

Semi-Annual Status Report

July 2002 to December 2002

Air Sparge/SVE System – Operation & Maintenance

Norwich Former MGP Site Birdsall Road Norwich, Chenango County,, NY

Prepared by:

Shaw Environmental, Inc. 13 British American Boulevard Latham, NY 12110

Project #: 108196



13 British American Boulevard Latham, NY 12110-1405 518.783.1996 Fax 518.783.8397

May 13, 2003

Mr. Bert W. Finch New York State Electric & Gas Corporation Corporate Drive, Kirkwood Industrial Park P.O. Box 5224 Binghamton, New York 13902-5224

Subject:

Semi-Annual Status Report – July 2002 to December 2002

Air Sparge/SVE System - Operation & Maintenance

Norwich Former MGP Site

Birdsall Road, Norwich, Chenango County, New York

Shaw Project: 108196

Dear Mr. Finch:

This status report details the operational status of the Air Sparge/Soil Vapor Extraction treatment system at the Norwich former manufactured Gas Plant (MGP) Site. This semi-annual status report covers the period from July 1, 2002 to December 31, 2002.

Total run time for the air sparge and soil vapor extraction (SVE) system during the current reporting period was approximately 47.57%. The system was down upon arrival for the July Operation and Maintenance (O&M) visit. An alarm condition was listed due to a power outage. Shaw Environmental, Inc. (Shaw Environmental) personnel were not notified of the failure by the remote telemetry unit (RTU). The settings for the RTU were checked and found to be correct. The power outage caused 729 hours of downtime. The blower for the SVE system malfunctioned in September. A replacement blower was purchased, delivered to the site, and installed in November. The blower failure caused approximately 1,832 hours of down time. Total run time for the treatment system since start up is approximately 66.5%. The following sections present data associated with each component of the air sparge/SVE system from July 1, 2002 to December 31, 2002.

OPERATION AND MAINTENANCE

O&M visits were performed monthly during the reporting period. O&M visits were performed on July 23, August 14, September 25, November 12, and December 18, 2002. The SVE blower was shipped from the site on September 30, 2002. Further inspection of the blower by the repair contractors determined that a replacement was needed. The replacement blower arrived at the site, and was installed on November 7, 2002. Replacement belts were purchased and installed on November 12, 2002. The system was then restarted.

During each O&M visit, the system was monitored for airflow and volatile organic compounds (VOCs) utilizing a thermal anemometer and a photoionization detector (PID). Sparge Point Monitoring Points (SPMPs) and selected monitoring wells were monitored for depth to water and dissolved oxygen to track trends in groundwater. Vapor Point Monitoring Points (VPMPs) were checked for vacuum influence during each visit to verify the presence of a net negative pressure within the subsurface of the treatment zone. Individual system components were also monitored to ensure that all process systems were operating within design parameters.

In addition, routine maintenance was performed on treatment system equipment, including greasing of motors, bearings, and oil changes for the rotary lobe blowers. Building ventilation openings were checked regularly to maintain the required ventilation through the treatment building. The SVE heat exchanger was checked during each O&M visit to insure influent and effluent process air temperatures were within desired ranges.

SIGNIFICANT OPERATIONAL NOTES

Upon arrival at the Site for the July 2002 O&M visit, the system was found down with an alarm condition related to a power outage. The RTU did not notify Shaw Environmental personnel about the condition. The RTU settings were verified to ensure future operation. The SVE blower failed in September 2002. A replacement blower was purchased and installed at the site in November 2002. No other significant operational issues were encountered during this reporting period.

SOIL VAPOR EXTRACTION SYSTEM

The SVE system was initially activated on December 17, 1999. The three primary horizontal vapor extraction legs were active on a rotational basis until January 2002. A new leg of the SVE system was installed in December 2001. Based upon non-detect PID readings collected from the SVE blower effluent, the leg containing HVI-4, HVI-5, HVI-6, and HVI-11 (Leg 3) was idled initially. While PID readings were detected from the other two original system legs as well as from the new leg, no VOCs were detected during the system startup from Leg 3.

Mr. Bert Finch NYSEG, Corporate Drive, Binghamton, NY 13902-5224 Groundwater data indicated that this area contained the lowest remaining VOC and SVOC concentrations. Therefore, Leg 3 has remained idle since the activation of Leg 4. Motor operated valves (MOVs) connected to electronic timers control individual ball valves on each of the three active SVE legs. Each SVE leg is programmed to run for 8 hours per day.

Since the installation of SVE Leg 4, SVE Leg 3 has remained idle. During the next reporting period, SVE Leg 3 will be manually set to run for a period of approximately 1 hour. PID readings will be measured from the blower effluent. These concentrations will be compared to the concentrations observed from Legs 1 and 2. The system will then be set to rotate between Leg 4 and the two other legs indicating the highest effluent concentrations. Leg 4 will be run during the entire period due to its proximity to the residential properties.

The SVE system operated at an average flow of 1,483 standard cubic feet per minute (scfm) during the reporting period as measured at the SVE blower effluent. Calculations show a total of 1.73 pounds of Benzene, Toluene, Ethylbenzene and total Xylene (BTEX) were removed during the current reporting period and a cumulative total of 585.14 pounds of BTEX removed since start-up. A total of 759.05 pounds of total VOCs have been calculated to have been removed by the system since start up. System operating data and removal calculations are shown in **Table 1**. VOC recovery data is graphed and illustrated in **Figure 1**. Condensate was not found in the knock out drum from the SVE system during the reporting period.

SVE SYSTEM EFFLUENT

Vapor phase carbon units were installed in the treatment system to adsorb VOCs and maintain a system discharge within New York State Department of Environmental Conservation permitted levels. During early periods of system operation, these vapor phase units were effective in reducing VOC levels in the system final effluent. As system operation continued, a reduction in efficiency was observed. However, declining influent VOC levels allowed the system to continue operating while keeping within permitted discharge levels.

Vapor phase carbon was removed and replaced on December 21, 2001. This allowed the throughput of potential higher concentrations of VOCs as a result of operating the additional air sparge/SVE leg 4 which was recently installed.

Air samples were collected for laboratory analysis during the November and December 2002 site visits to track system removal efficiency, and to verify compliance with the air discharge permit. Analytical results of air samples collected during the current period, historical data, and permitted short term and annual guidance levels are presented in **Table 2**. All analytes in these samples show effluent concentrations below permitted levels. Annual discharges for the system continue to be within acceptable levels. System effluent concentrations will continue to

be tracked monthly with a PID and periodically utilizing laboratory analysis to monitor compliance with discharge limits. Laboratory analytical reports have been included as **Appendix A**.

AIR SPARGE SYSTEM

The air sparge system was initially activated on January 7, 2000. The sparge system is divided into three individual legs, each corresponding to one of the three individual SVE legs. An additional leg was added in December 2001. As discussed previously, Leg 3 was taken offline in order to allow for the operation of the new leg (Leg 4). Each sparge leg runs for 6 hours and idles for an hour prior to and after the respective SVE leg shuts down. There are a total of 26 active sparge points connected to the treatment system (including Leg 3). Each sparge point has operated at a flow rate of approximately 9.0 scfm during the period, with an average flow of approximately 57 scfm per active leg.

Dissolved oxygen levels were measured in monitoring wells during O&M visits beginning in February 2000. Based upon the data collected, effective distribution of sparge air is being achieved. Historical dissolved oxygen data available since February 2000 is tabulated and shown in **Table 3**. Air distribution trends and dissolved oxygen levels in monitoring points will continue to be monitored during future O&M visits to determine any needs for maintenance actions in order to maintain desired air flow rates to the treatment zone.

SYSTEM TREATMENT EFFICIENCY

Select monitoring wells as well as SPMPs have been sampled quarterly to track the progress of the treatment system. Monitoring wells were sampled during the current reporting period on September 25 and December 18, 2002. The groundwater samples were analyzed per USEPA Method 8021 for VOCs and USEPA Method 8270 for SVOCs (PAHs only). All available data has been tabulated and is presented in **Table 4**. A site layout map showing the site surface features, subsurface and above grade piping layout, and monitoring well locations has been included as **Appendix B**.

SPMP-1 and SPMP-2 are the primary monitoring points in the vicinity of the treatment area that would be affected by Legs 1, 2, and 3 (no longer active). Analytical results show a continued decreasing trend in total VOC and SVOC concentrations at these two monitoring points since May 2000. Additional monitoring wells were added to monitor the efficiency of the new leg of the system (Leg 4). Analytical data from these monitoring wells has not indicated a noticeable decrease in concentration of VOCs since leg 4 went on line. This is likely due to increased system downtime observed during this reporting period.

The next groundwater sampling event is scheduled to be performed in June 2003. Analytical results from this sampling event will be reported in the next semi-annual status report.

In correspondence received on June 17, 2002, the NYSDEC requested that Shaw Environmental evaluate the effect of water table elevation changes on mass removal efficiency. Graphs illustrating fluctuations in water table elevation as compared to mass removal estimates have been included in **Appendix C**. The data contained in the graphs prepared for Leg 1 and Leg 4 do not show a strong correlation between the water table elevation and the mass removal efficiency. Please note that the mass removal spike corresponding to November 12, 2002 in each graph coincided with the system restart after the installation of the replacement SVE blower, and may be due to VOCs present in the pore spaces around the SVE screening.

PROPOSED ACTIVITIES

Proposed activities for the next reporting period include:

- Monthly operation and maintenance visits to monitor system operation. System flow and vacuum rates will be adjusted to maximize treatment system efficiency.
- The groundwater quality in the vicinity of treatment system legs 1, 2 and 3 appears to be approaching asymptotic conditions. Field screening does not indicate substantial chemical removal from these legs. However, groundwater quality in the vicinity of leg 4 has not improved significantly during this reporting period. Additionally, field screening did not indicate substantial chemical removal from leg 4. As such, the air sparge and SVE system will be shut down in June 2003 and a third party evaluation of the system will be performed. Prior to the shutdown, a shutdown plan will be submitted to the NYSDEC. As part of the system shutdown, the system components will be prepared for the possibility of several months of idle time.
- The next groundwater sampling event will be conducted in June 2003. The quarterly sampling regime includes the following monitoring wells: GW91-5, GW91-6, GW92-11S, GW92-11D, GW92-08, SPMP-1S SPMP-2S, GW01-14, GW01-15S and GW01-15D. GW92-12 will also be sampled to track groundwater quality to the southeast of the site.

It is our continuing effort to provide NYSEG with the highest quality environmental services. Should you have any questions or comments concerning this status report, please do not hesitate to contact the undersigned at (518) 783-1996.

Sincerely,

Shaw Environmental, Inc.

Shaw Environmental, Inc.

Kurt Bedore, P.E. Staff Engineer

John Skaarup
Project Engineer
Project Manager

Shaw Environmental, Inc.

fler & Slasury for
Andrew Graham
Hydrogeologist



Attachments:

Table 1 BTEX	Recovery
--------------	----------

Table 2 Treatment System Efficiency

Table 3 Dissolved Oxygen Measured in Monitoring Points

Table 4 Monitoring Well Data

Figure 1 Soil Vapor Extraction System VOC Recovery

Appendix A Laboratory Analytical Results

Appendix B Site Map Appendix C Graphs

_	TABLES

Table 1 NYSEG Former MGP Site Norwich, New York Air Sparge/Soil Vapor Extraction System BTEX Recovery

Sampling	Run Time Since	SVE	SVE Blower	Average	Average	SVE Blower	VOC	VOC	VOCs	VOC's	Cumulative	Cumulative
Date	Last Visit	Operation	Effluent	SVE Blower		Effluent	Removal	Removal	Recovered	Recovered	lbs. of VOC'	lbs. of VOC's
	(hrs)	Since Last	Flow Velocity	Effluent	Effluent	Lab Result	Rate	Rate	Since Last	Since Last	Recovered	Recovered
	, ,	O&M Visit	(6" diam.)	Flow Rate	PID Reading	(BTEX only)	(BTEX only)	(total)	O&M Visit	O&M Visit		
	Available Actual	(%)	(fpm)	(cfm)	(ppmv)	(ppmv)	(lbs/hr)	(lbs/hr)	(lbs BTEX)	(total lbs.)	(lbs BTEX)	(total lbs.)
12/17/1999	070	0.00%	7017	1378	14.49		0.1007	0.3115	0.00	0.00	0.00	0.00
12/21/1999	96 / 90	93.75%	6933	1361	23.80		0.0952	0.4090	8.57	36.81	8.57	36.81
01/07/2000	119 / 101	84.87%	7000	1374			0.0906		9.15		17.72	67.56
01/11/2000	96 / 93	96.88%	7000	1374	5.00		0.0885		8.23	9.70	25.95	77.26
02/14/2000	816 / 800	98.04%	7000	1374	11.63		0.0743			142.65	85.36	219.91
02/21/2000	168 / 165	98.21%	7000 6967		11.63		0.0437	0.2494	7.21	41.15		261.07
03/03/2000	264 / 75 432 / 428	28.41% 99.07%	6967	1368 1368	10.00 10.00		0.0348 0.0196	0.2314 0.2134	2.61 8.37	17.35 91.33	95.17 103.55	278.42 369.75
04/14/2000	576 / 362	62.85%	6767	1329	1.73		0.0196	0.2134	4.97	44.67	103.55	414.41
05/03/2000	456 / 453	99.34%	7300	1433	2.97	0,1110	0.0137		5.73		114.24	437.35
06/15/2000	1032 / 300	29.07%	6933	1361	0.00		0.0120	0.0300	2.92	9.70	117.16	447.05
07/24/2000	936 / 934	99.79%	7233	1420	5.67	2,1000	0.2370			57.41	338.50	504.46
08/17/2000	576 / 16	2.78%			3.53		0.2257	0.1019		1.63		506.09
09/13/2000	648 / 161	24.85%			2.47		0.2036	0.0665			374.89	516.80
10/16/2000	792 / 406.2	51.29%	4500	884	2.00	507.7703	0.0456	0.0402	18.54	16.32	393.43	533.13
11/09/2000	576 / 2.8	0.49%	6750	1325	1.50		0.0548	0.0302	0.15	0.08		533.21
12/19/2000	960 / 786	81.88%	6500		1.00		0.0284	0.0254	22.32			553.15
01/17/2001	696 / 1.5	0.22%	6750		0.00		0.0232	0.0101	0.03			553.16
02/14/2001	672 / 457	68.01%	6750		0.00		0.0158	0.0000				553.16
03/27/2001	984 / 984	100.00%	6750		0.00		0.0147	0.0000	14.51	0.00		553.16
04/23/2001 05/21/2001	648 / 1.1 672 / 664	0.17%	7000 7083	1374	0.00	0.4400	0.0131	0.0000		0.00		553.16
06/15/2001	600 / 598	98.81% 99.67%	7083	1391 1388	0.00		0.0122 0.0110	0.0000		0.00 7.78		553.16 560.94
07/12/2001	648 / 647	99.85%			0.00		0.0056					569.30
08/07/2001	624 / 600	96.15%	7167	1407	0.00		0.0038	0.0000				569.30
09/28/2001	1248 / 1247	99.92%	6933		0.00		0.0003			0.00		569.30
10/01/2001	72 / 24	33.33%	5849		0.00		0.0003		0.01	0.00		569.30
11/20/2001	1200 / 292	24.33%	4763		0.00		0.0002	0.0000				569.30
12/28/2001	912 / 648	71.05%	4483	880	1.87		0.0002	0.0132				577.87
01/16/2002	456 / 444.3	97.43%	7600	1492	3.50	0.9010	0.1068	0.0497	47.46			599.93
02/20/2002	840 / 819.7	97.58%					0.0023			38.20		638.12
03/26/2002	816 / 816	100.00%		1486	3.10		0.0472	0.0419			544.59	672.30
04/16/2002	504 / 504	100.00%		1489	0.00		0.0006					690.42
05/13/2002	648 / 648	100.00%		1486	1.23	0.005	0.0006	0.0143	0.37	9.25		699.67
06/14/2002	768 / 691	89.97%			3.80		0.0550	0.0593				740.65
07/23/2002	933 / 204	21.86%			0.00		0.0003		0.07	9.12		749.77
08/14/2002	528 / 528	100.00%		1489	0.00		0.0003	0.0000	0.17	0.00		749.77
09/25/2002 11/12/2002	1408 / 728	51.70%		4/70		0.0400	0.0054	0.0050	0.00		583.50	749.77
12/18/2002	1152 / 0 864 / 864	0.00% 100.00%	7500 7583		0.93		0.0057	0.0053 0.0107	0.00 1.64	0.00 9.28		749.77 759.05
Averages	004 / 004	66.5%		1489			0.0019	0.0107		9.20		7 39.05
pverages		30.078	0310					0.07		13.40		

Notes:

VOC concentrations are estimated for dates with no laboratory analytical available (shaded cells).

Table 2 NYSEG Former MGP Site Norwich, New York Air Sparge/Soil Vapor Extraction System Treatment Efficiency

Date	Compound	SVE	Carbon 1	Carbon 2	Annual D	ischarge	Short Term	Discharge
		Influent	Effluent	Effluent	Allowable	Actual	Allowable	Actual
		(ppmv)	(ppmv)	(ppmv)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)
01/11/2000	Ronzene	0.1600	NS	0.0120	0.120	0.010	30	0.600
01/11/2000	Toluene	0.1000	NS	0.0120	1400	0.020	100,000	1.000
	Ethyl Benzene	0.1000	NS NS	0.0007	2000	0.000	45,000	0.000
	•	0.1200	NS NS	0.0007	300	0.000	100,000	0.200
05/03/2000	Xylenes	0.0200	0.0230	0.0030	0.120	0.010	30	0.700
03/03/2000	Toluene	0.0200	0.0230	0.0140	1400	0.040	100,000	2.700
		0.0120	0.0140	0.0410	2000	0.070	45,000	4.400
	Ethyl Benzene				300	0.070	100,000	6.900
07/24/2000	Xylenes	0.0700 NS	0.2400 NS	0.1040	0.120	0.110	30	4.600
0772472000					1400	0.060	100,000	3.700
	Toluene	NS NC	NS NC	0.0560	2000	0.450	45,000	29.200
	Ethyl Benzene	NS NS	NS	0.5100	300	1.460	100,000	95.100
4410010000	Xylenes	NS 0.4000	NS 0.0400	1.4400	0.120	0.000	30	0.200
11/09/2000		0.1900	0.0160	0.0037	1400	0.000	100,000	0.800
	Toluene	0.0550	0.0120	0.0140			· ·	
	Ethyl Benzene	0.0610	0.0054	0.0130	2000	0.010	45,000	0.800
	Xylenes	0.2160	0.0440	0.2040	300	0.200	100,000	13.300
02/14/2001		ND	NS	0.0020	0.120	0.000	30	0.100
	Toluene	0.0019	NS	0.0084	1400	0.010	100,000	0.500
	Ethyl Benzene	0.0007	NS	0.0068	2000	0.010	45,000	0.400
	Xylenes	0.0049	NS	0.1300	300	0.130	100,000	8.500
05/22/2001	Benzene	0.0023	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0012	NS	0.0010	1400	0.000	100,000	0.100
	Ethyl Benzene	0.0045	NS	0.0080	2000	0.010	45,000	0.500
	Xylenes	0.0230	NS	0.0880	300	0.090	100,000	6.000
08/07/2001	Benzene	ND	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0021	NS	0.0020	1400	0.000	100,000	0.100
	Ethyl Benzene	ND	NS	ND	2000		45,000	0.000
	Xylenes	0.0016	NS	0.0270	300	0.020	100,000	1.600
01/16/2002	Benzene	0.1200	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0320	NS	ND	1400	0.000	100,000	0.000
	Ethyl Benzene	0.5800	NS	0.0004	2000	0.000	45,000	0.000
	Xylenes	0.1690	NS	0.0012	300	0.000	100,000	0.100

Table 2 NYSEG Former MGP Site Norwich, New York Air Sparge/Soil Vapor Extraction System Treatment Efficiency

Date	Compound	SVE	Carbon 1	Carbon 2	Annual D	ischarge	Short Term	Discharge
		Influent	Effluent	Effluent	Allowable	Actual	Allowable	Actual
		(ppmv)	(ppmv)	(ppmv)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)
02/20/2002	Benzene	ND	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0041	NS	0.0043	1400	0.000	100,000	0.300
1	Ethyl Benzene	0.0045	NS	ND	2000	0.000	45,000	0.000
N .	Xylenes	0.0109	NS	0.0041	300	0.000	100,000	0.300
05/13/2002	Benzene	ND	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0049	NS	0.0034	1400	0.000	100,000	0.200
	Ethyl Benzene	ND	NS	ND	2000	0.000	45,000	0.000
	Xylenes	ND	NS	ND	300	0.000	100,000	0.000
11/13/2002	Benzene	0.0170	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0094	NS	0.0066	1400	0.010	100,000	0.400
	Ethyl Benzene	0.0160	NS	ND	2000	0.000	45,000	0.000
	Xylenes	0.0059	NS	ND	300	0.000	100,000	0.000
12/19/2002	Benzene	ND	NS	ND	0.120	0.000	30	0.000
	Toluene	0.0130	NS	0.0160	1400	0.010	100,000	0.800
	Ethyl Benzene	ND	NS	ND	2000	0.000	45,000	0.000
	Xylenes	ND	NS	ND	300	0.000	100,000	0.000

Air discharge allowances based on average discharge flow of 1344 scfm., Air Guide 1. Shaded cells indicate concentrations exceeding guidance values.

Table 3
Dissolved Oxygen Measured in Performance Monitoring Wells (mg/L)

Date	Status of Sparge System/Flowrate (avg scfm/point)	SPMP-1D	SPMP-1S	SPMP-2D	SPMP-2S	GGW01-14	GW91-06
2/14/00	Prior to Sparge Startup	0.70	NM	11.62	_ NM	NM	NM
2/14/00	On /7.35	1.53	NM	12.52	NM	NM	NM
3/21/00	On / 7.35	9.43	9.48	0.93	5.42	NM	NM
5/3/00	On / 7.00	9.08	7.60	2.27	4.60	NM	NM
6/15/00	On / 6.12	6.40	3.22	1.80	2.98	NM	NM
7/24/00	On / 7.76	1.90	6.09	NM	1.43	NM	NM
8/14/00	On / 8.0	9.01	9.16	9.10	8.63	NM	NM
9/11/00	On / 7.29	NM	NM	NM	NM	NM	NM
10/16/00	Off / 0.00	NM	NM	NM	NM	NM	NM
11/9/00	On / 7.8	7.52	NM	1.19	5.23	NM	NM
12/19/00	Off / 0.00	NM	NM	NM	NM	NM	NM
1/17/01	On / 9.42	5.27	5.86	7.26	9.61	NM	NM
2/14/01	On / 9.17	9.08	9.23	9.67	9.32	NM	NM
3/27/01	On / 9.6	NM	NM	NM	NM	NM	NM
4/23/01	On / 8.33	NM	NM	NM	NM	NM	NM
5/21/01	On / 8.56	9.94	9.89	0.66	1.45	NM	NM
6/15/01	On / 8.17	7.47	2.77	1.06	1.39	NM	NM
7/12/01	On / 7.65	2.63	2.91	1.23	1.74	NM	NM
8/7/01	On / 6.59	2.59	2.78	0.67	1.01	NM	NM
9/28/01	On / 14.12	8.33	5.50	1.22	0.93	NM	NM
10/16/01	Off / 0.0	NM	NM	NM_	NM	NM	NM
11/20/01	On / 10.29	4.52	Dry	0.45	1.27	NM	NM
12/28/01	On / 10.47	13.61	NM	3.70	5.62	NM	NM_
1/16/02	On / 11.70	3.16	NM	NM	NM	NM	NM
2/20/02	On / 11.6	5.63	1.84	1.2	2.7	0.79	1.05
3/26/02	On / 13.75	NM	NM	NM	NM	NM	NM
4/16/02	On / 13.2	NM_	NM	NM	NM	NM	NM_
5/13/02	On / 11	1.31	1.06	0.79	0.76	1.73	1.46

Table 3
Dissolved Oxygen Measured in Performance Monitoring Wells (mg/L)

Date	Status of Sparge System/Flowrate (avg scfm/point)	SPMP-1D	SPMP-1S	SPMP-2D	SPMP-2S	GGW01-14	GW91-06
6/14/02	On / 8.85	2.04	1.78	0.98	0.56	2.13	2.53
7/23/02	On/ 9.4	6.28	1.66	0.82	0.86	0.73	1.03
8/14/02	On/ 8.9	Dry	Dry	Dry	Dry	0.62	0.53
9/25/02	Off	5.8	6.08	1.42	1.42	NM	1.05
11/12/02	On/ 9.8	0.61	NM	0.73	0.67	0.97	1.32
12/18/02	On/ 7.8	0.61	NM	0.62	0.42	0.93	0.71

NM - Not Measured

Notes:

Air Sparge Leg 2 not operational on 11/9/00 and 1/17/01 due to MOV failure. System was down upon arrival during 1/17/01 site visit, but was restarted. System ran for approx. 1 hour before collecting data. System subsequently idled due to problems with heat exchanger motor.

		12/02			9/02	_		05/02	
Well ID	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.
GW91-4SH	NS	NS	NS	NS	NS	NS	NS	NS	NS
GW91-4D	NS	NS	NS	NS	NS	NS	NS	NS	NS
GW91-5	NS	NS	NS	29	92	18	ND	ND	ND
GW91-6	2,619	1,271	1,100	2,628	1,420	1,200	2,279	133	630
GW92-08	85	21	ND	307	144	11	197	17	17
GW-92-11D	4	ND	ND	31	ND	ND	5	ND	ND
GW92-11SH	32	NS	NS	14	ND	ND	41	ND	ND
SPMP-1S	454	2,148	ND	488	9,540	250	263	1,375	29
SPMP-2S	77	172	ND	296	734	45	234	253	23
GW92-12	ND	ND	ND	ND	ND	ND	NS	NS	NS
GW01-14	3,169	1,692	1,200	1,862	1,054	290	2,271	1,838	680
GW01-15S	545	455	250	2,691	1,770	1,300	1,500	435	270

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

NS** - Well dry

		02/02			11/01			8/01	
Well ID	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.
GW91-4SH	NS	NS	NS	NS	NS	NS	NS	NS	NS
GW91-4D	NS	NS	NS	NS	NS	NS	NS	NS	NS
GW91-5	ND	ND	ND	34	ND	ND	1	ND	ND
GW91-6	1,974	136	330	1107	381	900	1510	440	1400
GW92-08	1,475	130.2	61	504	181	12	129	166	16
GW-92-11D	506	26.6	71	8	ND	ND	5	ND	ND
GW92-11SH	7	ND	ND	NS*	NS*	NS*	ND	ND	ND
SPMP-1S	268	2,102	80	NS**	NS**	NS**	157	740	28
SPMP-2S	277	616.9	42	232	653	40	195	557	48
GW92-12	NS	NS	NS	ND	ND	ND	ND	ND	ND
GW01-14	2,000	1,066	480	NS	NS	NS	NS	NS	NS
GW01-15S	1,185	730.8	64	NS	NS	NS	NS	NS	NS

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

NS** - Well dry

		6/01			5/01	-	2/01			
Well ID	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.	
GW91-4SH	NS	NS	NS	5	ND	ND	11	ND	ND	
GW91-4D	NS	NS	NS	1	ND	6	ND	ND	ND	
GW91-5	3	ND	ND	NS	NS	NS	NS	NS	NS	
GW91-6	NS	NS	NS	2,545	3,518	1,800	1,300	2,400	3,100	
GW92-08	676	82	ND	NS	NS	NS	NS	NS	NS	
GW-92-11D	NS	NS	NS	78	61	12	0.5	ND	ND	
GW92-11SH	3	ND	ND	NS	NS	NS	NS	NS	NS	
SPMP-1S	NS	NS	NS	139	1,965	330	167	4,860	110	
SPMP-2S	NS	NS	NS	114	615	46	68	449	26	
GW92-12	ND	ND	ND	NS	NS	NS	NS	NS	NS	
GW01-14	NS	NS	NS	NS	NS	NS	NS	NS	NS	
GW01-15S	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

NS** - Well dry

		11/00			8/00	7/00		
Well ID	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.	SVOCs	Naphth.
GW91-4SH	30.9	40	6	16	ND	ND	NS	NS
GW91-4D	14	86	18	9	ND	14	NS	NS
GW91-5	NS	NS	NS	NS	NS		NS	NS
GW91-6	1,357	3,433	3,200	1,110	ND	3200	NS	NS
GW92-08	NS	NS	NS	88	175	ND	NS	NS
GW-92-11D	NS	NS	NS	3	ND	ND	NS	NS
GW92-11SH	NS	NS	NS	NS	NS	NS	NS	NS
SPMP-1S	NS	NS	NS	351	10,250	1,500	NS	NS
SPMP-2S	NS	NS	NS	103	1,061	92	**1,290	NS
GW92-12	NS	NS	NS	NS	NS	NS	NS	NS
GW01-14	NS	NS	NS	NS	NS	NS	NS	NS
GW01-15S	NS	NS	NS	NS	NS	NS	NS	NS

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

NS** - Well dry

** - Sample was collected to replace the one damaged from the 5/00 sampling event

		5/00			5/99			1998	
Well ID	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.	VOCs	SVOCs	Naphth.
GW91-4SH	3.0	324	ND	61.1	62.0	NS	37.6	134.3	8.0
GW91-4D	1.0	ND	22.0	29.9	Damaged @	NS	38.5	72.0	110
GW91-5	NS	NS	NS	81.5	33.0	NS	NS	NS	NS
GW91-6	2,170	ND	5,500	2,229	586	NS	2,432	210	3600
GW92-08	NS	NS	NS	943.9	NS	NS	898.5	NS	NS
GW-92-11D	182	ND	430	10.5	NS	NS	70.1	NS	NS
GW92-11SH	NS	NS	NS	3.5	NS	NS	3.0	NS	NS
SPMP-1S	*4,901	10,460	1,600	NS	NS	NS	NS	NS	NS
SPMP-2S	*300	Damaged @	150.0	NS	NS	NS	NS	NS	NS
GW92-12	NS	NS	NS	NS	NS	NS	NS	NS	NS
GW01-14	NS	NS	NS	NS	NS	NS	NS	NS	NS
GW01-15S	NS	NS	NS	NS	NS	NS	NS	NS	NS

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

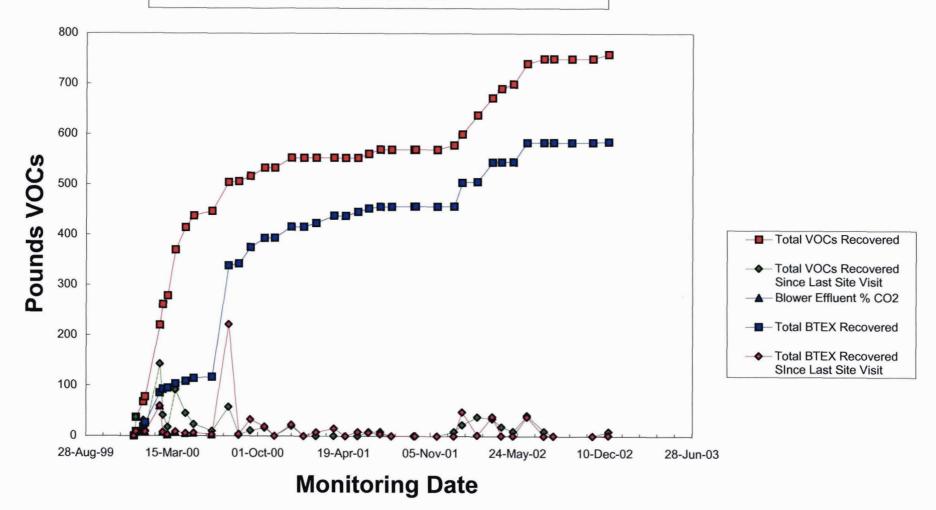
NS* - No recovery after well purging

NS** - Well dry

* - Samples were collected in June, 2000

Figure 1 - Soil Vapor Extraction System VOC Recovery

NYSEG Norwich



APPENDIX A LABORATORY ANALYTICAL RESULTS



H & C Poute Te	EIVED	
-	113	
- Sept.	. 10	
Code		-

\sim 1	:4.
U	ient:

SHAW E & I, INC.

Date of Report:

01/07/03

Address:

13 British American Boulevard

Date Received:

12/19/02

Latham, NY 12110

CAS Project No:

P2202509

Contact:

Mr. Drew Graham

Purchase Order:

108196

Client Project ID: NYSEG Norwich/108196

New York ELAP ID: 11221

Two (2) Tedlar Bag Samples labeled:

"Final Effluent Leg-3"

and "Blower Effluent Leg-3"

The samples were received at the laboratory under chain of custody on December 19, 2002. The samples were received intact. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time that they were received at the laboratory.

BTEX Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for benzene, toluene, ethylbenzene and total xylenes. The analyses were performed according to the methodology outlined in EPA Method TO-15. However, the method was modified to include the use of Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RTx-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Reviewed and Approved:

Reviewed and Approved:

Svetlana Walsh

Analytical Chemist

Air Quality Laboratory

GCMS-VOA Team Leader

Page 1 of 6

Laboratory

Air Quality Laboratory

Chris Parnell

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client:

Shaw Environmental Inc.

Client Sample ID: Final Effluent Leg-3

CAS Project ID: P2202509

Client Project ID: NYSEG Norwich/108196

CAS Sample ID: P2202509-001

Test Code:

Modified EPA TO-15

Instrument ID:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Sampling Media:

Tedlar Bag

Date Collected: 12/18/02

Date Received: 12/19/02

Date(s) Analyzed: 12/19/02

Volume(s) Analyzed:

0.20 Liter(s)

Test Notes:

D.F. = 1.00

	CAS#	Compound	Result µg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
Ī	71-43-2	Benzene	ND	5.0	ND	1.6	
Ϊ	108-88-3	Toluene	60	5.0	16	1.3	
4	100-41-4	Ethylbenzene	ND	5.0	ND	1.2	
ı	136777-61-2	m,p-Xylenes	ND	5.0	ND	1.2	
	95-47-6	o-Xylene	ND	5.0	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RG Date: 116103

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Shaw Environmental Inc.

Client Sample ID: Blower Effluent Leg-3 CAS Project ID: P2202509

Client Project ID: NYSEG Norwich/108196 CAS Sample ID: P2202509-002

Test Code:

Modified EPA TO-15

Instrument ID:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Sampling Media:

Tedlar Bag

Date Collected: 12/18/02

Date Received: 12/19/02

Date(s) Analyzed: 12/19/02

Volume(s) Analyzed:

0.20 Liter(s)

Test Notes:

D.F. = 1.00

	CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
╓	71-43-2	Benzene	ND	5.0	ND	1.6	
 	108-88-3	Toluene	48	5.0	13	1.3	
₩_	100-41-4	Ethylbenzene	ND	5.0	ND	1.2	
	136777-61-2	m,p-Xylenes	ND	5.0	ND	1.2	
	95-47-6	o-Xylene	ND	5.0	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RU Verified By:_

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Shaw Environmental Inc.

Client Sample ID: Method Blank CAS Project ID: P2202509
Client Project ID: NYSEG Norwich/108196 CAS Sample ID: P021219-MB

Test Code:

Modified EPA TO-15

Instrument ID:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Sampling Media:

Tedlar Bag

Date Received: NA

Date(s) Analyzed: 12/19/02

Date Collected: NA

Volume(s) Analyzed:

1.00 Liter(s)

Test Notes:

D.F. = 1.00

	CAS#	Compound	Result μg/m³	MRL μg/m³	Result ppbV	MRL ppbV	Data Qualifier
ı	71-43-2	Benzene	ND	1.0	ND	0.31	
Ţ	108-88-3	Toluene	ND	1.0	ND	0.27	
	100-41-4	Ethylbenzene	ND	1.0	ND	0.23	
	136777-61-2	m,p-Xylenes	ND	1.0	ND	0.23	
ſ	95-47-6	o-Xylene	ND	1.0	ND	0.23	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 1603

4

Columbia Analytical Services, Inc. Sample Acceptance Check Form

Client:	: Shaw Environmental Inc.		Work order:	P2202509			
Project:	NYSEG Norwich/108196	-	•			_	
Sa	mple(s) received on: 12/19/02 D	ate opened:	12/19/02	2 by	SM		
	rm is used for <u>all</u> samples received by PAI. The use of this form nonconformity. Thermal preservation and pH will only be eval				he method/S0	OP.	
1	Was and do not be suited for the Day				$\frac{\mathbf{Yes}}{\Box}$	<u>No</u> ⊠	<u>N/A</u>
1	Were custody seals on outside of cooler/Box?		G . 11 . 7 ! 10				×
	Location of seal(s)?	<u> </u>	Sealing Lid?				X
	Were signature and date included?						X
	Were seals intact?					□ ⊠	
	Were custody seals on outside of sample container?		0 - 1' - 7' 10				×
	Location of seal(s)?		Sealing Lid?				X
	Were signature and date included?						X
2	Were seals intact?	1 700					
2	Were sample containers marked with client samp	le ID?			\boxtimes		
3	Did sample containers arrive in good condition?	•			X		
4	Were chain-of-custody papers used and filled out				\square		
5	Did sample container labels and/or tags agree with		ers?		⊠ ⊠		
6	Was sample volume received adequate for analysi	18?			X		
7	Are samples within specified holding times?	0 1			\boxtimes		⊔ ⊠
8	Was proper temperature (thermal preservation) of		-				ഥ
	Cooler Temperature	NA	°C				
9	Blank Temperature	NA		ifo		X	
9	Is pH (acid) preservation necessary, according to			mijormation?			X
	Is there a client indication that the submitted samples a		eserveu:				X
	Were <u>VOA vials</u> checked for presence/absence of air		mII and if no consum	altan it?			X
	Does the client/method/SOP require that the analyst cl	neck the sample	pH and if necessary	alter it?			(A)
	gering rapid to	interni) (Hanib	
						() () () () () () () () () ()	
P2202509-00						NA	
P2202509-00	J2					NA NA	
·	_					_	
· -			-				
			_				-
							_
Explain a	ny discrepancies: (include lab sample ID nu	ımbers):					
		•					
							-

12/19/02 11:25 AM

Performance Analytical Inc.

Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

2665 Park Center Drive, Suite D Simi Valley, California 93065 Phone (805) 526-7161 Fax (805) 526-7270

Chain of Custody Record Analytical Services Request

Client / Address Show Environment at INC. 13 Brz: Tigh American Blob Lathan Nev. 12/10 Client Project Name / Location				Phone 5 Kg 7 U		Fax	cs ex		,	ANALYSI		PAI Project N		D9
13 13211 Sh America	12/12 (11/21			Client Project	3-1996 No.) (3 ·)	85-877	// 	.		-,	100		
Client Project Name / Location	<u> </u>			Chem Hojeet				/.						
Client Project Name / Location Nyse Warn, La	Noise	wich w	y .	10	8/56		/	′ 、/	/		/ /			
Contact	Sam	pler (Signature)		7	P. O. No.),		γ χ	/	′ /	' /			-
Drew Caphain		tion a	-//	<i>,</i>		<u>.</u>	/,0) . t/						
Client Sample ID	Date Collected	Time Collected	Lab Sample No.	Type of Sample	Container ID (Serial#)	Regulator ID (Serial#)	Le Rich		/		Expected Turnaround Ti		Kemarks	
FingleFilentleg-3 Blows Frigar Lig-3	12/18/00	0910		A.S		·	X				Worms/	LAS I	Co ATT	3;11
Blowes Frilow Les-3	12/19/02	09/5		AIR			φ				(Norma)	WYSE	6 ATZ	Tel
	•					ŧ						Juhn To	245000	Tini
				,							_	,	the special of	
``				,					•				_	
				_	-									
,														
•	_									_				
													14.4	
					· A.									
	_				, ,				4		-			
	•													
			-	,										
							/	79				_		
1	//		<u> </u>	\ <u> </u>	· ·			1			1		I	
Relinguished by: (Signature)	da .			Date / 2/18-/191	Time /low	Regeived by	: (Signature)	Ma	lon	e)		Date 12/19/02	Time ///5	_
Relinquished by : (Signature)				Date	Time		: (Signature)		· ·	1		Date	Time	
Relinquished by : (Signature)				Date	Time	Received by	: (Signature))				Date	Time	
○					<u> </u>									

The state of the s		
ما تعالى		
_		



Ų,		Special Specia Specia Specia Specia Special Special Special Special Special Sp		V	E	D	
	4	 in the	i	V		U	

Exper	lence	is the	solution
-------	-------	--------	----------

314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-08AN 3 1

٠٠٠		b
File	3	Corte:

LABORATORY REPORT

for

NYS Electric & Gas Kirkwood Industrial Park Corporate Drive, PO 5224 Binghamton, NY 13902

Attention: John Ruspantini

Purchase Order #: CONTRACT:98-154

Reissued Report 1/29/03

CC: Drew Grahm

ELAP ID#: 10709

Report date: 01/29/03

Number of samples analyzed: 11

AES Project ID: 020925AW

Invoice #: 247388

AIHA ID#: 100307

Page

1





314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

LABORATORY REPORT

for

NYS Electric & Gas Kirkwood Industrial Park Corporate Drive, PO 5224 Binghamton, NY 13902

Attention: John Ruspantini

Purchase Order #: CONTRACT:98-154

Reissued Report 1/29/03

CC: Drew Grahm

o. 220... 020.2..

Report date: 01/29/03

Number of samples analyzed: 11

AES Project ID:

020925AW

Invoice #: 247388

ELAP ID#: 10709 AIH

AIHA ID#: 100307

Page



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW91-5 AES sample #: 020925AW01

Date sample received: 09/25/02 Location: NYSEG Norwich

Samples taken by: BH/SH MATRIX: Water

grab

PARAMETER PERFORMED	<u>METHOD</u>	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	1	ug/l	SO-A	10/03/02
Ethylbenzene	EPA-8021	4	ug/l	SO-A	10/03/02
Toluene	EPA-8021	<1	ug/l	SO-A	10/03/02
o-Xylene	EPA-8021	9	ug/l	SO-A	10/03/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	10/03/02
Isopropyl Benzene	EPA-8021	3	ug/l	SO-A	10/03/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	10/03/02
p-Cymene	EPA-8021	<1	ug/l	SO-A	10/03/02
1,2,4-Trimethylbenzene	EPA-8021	6	ug/l	SO-A	10/03/02
1,3,5-TMB & Sec-BB Total	EPA-8021	5	ug/l	SO-A	10/03/02
n-Butylbenzene	EPA-8021	1	ug/l	SO-A	10/03/02
Naphthalene	EPA-8021	<5	ug/l	SO-A	10/03/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	10/03/02
t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/03/02
Naphthalene	EPA-8270	18	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	20	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW91-5

Dibenzofuran

<10

ug/l

MT-CE-29

Date sample received: 09/25/02 Location: NYSEG Norwich

AES sample #: 020925AW01	Samples taken by: MATRIX: Water	BH/SH	Loc	Location: NYSEG Norwich grab		
continued: PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF TEST	DATE	
Fluoranthene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Pyrene	EPA-8270	14	ug/l	MT-CE-29 10/0	02/02	
Chrysene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CE-29 10/0	02/02	
2-Methylnaphthalene	EPA-8270	40	ug/l	MT-CE-29 10/0	02/02	

EPA-8270

10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW91-6,

Date sample received: 09/25/02

AES sample #: 020925AW02

Samples taken by: BH/SH

Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Benzene	EPA-8021	73	ug/l	SO-A	10/02/02
Ethylbenzene	EPA-8021	440	ug/l	SO-A	10/02/02
Toluene	EPA-8021	<50	ug/l	SO-A	10/02/02
o-Xylene	EPA-8021	170	ug/l	SO-A	10/02/02
m,p-Xylene	EPA-8021	<50	ug/l	SO-A	10/02/02
Isopropyl Benzene	EPA-8021	<50	ug/l	SO-A	10/02/02
n-Propylbenzene	EPA-8021	<50	ug/l	SO-A	10/02/02
p-Cymene	EPA-8021	<50	ug/l	SO-A	10/02/02
1,2,4-Trimethylbenzene	EPA-8021	180	ug/l	SO-A	10/02/02
1,3,5-TMB & Sec-BB Total	EPA-8021	65	ug/l	SO-A	10/02/02
n-Butylbenzene	EPA-8021	<50	ug/l	SO-A	10/02/02
Naphthalene	EPA-8021	1700	ug/l	SO-A	10/02/02
Methyl-t-Butyl Ether	EPA-8021	<100	ug/l	SO-A	10/02/02
t-Butylbenzene	EPA-8021	<50	ug/l	SO-A	10/02/02
Naphthalene	EPA-8270	1200	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	160	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	60	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02

4



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled: Date sample received: 09/25/02

09/25/02

CLIENT'S SAMPLE ID: GW91-6

AES sample #: 020925AW02	Samples taken by: MATRIX: Water	BH/SH	Loc gra		Norwich
continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	<50	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	<50	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW01-14

Date sample received: 09/25/02

AES sample #: 020925AW03

Samples taken by: BH/SH

Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	160	ug/l	SO-A	10/02/02
Ethylbenzene	EPA-8021	580	ug/l	SO-A	10/02/02
Toluene	EPA-8021	<20	ug/l	SO-A	10/02/02
o-Xylene	EPA-8021	200	ug/l	SO-A	10/02/02
m,p-Xylene	EPA-8021	28	ug/l	SO-A	10/02/02
Isopropyl Benzene	EPA-8021	42	ug/l	SO-A	10/02/02
n-Propylbenzene	EPA-8021	<20	ug/l	SO-A	10/02/02
p-Cymene	EPA-8021	<20	ug/l	SO-A	10/02/02
1,2,4-Trimethylbenzene	EPA-8021	220	ug/l	SO-A	10/02/02
1,3,5-TMB & Sec-BB Total	EPA-8021	72	ug/l	SO-A	10/02/02
n-Butylbenzene	EPA-8021	<20	ug/l	SO-A	10/02/02
Naphthalene	EPA-8021	560	ug/l	SO-A	10/02/02
Methyl-t-Butyl Ether	EPA-8021	<40	ug/l	SO-A	10/02/02
t-Butylbenzene	EPA-8021	<20	ug/l	SO-A	10/02/02
Naphthalene	EPA-8270	290	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	28	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	240	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	76	ug/l	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	180	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	46	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: GW01-14

Date Sample received: 09/25/02

AES sample #: 020925AW03	Samples taken by: MATRIX: Water	BH/SH	Loc gra		Norwich
continued: PARAMETER PERFORMED	<u>METPHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	52	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	78	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<20	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	20	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	20	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	24	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW92-08

Date sample received: 09/25/02 Location: NYSEG Norwich

AES sample #: 020925AW04

Samples taken by: BH/SH MATRIX: Water

grab

				_		
	PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
l	Benzene	EPA-8021	58	ug/l	SO-A	10/03/02
1	Ethylbenzene	EPA-8021	160	ug/l	SO-A	10/03/02
	Toluene	EPA-8021	<2	ug/l	SO-A	10/03/02
i	o-Xylene	EPA-8021	32	ug/l	SO-A	10/03/02
	m,p-Xylene	EPA-8021	5	ug/l	SO-A	10/03/02
)	Isopropyl Benzene	EPA-8021	18	ug/l	SO-A	10/03/02
	n-Propylbenzene	EPA-8021	5	ug/l	SO-A	10/03/02
,	p-Cymene	EPA-8021	<2	ug/l	SO-A	10/03/02
ı	1,2,4-Trimethylbenzene	EPA-8021	<2	ug/l	SO-A	10/03/02
	1,3,5-TMB & Sec-BB Total	EPA-8021	10	ug/l	SO-A	10/03/02
ı	n-Butylbenzene	EPA-8021	4	ug/l	SO-A	10/03/02
1	Naphthalene	EPA-8021	15	ug/l	SO-A	10/03/02
	Methyl-t-Butyl Ether	EPA-8021	<4	ug/l	SO-A	10/03/02
ı	t-Butylbenzene	EPA-8021	<2	ug/l	SO-A	10/03/02
	Naphthalene	EPA-8270	11	ug/l	MT-CE-29	10/02/02
	Acenaphthylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Acenaphthene	EPA-8270	79	ug/l	MT-CE-29	10/02/02
	Fluorene	EPA-8270	23	ug/l	MT-CE-29	10/02/02
	Phenanthrene	EPA-8270	31	ug/l	MT-CE-29	10/02/02
	Anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Date Sampled: 09/25/02 CLIENT: NYS Electric & Gas CLIENT'S SAMPLE ID: GW92-08 Date sample received: 09/25/02 Location: NYSEG Norwich AES sample #: 020925AW04 Samples taken by: BH/SH

ALD Sample #: 020323AN04	MATRIX: Water		grab		
continued: <pre>PARAMETER PERFORMED</pre>	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	<10	u g /l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW92-12

Samples taken by: BH/SH

Date sample received: 09/25/02 Location: NYSEG Norwich

AES sample #: 020925AW05 Samples taken by MATRIX: Water

grab

	PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
	Benzene	EPA-8021	<0.5	ug/l	SO-A	10/02/02
-	Ethylbenzene	EPA-8021	< 1̈́	ug/l	SO-A	10/02/02
-	Toluene	EPA-8021	<1	ug/l	SO-A	10/02/02
	o-Xylene	EPA-8021	<1	ug/l	SO-A	10/02/02
	m,p-Xylene	EPA-8021	<1	ug/l	SO-A	10/02/02
	Isopropyl Benzene	EPA-8021	<1	ug/l	SO-A	10/02/02
فعن	n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
-	p-Cymene	EPA-8021	<1	ug/l	SO-A	10/02/02
	1,2,4-Trimethylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	10/02/02
	n-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	Naphthalene	EPA-8021	<5	ug/l	SO-A	10/02/02
	Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	10/02/02
-	t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	Naphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Acenaphthylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Acenaphthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Fluorene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Phenanthrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas		Date Sampled:	09/25/02
CLIENT'S SAMPLE ID: GW92-12		Date sample received:	09/25/02
AES sample #: 020925AW05	Samples taken by: BH/	SH Location: NY	SEG Norwich

	MATRIX: Water		gra	d	
continued: <pre>PARAMETER PERFORMED</pre>	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW92-11S AES sample #: 020925AW06

Samples taken by: BH/SH

Date sample received: 09/25/02 Location: NYSEG Norwich

MATRIX: Water grab

	PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
	Benzene	EPA-8021	7	ug/l	SO-A	10/02/02
	Ethylbenzene	EPA-8021	3	ug/l	SO-A	10/02/02
	Toluene	EPA-8021	<1	ug/l	SO-A	10/02/02
	o-Xylene	EPA-8021	3	ug/l	SO-A	10/02/02
	m,p-Xylene	EPA-8021	<1	ug/l	SO-A	10/02/02
	Isopropyl Benzene	EPA-8021	1	ug/1	SO-A	10/02/02
	n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	p-Cymene	EPA-8021	<1	ug/l	SO-A	10/02/02
	1,2,4-Trimethylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	10/02/02
	n-Eutylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	Naphthalene	EPA-8021	< 5	ug/l	SO-A	10/02/02
	Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	10/02/02
	t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
	Naphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Acenaphthylene	EPA-8270	<10	ug/1	MT-CE-29	10/02/02
	Acenaphthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
_	Fluorene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Phenanthrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas Date Sampled: 09/25/02 CLIENT'S SAMPLE ID: GW92-11S Date sample received: 09/25/02 Location: NYSEG Norwich

AES sample #: 020925AW06 Samples taken by: BH/SH MATRIX: Water grab

continued:			3		
PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02

Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	<10	ug/I	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02

CLIENT'S SAMPLE ID: GW01-15S

Date sample received: 09/25/02

AES sample #: 020925AW07

Samples taken by: BH/SH

Location: NYSEG Norwich

MATRIX:

Water

grab

			_		
PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	180	ug/l	SO-A	10/02/02
Ethylbenzene	EPA-8021	350	ug/l	SO-A	10/02/02
Toluene	EPA-8021	35	ug/l	SO-A	10/02/02
o-Xylene	EPA-8021	120	ug/l	SO-A	10/02/02
m,p-Xylene	EPA-8021	56	ug/l	SO-A	10/02/02
Isopropyl Benzene	EPA-8021	<25	ug/l	SO-A	10/02/02
n-Propylbenzene	EPA-8021	<25	ug/l	SO-A	10/02/02
p-Cymene	EPA-8021	<25	ug/l	SO-A	10/02/02
1,2,4-Trimethylbenzene	EPA-8021	90	ug/l	SO-A	10/02/02
1,3,5-TMB & Sec-BB Total	EPA-8021	60	ug/l	SO-A	10/02/02
n-Butylbenzene	EPA-8021	<25	ug/l	SO-A	10/02/02
Naphthalene	EPA-8021	1800	ug/l	SO-A	10/02/02
Methyl-t-Butyl Ether	EPA-8021	<50	ug/l	SO-A	10/02/02
t-Butylbenzene	EPA-8021	<25	ug/l	SO-A	10/02/02
Naphthalene	EPA-8270	1300	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	170	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	120	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: GW01-15S

Date Sampled: 09/25/02

Date sample received: 09/25/02

AES sample #: 020925AW07 Samples taken by: BH/SH Location: NYSEG Norwich

MATRIX: Water gra

	MATRIX: Water		gra	b	
continued: PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	<100	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	180	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	<100	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: SPMP-2S

Date Sample received: 09/25/02

AES sample #: 020925AW08 Samples taken by: BH/SH Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	<2.5	ug/l	SO-A	10/02/02
Ethylbenzene	EPA-8021	56	ug/l	SO-A	10/02/02
Toluene	EPA-8021	<5	ug/l	SO-A	10/02/02
o-Xylene	EPA-8021	44	ug/l	SO-A	10/02/02
m,p-Xylene	EPA-8021	<5	ug/l	SO-A	10/02/02
Isopropyl Benzene	EPA-8021	6	ug/l	SO-A	10/02/02
n-Propylbenzene	EPA-8021	<5	ug/l	SO-A	10/02/02
p-Cymene	EPA-8021	<5	ug/l	SO-A	10/02/02
1,2,4-Trimethylbenzene	EPA-8021	72	ug/l	SO-A	10/02/02
1,3,5-TMB & Sec-BB Total	EPA-8021	25	ug/l	SO-A	10/02/02
n-Butylbenzene	EPA-8021	7	ug/l	SO-A	10/02/02
Naphthalene	EPA-8021	86	ug/l	SO-A	10/02/02
Methyl-t-Butyl Ether	EPA-8021	<10	ug/l	SO-A	10/02/02
t-Butylbenzene	EPA-8021	<5	ug/l	SO-A	10/02/02
Naphthalene	EPA-8270	45	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	36	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	98	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	50	ug/1	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	140	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	39	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: SPMP-2S

AES sample #: 020925AW08

Date Sampled: 09/25/02

Date sample received: 09/25/02

Location: NYSEG Norwich

AES Sample #: 020925AW00	MATRIX: Water	Bn/ Sn	gra		NOIWICH
continued: <pre>PARAMETER PERFORMED</pre>	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-8270	47	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-8270	83	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-8270	20	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-8270	18	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-8270	28	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-8270	130	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02 Date sample received: 09/25/02

CLIENT'S SAMPLE ID: GW92-11D AES sample #: 020925AW09

Samples taken by: BH/SH

Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Benzene	EPA-8021	17	ug/1	SO-A	10/03/02
Ethylbenzene	EPA-8021	<1	ug/l	SO-A	10/03/02
Toluene	EPA-8021	<1	ug/l	SO-A	10/03/02
o-Xylene	EPA-8021	5	ug/l	SO-A	10/03/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	10/03/02
Isopropyl Benzene	EPA-8021	<1	ug/l	SO-A	10/03/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	10/03/02
p-Cymene	EPA-8021	<1	ug/l	SO-A	10/03/02
1,2,4-Trimethylbenzene	EPA-8021	1	ug/l	SO-A	10/03/02
1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	10/03/02
n-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/03/02
Naphthalene	EPA-8021	8	ug/l	SO-A	10/03/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	10/03/02
t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/03/02
Naphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas Date Sampled: 09/25/02 CLIENT'S SAMPLE ID: GW92-11D Date sample received: 09/25/02

ı	AES sample #: 020925AW09	Samples taken by: MATRIX: Water	BH/SH	Loc gra		Norwich
	continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
	Fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
,	Pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Chrysene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
,	Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
۱.	Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
ı	Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
	2-Methylnaphthalene	EPA-8270	<10	ug/l	MT-CE-29	10/02/02
ı	Dibenzofuran	EPA-8270	<10	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

09/25/02 Date sample received: 09/25/02

CLIENT'S SAMPLE ID: SPMP-1S AES sample #: 020925AW10

Samples taken by: BH/SH

Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	<5	ug/l	SO-A	10/03/02
Ethylbenzene	EPA-8021	<10	ug/l	SO-A	10/03/02
Toluene	EPA-8021	<10	ug/1	SO-A	10/03/02
o-Xylene	EPA-8021	16	ug/l	SO-A	10/03/02
m,p-Xylene	EPA-8021	<10	ug/l	SO-A	10/03/02
Isopropyl Benzene	EPA-8021	<10	ug/l	SO-A	10/03/02
n-Propylbenzene	EPA-8021	<10	ug/l	SO-A	10/03/02
p-Cymene	EPA-8021	10	ug/l	SO-A	10/03/02
1,2,4-Trimethylbenzene	EPA-8021	18	ug/l	SO-A	10/03/02
1,3,5-TMB & Sec-BB Total	EPA-8021	44	ug/l	SO-A	10/03/02
n-Butylbenzene	EPA-8021	150	ug/l	SO-A	10/03/02
Naphthalene	EPA-8021	250	ug/l	SO-A	10/03/02
Methyl-t-Butyl Ether	EPA-8021	<20	ug/l	SO-A	10/03/02
t-Butylbenzene	EPA-8021	<10	ug/l	SO-A	10/03/02
Naphthalene	EPA-8270	170	ug/l	MT-CE-29	10/02/02
Acenaphthylene	EPA-8270	160	ug/l	MT-CE-29	10/02/02
Acenaphthene	EPA-8270	1200	ug/l	MT-CE-29	10/02/02
Fluorene	EPA-8270	480	ug/l	MT-CE-29	10/02/02
Phenanthrene	EPA-8270	1300	ug/l	MT-CE-29	10/02/02
Anthracene	EPA-8270	520	ug/l	MT-CE-29	10/02/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: SPMP-1S

Date Sample received: 09/25/02

AES sample #: 020925AW10 Samples taken by: BH/SH Location: NYSEG Norwich

	MATRIX:	Water	•	grab		
continued: PARAMETER PERFORMED	METHO	<u>ac</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Fluoranthene	EPA-82	270	1300	ug/l	MT-CE-29	10/02/02
Pyrene	EPA-82	270	2100	ug/l	MT-CE-29	10/02/02
Chrysene	EPA-82	270	440	ug/l	MT-CE-29	10/02/02
Benzo(b)fluoranthene	EPA-82	270	260	ug/l	MT-CE-29	10/02/02
Benzo(k)fluoranthene	EPA-82	270	280	ug/l	MT-CE-29	10/02/02
Benzo(a)pyrene	EPA-82	270	440	ug/l	MT-CE-29	10/02/02
Indeno(1,2,3-cd)pyrene	EPA-82	270	200	ug/l	MT-CE-29	10/02/02
Dibenzo(a,h)anthracene	EPA-82	270	<100	ug/l	MT-CE-29	10/02/02
Benzo(g,h,i)perylene	EPA-82	270	160	ug/l	MT-CE-29	10/02/02
Benzo(a)anthracene	EPA-82	270	530	ug/l	MT-CE-29	10/02/02
2-Methylnaphthalene	EPA-82	270	<100	ug/l	MT-CE-29	10/02/02
Dibenzofuran	EPA-82	270	<100	ug/l	MT-CE-29	10/02/02





314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

07/09/02

CLIENT'S SAMPLE ID: Trip Blank Lot#055

MATRIX:

Date sample received: 09/25/02

AES sample #: 020925AW11

Samples taken by: BH/SH Water

Location: NYSEG Norwich

grab

			_		
PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTESK REF	TEST DATE
Benzene	EPA-8021	<0.5	ug/l	SO-A	10/02/02
Ethylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
Toluene	EPA-8021	<1	ug/l	SO-A	10/02/02
o-Xylene	EPA-8021	<1	ug/1	SO-A	10/02/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	10/02/02
Isopropyl Benzene	EPA-8021	<1	ug/l	SO-Ā	10/02/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
p-Cymene	EPA-8021	<1	ug/l	SO-A	10/02/02
1,2,4-Trimethylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	10/02/02
n-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02
Naphthalene	EPA-8021	<5	ug/l	SO-A	10/02/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	10/02/02
t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	10/02/02

APPROVED BY:

Report date: 01/29/03

Page

22

Stall Ha



RECEIVED Route To: Drew

Experience is the solution

314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-05618 05

File Code: 8A

LABORATORY REPORT

for

NYS Electric & Gas Kirkwood Industrial Park Corporate Drive, PO 5224 Binghamton, NY 13902

Attention: John Ruspantini

Purchase Order #: CONTRACT: 98-154

Reissued Report 1/29 Updated Report 2/4

CC: Drew Graham

Report date: 02/04/03

Number of samples analyzed:

AES Project ID: 021219 A

Invoice #: 250751

ELAP ID#: 10709 AIHA ID#: 100307

Page 1



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

CLIENT'S SAMPLE ID: GW91-6

Date sample received: 12/19/02

12/18/02

AES sample #: 021219 A01

Samples taken by: R.Hyde

Water

Location: NYSEG Norwich

MATRIX:

grab

	PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
)	Benzene	EPA-8021	64	ug/l	SO-A	12/20/02
)	Ethylbenzene	EPA-8021	330	ug/l	SO-A	12/20/02
	Toluene	EPA-8021	<50	ug/l	SO-A	12/20/02
j	o-Xylene	EPA-8021	150	ug/l	SO-A	12/20/02
	m,p-Xylene	EPA-8021	54	ug/l	SO-A	12/20/02
)	Isopropyl Benzene	EPA-8021	<50	ug/l	SO-A	12/20/02
1	n-Propylbenzene	EPA-8021	<50	ug/l	SO-A	12/20/02
	p-Cymene	EPA-8021	<50	ug/l	SO-A	12/20/02
)	1,2,4-Trimethylbenzene	EPA-8021	160	ug/l	SO-A	12/20/02
	1,3,5-TMB & Sec-BB Total	EPA-8021	61	ug/l	SO-A	12/20/02
)	n-Butylbenzene	EPA-8021	<50	ug/l	SO-A	12/20/02
)	Naphthalene	EPA-8021	1800	ug/l	SO-A	12/20/02
	Methyl-t-Butyl Ether	EPA-8021	<100	ug/l	SO-A	12/20/02
1	t-Butylbenzene	EPA-8021	<50	ug/l	SO-A	12/20/02
	Acenaphthene	EPA-8270	110	ug/l	MT-CF-23	12/27/02
l	Anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
ı	Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
ı	Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas Date S
CLIENT'S SAMPLE ID: GW91-6 Date s

Date Sampled: 12/18/02 Date sample received: 12/19/02

MATRIX: Water			R.Hyde Location: NYSEG Norwich grab				
continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	UNITS	NOTEBK REF	TEST DATE		
Chrysene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02		
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02		
Fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02		
Fluorene	EPA-8270	26	ug/l	MT-CF-23	12/27/02		
Phenanthrene	EPA-8270	35	ug/l	MT-CF-23	12/27/02		
Pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02		
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02		
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02		
Naphthalene	EPA-8270	1100	ug/l	MT-CF-23	12/27/02		



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

12/18/02

CLIENT'S SAMPLE ID: GW92-08

Date sample received: 12/19/02 Location: NYSEG Norwich

AES sample #: 021219 A02 Samples taken by: R.Hyde MATRIX: Water

grab

				3	•	
	PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
	Benzene	EPA-8021	10	ug/l	SO-A	12/20/02
	Ethylbenzene	EPA-8021	44	ug/l	SO-A	12/20/02
	Toluene	EPA-8021	<1	ug/l	SO-A	12/20/02
	o-Xylene	EPA-8021	12	ug/l	SO-A	12/20/02
	m,p-Xylene	EPA-8021	1	ug/l	SO-A	12/20/02
	Isopropyl Benzene	EPA-8021	4	ug/l	SO-A	12/20/02
	n-Propylbenzene	EPA-8021	<u>1</u>	ug/l	SO-A	12/20/02
	p-Cymene	EPA-8021	<1	ug/l	SO-A	12/20/02
	1,2,4-Trimethylbenzene	EPA-8021	2	ug/l	SO-A	12/20/02
	1,3,5-TMB & Sec-BB Total	EPA-8021	4	ug/l	SO-A	12/20/02
	n-Butylbenzene	EPA-8021	1	ug/l	SO-A	12/20/02
1	Naphthalene	EPA-8021	6	ug/l	SO-A	12/20/02
	Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	12/20/02
ļ	t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	Acenaphthene	EPA-8270	21	ug/l	MT-CF-23	12/27/02
•	Anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02

Albany, NY



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: GW92-08

Date Sample d: 12/18/02

Date sample received: 12/19/02

AFS sample #: 021219 A02

Samples taken by: P Hyde

AES sample #: 021219 A02	Samples taken by: MATRIX: Water	R.Hyde Location: NYSEG Norwich grab				
continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE	
Chrysene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Fluorene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Phenanthrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	
Naphthalene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02	



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas Date Sampled: CLIENT'S SAMPLE ID: GW92-11S Date sample received: 12/19/02

AES sample #: 021219 A03 Samples taken by: R.Hyde Location: NYSEG Norwich

MATRIX: Water grab

			-		
PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	12	ug/l	SO-A	12/23/02
Ethylbenzene	EPA-8021	10	ug/l	SO-A	12/23/02
Toluene	EPA-8021	<1	ug/l	SO-A	12/23/02
o-Xylene	EPA-8021	7	ug/l	SO-A	12/23/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	12/23/02
Isopropyl Benzene	EPA-8021	3	ug/l	SO-A	12/23/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
p-Cymene	EPA-8021	<1	ug/l	SO-A	12/23/02
1,2,4-Trimethylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	12/23/02
n-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
Naphthalene	EPA-8021	<5	ug/l	SO-A	12/23/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	12/23/02
t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02

12/18/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

AES sample #: 021219 A04

Date Sampled:

12/18/02

CLIENT'S SAMPLE ID: GW92-11D

Samples taken by: R.Hyde

Date sample received: 12/19/02 Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	4	ug/l	SO-A	12/23/02
Ethylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
Toluene	EPA-8021	<1	ug/l	SO-A	12/23/02
o-Xylene	EPA-8021	<1	ug/l	SO-A	12/23/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	12/23/02
Isopropyl Benzene	EPA-8021	<1	ug/l	SO-A	12/23/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
p-Cymene	EPA-8021	<1	ug/l	SO-A	12/23/02
1,2,4-Trimethylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	12/23/02
n-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
Naphthalene	EPA-8021	<5	ug/l	SO-A	12/23/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	12/23/02
t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
Acenaphthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas Date Sampled: 12/18/02 CLIENT'S SAMPLE ID: GW92-11D Date sample received: 12/19/02

AES sample #: 021219 A04 Samples taken by: R.Hyde Location: NYSEG Norwich

AES sample #: 021219 A04	MATRIX: Water	н.нусе	Loc gra		Norwich
continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	UNITS	NOTEBK REF	TEST DATE
Chrysene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Fluorene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Phenanthrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
<pre>Indeno(1,2,3-cd)pyrene</pre>	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Naphthalene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Water

CLIENT: NYS Electric & Gas

Date Sampled:

12/18/02

CLIENT'S SAMPLE ID: GW92-12

AES sample #: 021219 A05 Samples taken by: R.Hyde

MATRIX:

Date sample received: 12/19/02 Location: NYSEG Norwich

grab

	PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
	Benzene	EPA-8021	<0.5	ug/l	SO-A	12/20/02
•	Ethylbenzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	Toluene	EPA-8021	<1	ug/l	SO-A	12/20/02
-	c-Xylene	EPA-8021	<1	ug/l	SO-A	12/20/02
	m,p-Xylene	EPA-8021	<1	ug/l	SO-A	12/20/02
	Isopropyl Benzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	p-Cymene	EPA-8021	<1	ug/l	SO-A	12/20/02
•	1,2,4-Trimethylbenzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	1,3,5-TMB & Sec-BB Total	EPA-8021	<1	ug/l	SO-A	12/20/02
•	n-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	Naphthalene	EPA-8021	<5	ug/l	SO-A	12/20/02
_	Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	12/20/02
***	t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/20/02
	Acenaphthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
•	Anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
	Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: GW92-12

Date Sample received: 12/19/02

AES sample #: 021219 A05	Samples taken by: MATRIX: Water	R.Hyde Location: NYSEG Norwich grab			
continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	UNITS	NOTEBK REF	TEST DATE
Chrysene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Fluorene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Phenanthrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Naphthalene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

12/18/02

CLIENT'S SAMPLE ID: GW01-14

AES sample #: 021219 A06

Samples taken by: R.Hyde

Date sample received: 12/19/02

Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Benzene	EPA-8021	200	ug/1	SO-A	12/23/02
Ethylbenzene	EPA-8021	750	ug/l	SO-A	12/23/02
Toluene	EPA-8021	57	ug/l	SO-A	12/23/02
o-Xylene	EPA-8021	250	ug/l	SO-A	12/23/02
m,p-Xylene	EPA-8021	82	ug/l	SO-A	12/23/02
Isopropyl Benzene	EPA-8021	50	ug/l	SO-A	12/23/02
n-Propylbenzene	EPA-8021	<20	ug/1	SO-A	12/23/02
p-Cymene	EPA-8021	<20	ug/l	SO-A	12/23/02
1,2,4-Trimethylbenzene	EPA-8021	240	ug/l	SO-A	12/23/02
1,3,5-TMB & Sec-BB Total	EPA-8021	110	ug/l	SO-A	12/23/02
n-Butylbenzene	EPA-8021	26	ug/1	SO-A	12/23/02
Naphthalene	EPA-8021	1400	ug/l	SO-A	12/23/02
Methyl-t-Butyl Ether	EPA-8021	<40	ug/I	SO-A	12/23/02
t-Butylbenzene	EPA-8021	<20	ug/l	SO-A	12/23/02
Acenaphthene	EPA-8270	220	ug/l	MT-CF-23	12/27/02
Anthracene	EPA-8270	28	ug/l	MT-CF-23	12/27/02
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT:	NYS Electric & Gas	Date	Sampled:	12/18/02
CLIENT'S	SAMPLE ID: GW01-14	Date	sample received:	12/19/02

AES sample #: 021219 A06	Samples taken by: MATRIX: Water	R.Hyde Location: NYSEG Norwich grab			
continued: PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Chrysene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/1	MT-CF-23	12/27/02
Fluoranthene	EPA-8270	26	ug/l	MT-CF-23	12/27/02
Fluorene	EPA-8270	61	ug/1	MT-CF-23	12/27/02
Phenanthrene	EPA-8270	130	ug/l	MT-CF-23	12/27/02
Pyrene	EPA-8270	27	ug/1	MT-CF-23	12/27/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Naphthalene	EPA-8270	1200	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Date Sampled: CLIENT: NYS Electric & Gas CLIENT'S SAMPLE ID: SPMP-2S Date sample received: 12/19/02

Samples taken by: R.Hyde Location: NYSEG Norwich AES sample #: 021219 A07

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEEK REF	TEST DATE
Benzene	EPA-8021	<0.5	ug/l	SO-A	12/23/02
Ethylbenzene	EPA-8021	3	ug/l	SO-A	12/23/02
Toluene	EPA-8021	<1	ug/l	SO-A	12/23/02
o-Xylene	EPA-8021	17	ug/l	SO-A	12/23/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	12/23/02
Isopropyl Benzene	EPA-8021	<1	ug/l	SO-A	12/23/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
p-Cymene	EPA-8021	<1	ug/l	SO-A	12/23/02
1,2,4-Trimethylbenzene	EPA-8021	29	ug/l	SO-A	12/23/02
1,3,5-TMB & Sec-BB Total	EPA-8021	11	ug/l	SO-A	12/23/02
n-Butylbenzene	EPA-8021	4	ug/l	SO-A	12/23/02
Naphthalene	EPA-8021	13	ug/l	SO- A	12/23/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	12/23/02
t-Butylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
Acenaphthene	EPA-8270	52	ug/l	MT-CF-23	12/27/02
Anthracene	EPA-8270	14	ug/l	MT-CF-23	12/27/02
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/1	MT-CF-23	12/27/02

12/18/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas CLIENT'S SAMPLE ID: SPMP-2S AES sample #: 021219 A07	Samples taken by: MATRIX: Water	Da	ite sample	d: 12 received: 12 ation: NYSEC b	/19/02
continued: PARAMETER PERFORMED	METHOD	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DAT
Chrysene	EPA-8270	<10	ug/1	MT-CF-23	12/27/0

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBR REF	TEST DATE
Chrysene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Fluoranthene	EPA-8270	12	ug/l	MT-CF-23	12/27/02
Fluorene	EPA-8270	24	ug/l	MT-CF-23	12/27/02
Phenanthrene	EPA-8270	40	ug/l	MT-CF-23	12/27/02
Pyrene	EPA-8270	16	ug/l	MT-CF-23	12/27/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Naphthalene	EPA-8270	14	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

12/18/02 Date sample received: 12/19/02

CLIENT'S SAMPLE ID: SPMP-1S AES sample #: 021219 A08

Samples taken by: R.Hyde

Location: NYSEG Norwich

MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	<5	ug/l	SO-A	12/23/02
Ethylbenzene	EPA-8021	<10	ug/l	SO-A	12/23/02
Toluene	EPA-8021	<10	ug/l	SO-A	12/23/02
o-Xylene	EPA-8021	13	ug/l	SO-A	12/23/02
m,p-Xylene	EPA-8021	<10	ug/l	SO-A	12/23/02
Isopropyl Benzene	EPA-8021	<10	ug/l	SO-A	12/23/02
n-Propylbenzene	EPA-8021	<10	ug/l	SO-A	12/23/02
p-Cymene	EPA-8021	11	ug/l	SO-A	12/23/02
1,2,4-Trimethylbenzene	EPA-8021	18	ug/l	SO-A	12/23/02
1,3,5-TMB & Sec-BB Total	EPA-8021	40	ug/l	SO-A	12/23/02
n-Butylbenzene	EPA-8021	140	ug/l	SO-A	12/23/02
Naphthalene	EPA-8021	220	ug/l	SO-A	12/23/02
Methyl-t-Butyl Ether	EPA-8021	<20	ug/l	SO-A	12/23/02
t-Butylbenzene	EPA-8021	12	ug/l	SO-A	12/23/02
Acenaphthene	EPA-8270	310	ug/l	MT-CF-23	12/27/02
Anthracene	EPA-8270	120	ug/l	MT-CF-23	12/27/02
Benzo(a)anthracene	EPA-8270	140	ug/l	MT-CF-23	12/27/02
Benzo(a)pyrene	EPA-8270	120	ug/l	MT-CF-23	12/27/02
Benzo(b)fluoranthene	EPA-8270	49	ug/l	MT-CF-23	12/27/02
Benzo(k)fluoranthene	EPA-8270	73	ug/l	MT-CF-23	12/27/02

15



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

CLIENT'S SAMPLE ID: SPMP-1S

Date Sample received: 12/19/02

AES sample #: 021219 A08 Samples taken by: R.Hyde Location: NYSEG Norwich

AES sample #: 021219 A08	Samples taken by: MATRIX: Water	R.Hyde	Loc gra		Norwich
continued: PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chrysene	EPA-8270	120	ug/l	MT-CF-23	12/27/02
Dibenzo(a,h)anthracene	EPA-8270	<22	ug/1	MT-CF-23	12/27/02
Fluoranthene	EPA-8270	310	ug/l	MT-CF-23	12/27/02
Fluorene	EPA-8270	140	ug/l	MT-CF-23	12/27/02
Phenanthrene	EPA-8270	260	ug/l	MT-CF-23	12/27/02
Pyrene	EPA-8270	410	ug/l	MT-CF-23	12/27/02
Benzo(g,h,i)perylene	EPA-8270	49	ug/l	MT-CF-23	12/27/02
Indeno(1,2,3-cd)pyrene	EPA-8270	47	ug/l	MT-CF-23	12/27/02
Naphthalene	EPA-8270	<22	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas

Date Sampled:

12/18/02 Date sample received: 12/19/02

CLIENT'S SAMPLE ID: GW01-15S AES sample #: 021219 A09

Samples taken by: R.Hyde

Location: NYSEG Norwich

MATRIX:	Water	grab
---------	-------	------

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8021	20	ug/l	SO-A	12/23/02
Ethylbenzene	EPA-8021	45	ug/l	SO-A	12/23/02
Toluene	EPA-8021	<1	ug/l	SO-A	12/23/02
o-Xylene	EPA-8021	28	ug/l	SO-A	12/23/02
m,p-Xylene	EPA-8021	<1	ug/l	SO-A	12/23/02
Isopropyl Benzene	EPA-8021	<1	ug/l	SO-A	12/23/02
n-Propylbenzene	EPA-8021	<1	ug/l	SO-A	12/23/02
p-Cymene	EPA-8021	13	ug/l	SO-A	12/23/02
1,2,4-Trimethylbenzene	EPA-8021	29	ug/l	SO-A	12/23/02
1,3,5-TMB & Sec-BB Total	EPA-8021	37	ug/l	SO-A	12/23/02
n-Butylbenzene	EPA-8021	21	ug/l	SO-A	12/23/02
Naphthalene	EPA-8021	340	ug/l	SO-A	12/23/02
Methyl-t-Butyl Ether	EPA-8021	<2	ug/l	SO-A	12/23/02
t-Butylbenzene	EPA-8021	12	ug/l	SO-A	12/23/02
Acenaphthene	EPA-8270	91	ug/l	MT-CF-23	12/27/02
Anthracene	EPA-8270	14	ug/l	MT-CF-23	12/27/02
Benzo(a) anthracene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

CLIENT: NYS Electric & Gas Date
CLIENT'S SAMPLE ID: GW01-15S Date

Date Sampled: 12/18/02 Date sample received: 12/19/02

Samples taken by: R.Hyde Location: NYSEG Norwich MATRIX: Water grab

continued:

AES sample #: 021219 A09

continued: PARAMETER PERFORMED	<u>METHOD</u>	RESULT	<u>UNITS</u>	NOTEBK REF	TEST DATE
Chrysene	EPA-8270	<10	ug/1	MT-CF-23	12/27/02
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/I	MT-CF-23	12/27/02
Fluoranthene	EPA-8270	10	ug/l	MT-CF-23	12/27/02
Fluorene	EPA-8270	32	ug/l	MT-CF-23	12/27/02
Phenanthrene	EPA-8270	46	ug/l	MT-CF-23	12/27/02
Pyrene	EPA-8270	12	ug/l	MT-CF-23	12/27/02
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CF-23	12/27/02
Naphthalene	EPA-8270	250	ug/l	MT-CF-23	12/27/02

APPROVED BY:

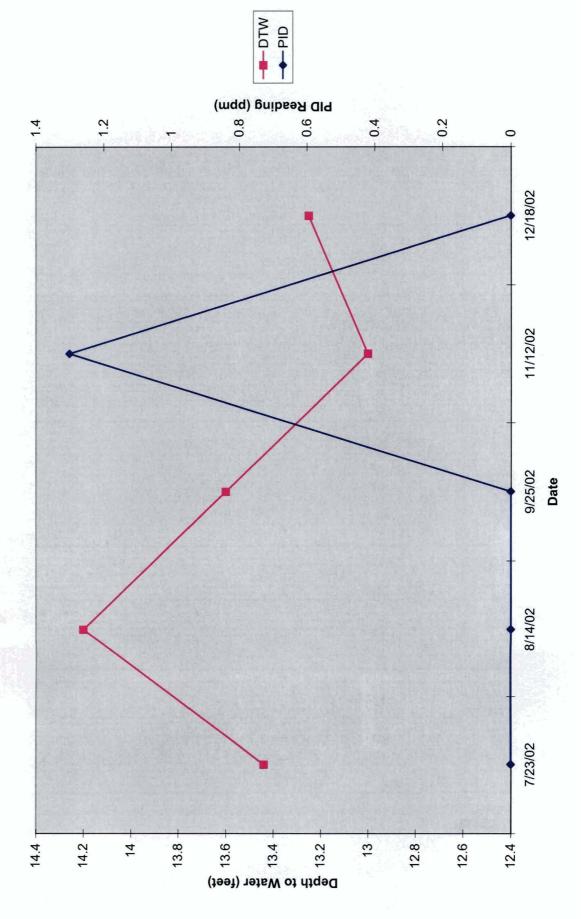
Report date: 02/04/03

-	
	APPENDIX B SITE MAP
-	
-	
-	
-	



APPENDIX C
GRAPHS

Depth to Water (SPMP-1S) Versus Blower Effluent PID Readings (Leg 1)



WTG -PID Reading (ppm) 1.4 0.4 0.2 0 Depth to Water (GW91-6) Versus Blower Effluent PID Readings (Leg 4) 12/18/02 11/12/02 9/25/02 Date 8/14/02 7/23/02 Depth to Water (ft) 8.1 8.2 8 7.9 9.7 7.5 7.4 7.3