratory Data

ESS Laboratory

Division of Thielsch Engineering, Inc.

June 29, 2000

Daniel Dair
LFR Levine-Fricke
250 Centerville Road
Bldg. E, Suite 12
Warwick, RI 02886

Dear Daniel Dair:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY

Laurel Stoddard
Laboratory Director

Enclosure

185 Frances Avenue, Cranston, RI 02910-2211 Tel.: 401-461-7181 Fax: 401-461-4486 http://www.thielsch.com
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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: LFR Levine-Fricke
CLIENT PROJECT ID: PSC Warwick
ESS PROJECT ID: 00060230

Sample Receipt
7 Aqueous samples were received on June 16, 2000 for the analysis specified on the enclosed Chain of Custody Record.

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

No unusual observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.

Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

6/29/00
Date

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: MW-1

ESS Project ID: 00060230
ESS Sample ID: 00060230-01
Date Sampled: 6/16/00

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Total Cyanide	ND	mg/L	0.01	06/17/00	335.2	VSC

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: UAS

Date: 6/23/00

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: MW-1
Date Sampled: 6/16/00
Percent Solid: N/A

ESS Project ID: 00060230
ESS Sample ID: 00060230-01
Units: mg/L
GFAA Dilution: 1
ICP1 Dilution: 1
Mercury Dilution: 1

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Antimony	ND	0.005	06/26/00	SAM	200.9
Arsenic	ND	0.05	06/19/00	SAM	200.7
Beryllium	ND	0.001	06/19/00	SAM	200.7
Cadmium	**0.005**	0.005	06/19/00	SAM	200.7
Chromium	ND	0.05	06/19/00	SAM	200.7
Copper	**0.06**	0.02	06/19/00	SAM	200.7
Lead	ND	0.005	06/24/00	SAM	200.9
Mercury	ND	0.0005	06/20/00	SAM	245.1
Nickel	ND	0.04	06/19/00	SAM	200.7
Selenium	ND	0.05	06/19/00	SAM	200.7
Silver	ND	0.005	06/19/00	SAM	200.7
Thallium	ND	0.002	06/23/00	SAM	200.9
Zinc	**0.16**	0.05	06/19/00	SAM	200.7

MRL = Method Reporting Limit. ND = Not Detected above MRL.

Approved By: LAS Date: 6/27/00

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Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: MW-1
Date Sampled: 6/16/00
Analyst: MD
Date Analyzed: 6/20/00

ESS Project ID: 00060230
ESS Sample ID: 00060230-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichlorobenzene	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	1
Carbon Tetrachloride	ND	1

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CERTIFICATE OF ANALYSIS

Client Project ID: PSC Warwick
Client Sample ID: MW-1

ESS Project ID: 00060230
ESS Sample ID: 00060230-01

Test Name	Result	MRL
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	1
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	2
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: AB

Date: 6/23/00

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CERTIFICATE OF ANALYSIS

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: ESS-4 MW-2 DRD

ESS Project ID: 00060230
ESS Sample ID: 00060230-06
Date Sampled: 6/16/00

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Total Cyanide	ND	mg/L	0.01	06/19/00	335.2	AR

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: CAS

Date: 6/23/00

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CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick DRD
Client Sample ID: ~~ESS-4~~ MW-2
Date Sampled: 6/16/00
Percent Solid: N/A

ESS Project ID: 00060230
ESS Sample ID: 00060230-06
Units: mg/L
GFAA Dilution: 1
ICP1 Dilution: 1
Mercury Dilution: 1

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Antimony	ND	0.005	06/26/00	SAM	200.9
Arsenic	ND	0.05	06/19/00	SAM	200.7
Beryllium	ND	0.001	06/19/00	SAM	200.7
Cadmium	**0.01**	0.005	06/19/00	SAM	200.7
Chromium	ND	0.05	06/19/00	SAM	200.7
Copper	ND	0.02	06/19/00	SAM	200.7
Lead	ND	0.005	06/24/00	SAM	200.9
Mercury	ND	0.0005	06/20/00	SAM	245.1
Nickel	ND	0.04	06/19/00	SAM	200.7
Selenium	ND	0.05	06/19/00	SAM	200.7
Silver	ND	0.005	06/19/00	SAM	200.7
Thallium	ND	0.002	06/23/00	SAM	200.9
Zinc	ND	0.05	06/19/00	SAM	200.7

MRL = Method Reporting Limit. ND = Not Detected above MRL.

Approved By: VAS Date: 6/27/00

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CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick DRD
Client Sample ID: ~~ESS-4~~ MW-2
Date Sampled: 6/16/00
Analyst: MD
Date Analyzed: 6/20/00

ESS Project ID: 00060230
ESS Sample ID: 00060230-06
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichlorobenzene	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	1
Carbon Tetrachloride	ND	1

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ESS Laboratory

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CERTIFICATE OF ANALYSIS

Client Project ID: PSC Warwick DRD
Client Sample ID: ~~ESS-4~~ MW-2

ESS Project ID: 00060230
ESS Sample ID: 00060230-06

Test Name	Result	MRL
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	1
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	2
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit. ND = Not Detected above MRL.

Approved By: WB Date: 6/23/00

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: ESS-1

ESS Project ID: 00060230
ESS Sample ID: 00060230-03
Date Sampled: 6/16/00

Test Name	Result	Units	MRL	Date Analyzed	Method	Analyst
Total Cyanide	ND	mg/L	0.01	06/17/00	335.2	VSC

ND = Not Detected above MRL

MRL = Method Reporting Limit.

Approved By: LAS

Date: 6/23/00

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: ESS-1
Date Sampled: 6/16/00
Percent Solid: N/A

ESS Project ID: 00060230
ESS Sample ID: 00060230-03
Units: mg/L
GFAA Dilution: 1
ICP1 Dilution: 1
Mercury Dilution: 1

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Antimony	ND	0.005	06/26/00	SAM	200.9
Arsenic	ND	0.05	06/19/00	SAM	200.7
Beryllium	ND	0.001	06/19/00	SAM	200.7
Cadmium	**0.005**	0.005	06/19/00	SAM	200.7
Chromium	ND	0.05	06/19/00	SAM	200.7
Copper	**0.16**	0.02	06/19/00	SAM	200.7
Lead	ND	0.005	06/24/00	SAM	200.9
Mercury	ND	0.0005	06/20/00	SAM	245.1
Nickel	ND	0.04	06/19/00	SAM	200.7
Selenium	ND	0.05	06/19/00	SAM	200.7
Silver	ND	0.005	06/19/00	SAM	200.7
Thallium	ND	0.002	06/23/00	SAM	200.9
Zinc	**0.21**	0.05	06/19/00	SAM	200.7

MRL = Method Reporting Limit. ND = Not Detected above MRL.

Approved By: LAS Date: 6/27/00

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: LFR Levine-Fricke
Client Project ID: PSC Warwick
Client Sample ID: ESS-1
Date Sampled: 6/16/00
Analyst: MD
Date Analyzed: 6/20/00

ESS Project ID: 00060230
ESS Sample ID: 00060230-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Test Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichlorobenzene	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	1
Carbon Tetrachloride	ND	1

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ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: PSC Warwick
Client Sample ID: ESS-1

ESS Project ID: 00060230
ESS Sample ID: 00060230-03

Test Name	Result	MRL
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	1
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	2
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit. ND = Not Detected above MRL.

Approved By: GAS Date: 6/23/00

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