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**BBL**

BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

*Transmitted Via Federal Express*

October 28, 1999

OCT 29 1999

Mr. Lawrence R. Cutting II  
Environmental Engineering Technician II  
New York State Department of Environmental Conservation  
Spill Prevention and Response  
Region 7  
1679 NY Route 11  
Kirkwood, New York 13795-1602

Re: Progress Parkway Enterprises, Inc.  
13 and 17½ Broad Street Facilities  
Binghamton, New York  
Project #: 1673.07360 #2

Dear Mr. Cutting:

Pursuant to our October 14, 1999 telephone conversation, this letter presents a summary of the ground-water investigation activities recently conducted by Blasland, Bouck & Lee, Inc. (BBL) at the 13 and 17½ Broad Street facilities located in Binghamton, New York. These activities were conducted on behalf of Progress Parkway Enterprises, Inc. (PPEI) in accordance with a March 2, 1999 letter from BBL to the New York State Department of Environmental Conservation (NYSDEC). This letter also presents proposed additional investigation activities based on the results of the recent ground-water investigation and the March 2, 1999 letter. As you know, a Voluntary Cleanup Program (VCP) Application was submitted to the NYSDEC on behalf of PPEI for the 13 and 17½ Broad Street facilities. PPEI received an August 23, 1999 letter from Mr. Anthony Quartararo, the NYSDEC project attorney, stating that the NYSDEC has reviewed the VCP application and determined that both facilities are eligible for the VCP.

Provided below is a brief overview of pertinent background information, followed by a description of the recent ground-water investigation activities and associated results.

**Background Information**

Phase II Investigation activities were conducted at the 13 and 17½ Broad Street facilities during June and July 1998. On behalf of PPEI, representatives from BBL were on-site to observe the Phase II Investigation activities. BBL presented a description of the Phase II Investigation activities and a discussion and summary of the Phase II Investigation analytical results obtained for each facility in a September 8, 1998 letter to the NYSDEC. The NYSDEC presented comments on the September 8, 1998 Phase II Investigation summary letter in a December 7, 1998 letter to BBL. BBL subsequently responded to the NYSDEC in a March 2, 1999 letter. That March 2, 1999 letter presented additional information obtained by BBL subsequent to the Phase II Investigation regarding the PPEI Broad Street facilities and an adjacent property (the Ashland Chemical Company), which is a Resource Conservation and Recovery Act (RCRA) Corrective Action site. Based on the additional information obtained by BBL and the NYSDEC's December 7, 1998 comment letter, the March 2, 1999 letter also proposed additional investigation activities at the 13 and 17½ Broad Street facilities to address potential environmental concerns identified as a result of the Phase II Investigation.

The additional investigation activities proposed in BBL's March 2, 1999 letter are summarized below.

- The installation and sampling of two background soil borings at the 13 Broad Street facility to further address arsenic concentrations detected in Phase II Investigation soil samples that just slightly exceeded the NYSDEC Soil Cleanup Objective for arsenic of 7.5 parts per million [as presented in the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) #4046]. As detailed in BBL's March 2, 1999 letter, arsenic was the only metal detected at concentrations exceeding the Soil Cleanup Objectives that may possibly need to be further addressed based on the NYSDEC comment requesting background soil sampling to determine if elevated levels of various inorganics are site-related.
- The installation and sampling of three soil borings at the 13 Broad Street facility to further address anomalously higher concentrations of lead, barium, chromium, mercury, and silver detected in Phase II Investigation soil sample SP-3 collected from a former floor drain at this facility.
- Surveying the elevations of the six existing monitoring wells located at the 13 and 17½ Broad Street facilities to determine the accurate elevation of each well with respect to a uniform vertical datum.
- Measuring ground-water elevations at the six existing monitoring wells to confirm/determine ground-water flow directions.
- Resampling monitoring well MW-3 at the 13 Broad Street facility to confirm elevated methylene chloride concentrations detected in the Phase II Investigation samples collected from this well.
- Resampling monitoring well MW-1 at the 13 Broad Street facility to further address the concentration of barium detected in the Phase II ground-water sample collected from this well which slightly exceeded the New York State Class GA Ground-Water Quality Standard (GWQS).
- Resampling monitoring wells MW-1, MW-2, and MW-3 at the 17½ Broad Street facility to further address the concentrations of barium and lead detected in Phase II ground-water samples collected from these wells which exceeded their respective GWQS.
- Properly closing the drywells (i.e., floor drains) located at the 13 and 17½ Broad Street facilities once the NYSDEC and PPEI agree that no further investigation and/or other activities are required to address the floor drains.

Based on our August 20, 1999 telephone conversation, it was agreed that BBL would proceed with implementing the ground-water investigation activities proposed in the March 2, 1999 letter (and identified above). The ground-water investigation activities were conducted by BBL on August 25 and 26, 1999. The NYSDEC (Mr. Lawrence Cutting) was on-site for a portion of the field activities. A brief description of the ground-water investigation activities conducted at each of the facilities is presented below along with a summary of the results of these activities.

### **13 Broad Street Facility**

On August 25, 1999, BBL attempted to collect ground-water samples from each of the 13 Broad Street facility monitoring wells for volatile organic compound (VOC) analysis to confirm the elevated methylene chloride concentrations previously detected in ground-water samples collected from monitoring well MW-3 during the Phase II Investigation and to confirm the absence of methylene chloride in ground-water samples

collected from monitoring wells MW-1 and MW-2. Monitoring well MW-2, however, was dry at the time of the sampling activities and could not be sampled. Therefore, ground-water samples were only collected from monitoring wells MW-1 and MW-3. The samples were analyzed by Galson Laboratories (Galson) for VOCs using United States Environmental Protection Agency (USEPA) SW-846 Method 8260 in accordance with the NYSDEC 1995 Analytical Services Protocol (ASP).

The Phase II Investigation ground-water sampling activities indicated the presence of barium in a ground-water sample collected from monitoring well MW-1 at a concentration of 1,500 ppb, which slightly exceeded the GWQS of 1,000 ppb. However, as discussed in BBL's September 8, 1998 letter to the NYSDEC, this sample was unfiltered and the elevated barium level most likely represented interference due to sediments in the ground-water sample. Therefore, monitoring well MW-1 at the 13 Broad Street facility was resampled for barium during the August 25, 1999 sampling event. In accordance with the NYSDEC's direction provided during your August 23, 1999 telephone conversation with Ms. Megan Miller of BBL, the ground-water samples collected on August 25, 1999 for laboratory analysis for metals (barium and/or lead) were decanted prior to submittal to the laboratory. The decanting procedure, which you described to Ms. Miller, involved allowing the ground-water samples to settle overnight in unpreserved sample bottles. The following morning, the ground water in the unpreserved bottles was carefully transferred to preserved sample bottles, so as not to disturb any sediment that had settled to the bottom of the unpreserved bottles. The samples were then submitted to Galson for laboratory analysis using USEPA SW-846 Method 6010 in accordance with NYSDEC 1995 ASP.

The validated analytical results for the ground-water samples obtained on August 25, 1999 are presented as Attachment 1. The results indicate that VOCs were not detected at concentrations greater than the laboratory quantitation limits in the ground-water sample collected from monitoring well MW-1. Two VOCs, trichloroethene (TCE) and tetrachloroethene (PCE) were detected in the ground-water sample and duplicate ground-water sample collected from monitoring well MW-3 at concentrations of 3 ppb, which is less than the GWQS of 5 ppb. Methylene chloride was not detected in any of the ground-water samples at concentrations greater than the laboratory quantitation limit of 5 ppb.

The validated analytical results of the ground-water sample collected from monitoring well MW-1 on August 25, 1999 indicate that barium was detected in the decanted ground-water sample at a concentration of 85.7 ppb. This concentration is significantly less than the GWQS of 1,000 ppb.

Prior to the ground-water sampling activities described above, ground-water elevations were obtained from each of the 13 Broad Street monitoring wells. In addition, the elevation of each of the monitoring wells were surveyed by BBL on August 26, 1999. The new elevations were referenced to the National Geodetic Vertical Datum (NGVD) of 1929 in feet above mean sea level (AMSL). A summary of the ground-water and monitoring well elevations is presented below.

<b>Monitoring Well</b>	<b>Top of Inner Casing Elevation (feet AMSL)</b>	<b>Depth to Ground Water from Top of Inner Casing (feet)</b>	<b>Ground-Water Elevation (feet AMSL)</b>
MW-1	873.24	35.43	837.81
MW-2	870.34	Dry	--
MW-3	874.47	38.69	835.78

Comparing the depth to ground water measurements obtained at the 13 Broad Street facility during both the July 1998 and August 1999 sampling events indicate that ground-water levels measured during the August 1999 sampling event were approximately 4 to 7 feet below ground-water levels measured during the July 1998 sampling event.

### **17½ Broad Street**

On August 25, 1999, BBL attempted to collect ground-water samples from each of the 17½ Broad Street facility monitoring wells for barium and lead to determine whether previous detections of barium and lead in ground-water samples collected from these wells represented dissolved barium and lead concentrations or interference due to sediments in the ground-water samples. The results of the Phase II Investigation ground-water sampling activities indicated barium and lead concentrations in each of the 17½ Broad Street monitoring wells at concentrations exceeding the GWQS. Due to extremely low ground-water levels at the time of the August 25, 1999 sampling event, monitoring wells MW-1 and MW-3 were dry or yielded insufficient ground-water volumes and could not be sampled. Therefore, a ground-water sample and duplicate sample were collected only from monitoring well MW-2 for barium and lead analyses. The samples were decanted in accordance with the procedures described previously in this letter, and subsequently analyzed by Galson using USEPA SW-846 Method 6010.

The validated analytical results for the ground-water samples collected on August 25, 1999 are presented as Attachment 1. Barium was detected in the ground-water sample and duplicate ground-water sample collected from monitoring well MW-2 at concentrations of 69.6 ppb and 69.2 ppb. These detected concentrations are significantly less than the GWQS of 1,000 ppb. Lead was not detected in either of the ground-water samples collected from monitoring well MW-2 at concentrations above the laboratory quantitation limit.

Prior to the ground-water sampling activities described above, ground-water elevations were obtained from each of the 17½ Broad Street monitoring wells. In addition, the elevation of each of the monitoring wells were surveyed by BBL on August 26, 1999. The new elevations were referenced to NGVD 1929 in feet AMSL. A summary of the ground-water and monitoring well elevations is presented below.

<b>Monitoring Well</b>	<b>Top of Inner Casing Elevation (feet AMSL)</b>	<b>Depth to Ground Water from Top of Inner Casing (feet)</b>	<b>Ground-Water Elevation (feet AMSL)</b>
MW-1	878.17	Dry	--
MW-2	878.14	40.14	838.00
MW-3	878.29	36.55	841.74

Comparing the depth to ground water measurements obtained at the 17½ Broad Street facility during both the July 1998 and August 1999 sampling events indicate that ground-water levels measured during the August 1999 sampling event were approximately 2.5 to 5 feet below ground-water levels measured during the July 1998 sampling event.

## **Conclusions and Recommendations**

Based on the results of the additional ground-water investigation activities described above, BBL has developed conclusions and recommendations for additional investigation activities to be conducted at each of the Broad Street facilities. These conclusions and recommendations are presented below.

### ***13 Broad Street***

Validated analytical results for ground-water samples obtained on August 25, 1999 indicate that methylene chloride was not detected in monitoring well MW-3 at the 13 Broad Street facility at a concentration greater than the laboratory quantitation limit. However, methylene chloride was detected in ground-water samples collected from this same well at concentrations of 3,980 ppb and 2,720 ppb in July 1998 during the Phase II Investigation. Due to the disparity in methylene chloride concentrations detected in the two rounds of ground-water samples collected from this well, BBL recommends that each of the 13 Broad Street monitoring wells be resampled for methylene chloride once ground-water levels have rebounded from the drought conditions experienced in the Binghamton area this past summer and are more representative of normal ground-water levels for that area.

In addition, because ground-water level measurements were only obtained from two of the monitoring wells at the 13 Broad Street facility during the August 25, 1999 sampling event, insufficient data was obtained to confirm/determine ground-water flow direction at the facility. Therefore, BBL recommends that another round of ground-water elevation measurements be obtained from each of the 13 Broad Street monitoring wells during the ground-water sampling event. Prior to conducting the next ground-water sampling event and round of ground-water level measurements, BBL will contact the NYSDEC project manager for the Ashland Chemical Company facility to request the date of the next planned ground-water level measuring event for that facility (if any). BBL will then attempt to obtain ground-water level measurements at the 13 Broad Street facility and the 17½ Broad Street facility at or around the same time, so that the data collected at each of the three facilities may be used to conduct a more comprehensive evaluation of ground-water flow direction in that area.

To further investigate the elevated methylene chloride concentrations detected in the Phase II ground-water samples collected from monitoring well MW-3, BBL recommends the installation of additional soil borings in the vicinity of monitoring well MW-3. Although a soil sample collected during the installation of monitoring well MW-3 indicated that methylene chloride was not detected, this sample was collected from a depth interval of 29.5 to 31.5 feet below ground surface (bgs). To evaluate whether the elevated methylene chloride concentrations detected in ground-water samples during the Phase II Investigation may potentially be associated with shallower soils in this area, BBL recommends the installation of four additional soil borings in the vicinity of monitoring well MW-3 to depths of approximately 10 feet bgs. Continuous soil samples will be collected while installing the soil borings and each soil sample will be visually characterized and screened for total organic vapors with a photoionization detector (PID). Up to four samples will be submitted for laboratory analysis for methylene chloride using USEPA SW-846 Method 8260.

Barium was detected in a Phase II Investigation ground-water sample collected from monitoring well MW-1 at a concentration of 1,500 ppb. The validated analytical results of the August 25, 1999 ground-water sampling activities indicate that barium was detected in the decanted ground-water sample collected from monitoring well MW-1 at a concentration of 85.7 ppb, which is significantly less than the GWQS of 1,000 ppb. The decrease in ground-water barium concentrations observed in

this well between July 1998 and August 1999 is most likely a result of the NYSDEC-suggested decanting procedures used during the August 1999 sampling event to obtain a sample that is more representative of actual ground-water quality. The results of the August 1999 sampling event indicate that the elevated barium concentrations detected in the July 1998 ground-water samples were not representative of dissolved concentrations, but rather attributable to the amount of particulate matter present in the ground-water samples which were not decanted prior to laboratory analysis. For this reason, no further activities related to the presence of barium in ground water at the 13 Broad Street facility are necessary.

As discussed previously, BBL proposed additional soil investigation activities at the 13 Broad Street facility in their March 2, 1999 letter to the NYSDEC to further address concentrations of metals detected in soil sample SP-3 collected from a floor drain which exceeded NYSDEC Soil Cleanup Objectives. At this time, BBL recommends that the previously proposed soil investigation activities be implemented. As presented in BBL's March 2, 1999 letter, these activities would include the following:

- The installation of a soil boring and collection of a soil sample from the 2 to 4-foot depth interval immediately adjacent to soil boring SP-3 for analysis for total lead, barium, chromium, mercury, and silver using USEPA SW-846 6000/7000 Series Methods; and
- The installation of two additional soil borings in the vicinity of soil boring SP-3 to a maximum depth of 6 feet bgs. Up to four samples will be submitted for laboratory analysis for lead, barium, chromium, mercury, and silver using USEPA SW-846 6000/7000 Series Methods.

Continuous soil samples will be collected while installing each of the three soil borings and each soil sample will be visually characterized and screened for total organic vapors with a PID.

BBL's March 2, 1999 letter to the NYSDEC also proposed additional soil investigation activities to further address arsenic detected in Phase II soil samples at concentrations exceeding the NYSDEC Soil Cleanup Objective. Specifically, BBL proposed the installation of two background soil borings at the 13 Broad Street facility and the collection of soil samples from these boring for arsenic analysis. As presented in BBL's March 2, 1999 letter, 11 out of the 15 Phase II Investigation soil samples collected contained arsenic concentrations in excess of the NYSDEC Soil Cleanup Objective for arsenic of 7.5 parts per million (ppm) or site background (as presented in the NYSDEC's TAGM #4046). The concentrations of arsenic detected in the 15 soil samples collected from both facilities ranged from 4.11 ppm to 16.5 ppm. The four soil samples which did not exceed the NYSDEC Soil Cleanup Objective for arsenic were collected from the three former floor drains located inside the warehouse at 17½ Broad Street. The soil samples which contained arsenic in excess of the Soil Cleanup Objective included six samples that were collected during the installation of the on-site monitoring wells at depth intervals ranging from 25-27 feet bgs and 35-37 feet bgs. These widespread detections of similar arsenic concentrations in the soil samples collected, including those samples collected from significant depths, clearly indicate that the detected concentrations are attributable to background arsenic concentrations. BBL maintains that further investigation activities to address the elevated arsenic concentrations are unwarranted and proposes not to implement the background soil sampling.

**17½ Broad Street**

Barium and lead were detected in Phase II Investigation ground-water samples collected from each of the 17½ Broad Street monitoring wells at concentrations exceeding the GWQS. The validated analytical results of the August 25, 1999 ground-water sampling activities indicate that barium was detected in the ground-water sample and duplicate ground-water sample collected from monitoring well MW-2 at concentrations of 69.6 ppb and 69.2 ppb. These detected concentrations are significantly less than the GWQS of 1,000 ppb. Lead was not detected in either of the ground-water samples collected from monitoring well MW-2 at concentrations above the laboratory quantitation limit. The decrease in ground-water barium and lead concentrations observed in this well between July 1998 and August 1999 is most likely a result of the NYSDEC-suggested decanting procedures used during the August 1999 sampling event. The results of the August 1999 sampling event indicate that the elevated barium and lead concentrations detected in the July 1998 ground-water samples were not representative of dissolved concentrations, but rather attributable to the amount of particulate matter present in the ground-water samples which were not decanted prior to laboratory analysis. For this reason, no further activities related to the presence of barium and lead in ground water at the 17½ Broad Street facility are necessary.

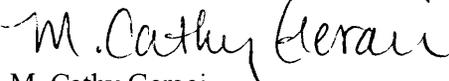
Based on the above conclusion, BBL believes that no further investigation activities are warranted for the 17½ Broad Street facility. Therefore, BBL proposes to close the floor drains at the facility in accordance with all applicable state and federal laws and regulations.

I will call you within the next week to follow-up on this letter and to discuss the recommendations proposed herein. Upon receiving approval from the NYSDEC, and consistent with your request, BBL will submit a Work Plan detailing the procedures to be followed to implement the additional ground-water and soil investigation activities proposed for the 13 and 17½ Broad Street facilities. Upon receipt of the NYSDEC's approval of that Work Plan, the approved field activities will be implemented and the schedule for implementation will be coordinated with the NYSDEC. Following completion of the activities and receipt of the analytical results, a letter will be prepared by BBL and submitted to the NYSDEC. That letter will present a description of the additional investigation activities and associated results. BBL's recommendations for further investigation activities (if any) based on the results of the additional investigation activities will also be presented in that letter.

If you have any questions or require any additional information, please do not hesitate to call me at (315) 446-2570, extension 290.

Sincerely,

BLASLAND, BOUCK & LEE, INC.



M. Cathy Geraci  
Associate

MAM/cmd  
Attachments

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cc: Mr. Edward F. Magenheimer, Progress Parkway Enterprises, Inc.  
Mr. David J. Ulm, Blasland, Bouck & Lee, Inc.

# ***Attachment 1***

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***August 25, 1999 Ground-Water Sampling Event  
- Validated Analytical Results***

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-1(13)

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-5

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082613

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

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

CAS NO.	COMPOUND	Q
75-71-8	Dichlorodifluoromethane	5
74-87-3	Chloromethane	5
75-01-4	Vinyl Chloride	5
74-83-9	Bromomethane	5
75-00-3	Chloroethane	5
75-69-4	Trichlorofluoromethane	5
75-35-4	1,1-Dichloroethene	5
67-64-1	Acetone	10
75-09-2	Methylene Chloride	5
75-34-3	1,1-Dichloroethane	5
78-93-3	2-Butanone	10
156-59-2	cis-1,2-Dichloroethene	5
156-60-5	trans-1,2-Dichloroethene	5
590-20-7	2,2-Dichloropropane	5
74-97-5	Bromochloromethane	5
67-66-3	Chloroform	5
71-55-6	1,1,1-Trichloroethane	5
56-23-5	Carbon Tetrachloride	5
563-58-6	1,1-Dichloropropene	5
71-43-2	Benzene	5
107-06-2	1,2-Dichloroethane	5
79-01-6	Trichloroethene	5
78-87-5	1,2-Dichloropropane	5
74-95-3	Dibromomethane	5
75-27-4	Bromodichloromethane	5
108-10-1	4-Methyl-2-pentanone	10
108-88-3	Toluene	5
79-00-5	1,1,2-Trichloroethane	5
127-18-4	Tetrachloroethene	5
142-28-9	1,3-Dichloropropane	5
591-78-6	2-Hexanone	10
124-48-1	Dibromochloromethane	5
106-93-4	1,2-Dibromoethane	5
108-90-7	Chlorobenzene	5

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-1(13)

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-5

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082613

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l                      Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
000-00-0	m,p-Xylene	5	U
100-42-5	Styrene	5	U
95-47-6	o-Xylene	5	U
98-82-8	Isopropylbenzene	5	U
103-65-1	n-Propylbenzene	5	U
98-06-6	tert-butylbenzene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
108-86-1	Bromobenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
106-43-4	4-Chlorotoluene	5	U
135-98-8	sec-butylbenzene	5	U
99-87-6	p-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

MW-1(13)

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-5

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082613

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

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

Number TICS found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	No Volatiles Found			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3 (13)

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-1

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082605

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l                      Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-71-8	Dichlorodifluoromethane	5	BWJ
74-87-3	Chloromethane	5	BWJ
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	BWJ
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	5	U
75-34-3	1,1-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
563-58-6	1,1-Dichloropropene	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
<b>79-01-6</b>	<b>Trichloroethene</b>	<b>3</b>	U J
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>3</b>	U J
142-28-9	1,3-Dichloropropane	5	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3 (13)

Lab Name: GALSON LABORATORIES

Contract: Blasland, B

Lab Code:

Case No.: 1

SAS No.:

SDG No.: L53777

Matrix: (soil/water) Water

Lab Sample ID: L53777-1

Sample wt/vol: 5 (g/mL) mL

Lab File ID: BC082605

Level: (low/med) LOW

Date Received: 08/25/99

%Moisture: not dec.

Date Analyzed: 08/26/99

GC Column: HP-624 ID: .2 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
000-00-0	m,p-Xylene	5	U
100-42-5	Styrene	5	U
95-47-6	o-Xylene	5	U
98-82-8	Isopropylbenzene	5	U
103-65-1	n-Propylbenzene	5	U
98-06-6	tert-butylbenzene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
108-86-1	Bromobenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
106-43-4	4-Chlorotoluene	5	U
135-98-8	sec-butylbenzene	5	U
99-87-6	p-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1E  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

MW-3 (13)

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-1

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082605

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

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

Number TICS found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	No Volatiles Found			
2.				
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3 (13) DUP

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-2

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082611

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l                      Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	10	U
<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>5</b>	U
75-34-3	1,1-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
563-58-6	1,1-Dichloropropene	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
<b>79-01-6</b>	<b>Trichloroethene</b>	<b>3</b>	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>3</b>	U
142-28-9	1,3-Dichloropropane	5	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW-3 (13) DUP

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-2

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082611

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
000-00-0	m,p-Xylene	5	U
100-42-5	Styrene	5	U
95-47-6	o-Xylene	5	U
98-82-8	Isopropylbenzene	5	U
103-65-1	n-Propylbenzene	5	U
98-06-6	tert-butylbenzene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
108-86-1	Bromobenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
106-43-4	4-Chlorotoluene	5	U
135-98-8	sec-butylbenzene	5	U
99-87-6	p-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

MW-3 (13) DUP

Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-2

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082611

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

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

Number TICS found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	No Volatiles Found			
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK
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Lab Name: GALSON LABORATORIES                      Contract: Blasland, B

Lab Code:                      Case No.: 1                      SAS No.:                      SDG No.: L53777

Matrix: (soil/water) Water                      Lab Sample ID: L53777-6

Sample wt/vol: 5                      (g/mL) mL                      Lab File ID: BC082612

Level: (low/med) LOW                      Date Received: 08/25/99

%Moisture: not dec.                      Date Analyzed: 08/26/99

GC Column: HP-624                      ID: .2 (mm)                      Dilution Factor: 1

Soil Extract Volume:                      (uL)                      Soil Aliquot Volume:                      (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l      Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
75-71-8	Dichlorodifluoromethane	5	NLS
74-87-3	Chloromethane	5	NLS
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	NLS
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	10	U
<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>6</b>	
75-34-3	1,1-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
563-58-6	1,1-Dichloropropene	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
142-28-9	1,3-Dichloropropane	5	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK
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Lab Name: GALSON LABORATORIES	Contract: Blasland, B	
Lab Code:	Case No.: 1	SAS No.:                      SDG No.: L53777
Matrix: (soil/water) Water		Lab Sample ID: L53777-6
Sample wt/vol: 5                      (g/mL) mL		Lab File ID: BC082612
Level: (low/med)      LOW		Date Received: 08/25/99
%Moisture: not dec.		Date Analyzed: 08/26/99
GC Column: HP-624                      ID: .2      (mm)		Dilution Factor: 1
Soil Extract Volume:                      (uL)		Soil Aliquot Volume:                      (uL)

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/l      Q

CAS NO.	COMPOUND	5	Q
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
000-00-0	m,p-Xylene	5	U
100-42-5	Styrene	5	U
95-47-6	o-Xylene	5	U
98-82-8	Isopropylbenzene	5	U
103-65-1	n-Propylbenzene	5	U
98-06-6	tert-butylbenzene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
108-86-1	Bromobenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
106-43-4	4-Chlorotoluene	5	U
135-98-8	sec-butylbenzene	5	U
99-87-6	p-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

1E  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

TRIP BLANK
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Lab Name: GALSON LABORATORIES

Contract: Blasland, B

Lab Code:

Case No.: 1

SAS No.:

SDG No.: L53777

Matrix: (soil/water) Water

Lab Sample ID: L53777-6

Sample wt/vol: 5 (g/mL) mL

Lab File ID: BC082612

Level: (low/med) LOW

Date Received: 08/25/99

%Moisture: not dec.

Date Analyzed: 08/26/99

GC Column: HP-624 ID: .2 (mm)

Dilution Factor: 1

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

Number TICS found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	No Volatiles Found			
2.				
3.				
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NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

MW-1

Lab Name: Galson Laboratories

Contract: BBL

Lab Code: 11626

Case No.:

SAS No.:

SDG No.: L53777

Matrix (soil/water): Water

Lab Sample ID: L53783-1

Level (low/med): LOW

Date Received: 08/26/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/l

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium	85.7	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: colorless

Clarity Before: clear

Texture:

Color After: colorless

Clarity After: clear

Artifacts:

Comments:

NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

MW-2

Lab Name: Galson Laboratories

Contract: BBL

Lab Code: 11626

Case No.:

SAS No.:

SDG No.: L53777

Matrix (soil/water): Water

Lab Sample ID: L53783-2

Level (low/med): LOW

Date Received: 08/26/99

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/l

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium	69.6	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: colorless

Clarity Before: clear

Texture:

Color After: colorless

Clarity After: clear

Artifacts:

Comments:

NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

MW-2DUP

Lab Name: Galson Laboratories

Contract: BBL

Lab Code: 11626

Case No.:

SAS No.:

SDG No.: L53777

Matrix (soil/water): Water

Lab Sample ID: L53783-3

Level (low/med): LOW

Date Received: 08/26/99

\* Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/l

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium	69.2	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
57-12-5	Cyanide				NR

Color Before: colorless

Clarity Before: clear

Texture:

Color After: colorless

Clarity After: clear

Artifacts:

Comments: