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Semi-Annual Status Report – January 2003 to June 2003 Air Sparge/SVE System - Operation & Maintenance Norwich Former MGP Site

Birdsall Road, Norwich, Chenango County, New York

July 29, 2003

Shaw Project: 108196



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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 - January 2003 to June 2003

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 January 1, 2003 to June 9, 2003.

Total run time for the air sparge and soil vapor extraction (SVE) system during the current reporting period was approximately 74.7%. The system was down upon arrival for the April Operation and Maintenance (O&M) visit. Several alarm conditions were listed due to power outages in mid to late March and other power outage alarms were received periodically during the reporting period. The power outages were related to grid issues according to NYSEG field personnel. The power outages caused approximately 678 hours of downtime. The air sparge and SVE system was restarted on March 25, 2003 and during the April O&M visit, and was operational for the remainder of the reporting period. The air sparge/SVE system was shut down at the conclusion of the June 9, 2003 visit pending a third party evaluation of the system.

The following sections present data associated with each component of the air sparge/SVE system from January 1, 2003 to June 9, 2003.

O&M visits were performed monthly during the reporting period. O&M visits were performed on January 31, February 20, March 17, April 14, May 20 and June 9, 2003.

OPERATION AND MAINTENANCE

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

As previously mentioned, several alarm conditions were listed due to power outages in mid to late March. Other power outage alarms were received periodically during the reporting period. The power outages were related to grid issues according to NYSEG field personnel. 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 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. Groundwater data indicated that this area contained the lowest remaining VOC and SVOC concentrations. Therefore, until this reporting period, Leg 3 had remained idle since the activation of Leg 4. Motor operated valves (MOVs) connected to electronic timers control individual ball valves on each of the active SVE legs. Each SVE leg is programmed to run for 8 hours per day.

The system was alternated between the operation of Legs 1, 2, and 3 during this reporting period, with the exception of Leg 4, which was operated during the entire period due to its proximity to the residential properties.

Mr. Bert Finch NYSEG, Corporate Drive, Binghamton, NY 13902-5224 The SVE system operated at an average flow of 1,456 standard cubic feet per minute (scfm) during the reporting period as measured at the SVE blower effluent. Calculations show a total of 0.9 pounds of Benzene, Toluene, Ethylbenzene and total Xylene (BTEX) were removed during the current reporting period and a cumulative total of 586.04 pounds of BTEX removed since start-up. A total of 760.87 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 June 2003 site visit 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. 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, operation of Legs 1, 2 and 3 were rotated 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. Each sparge

point has operated at a flow rate of approximately 9.3 scfm during the reporting period, with an average flow of approximately 60 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**.

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 June 9, 2003. 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. Analytical results in well SPMP-2 have shown fluctuating total VOC and SVOC concentrations since May 2001, while total VOC and SVOC concentrations observed in well SPMP-1 during recent sample events are similar to those observed in May 2001. Additional monitoring wells were added to monitor the efficiency of the new leg of the system (Leg 4). Analytical data from monitoring well GW01-14 has not indicated a noticeable decrease in concentration of VOCs since Leg 4 went on line. However, analytical data from monitoring well GW91-6 indicated a substantial decrease in VOC and SVOC concentrations.

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 are inconclusive due to non-detect blower effluent PID readings observed during this reporting period.

PROPOSED ACTIVITIES

No operation and maintenance activities, with the exception of waste removal from the site, are proposed as the air sparge/SVE system is currently idle. The air sparge/SVE system will remain idle pending the receipt of the third party evaluation of the system. The removal of

carbon, purge water and debris waste streams for disposal at a permitted facility is planned for August 2003.

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.

John Skaarup

Project Engineer/Project Manager

Shaw Environmental, Inc.

Kurt Bedore, P.E.

Senior Engineer/Project Manager



Attachments:

| Table 1 Table 2 Table 3 Table 4 | BTEX Recovery Treatment Efficiency Dissolved Oxygen Measured in Performance Monitoring Wells Monitoring Well Data |
|--|---|
| Figure 1 | Soil Vapor Extraction System VOC Recovery |
| Appendix A Appendix B Appendix C | Laboratory Analytical Results Site Map Graphs |

| _ | TABLES |
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|--------------------------|-------------------------------|------------------|---------------|--------------|----------------|--------------|------------------|------------------|--------------|----------------|------------------|------------------|
| | | | | N | | er MGP Site | | | | | | |
| | | | | - | Norwich, I | | | | | | | |
| | | | | Air Spare | • | r Extraction | System | | | | | |
| | | | | All Sparg | BTEX Re | | System | | | | | |
| 0 | Dura Tirana Olarana | 0)/5 | OVE DISSESSE | A | | | 1,00 | 1,00 | 1/00- | 1/001- | 10 | 0 |
| Sampling | Run Time Since | SVE | SVE Blower | Average | Average | SVE Blower | _ voc | _voc | VOCs | VOC's | Cumulative | Cumulative |
| Date | Last Visit | Operation | Effluent | 1 | 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 | 0 / 0 | 0.00% | | 1378 | 14.49 | | 0.1007 | 0.3115 | | 0.00 | | 0.00 |
| 12/21/1999 | 96 / 90 | 93.75% | | | 23.80 | | 0.0952 | 0.4090 | 8.57 | 36.81 | | 36.81 |
| 01/07/2000 | 119 / 101 | 84.87% | 7000 | 1374 | 4.73 | | 0.0906 | 0.3044 | 9.15 | 30.75 | | 67.56 |
| 01/11/2000 | 96 / 93 | 96.88% | 7000 | | 5.00 | 0.8100 | 0.0885 | 0.1043 | 8.23 | 9.70 | | 77.26 |
| 02/14/2000 | 816 / 800 | 98.04% | 7000 | 1374 | 11.63 | | 0.0743 | 0.1783 | 59.41 | 142.65 | | 219.91 |
| 02/21/2000 | 168 / 165 264 / 7 5 | 98.21% 28.41% | 7000 6967 | 1374 1368 | 11.63 10.00 | | 0.0437 0.0348 | 0.2494 0.2314 | 7.21 2.61 | 41.15 17.35 | | 261.07 278.42 |
| 03/21/2000 | 432 / 428 | 99.07% | | 1368 | 10.00 | | 0.0348 | 0.2314 | 8.37 | 91.33 | | |
| 04/14/2000 | 576 / 362 | 62.85% | 6767 | 1300 | 1.73 | | 0.0196 | 0.2134 | 4.97 | 91.33 44.67 | 103.55 | 414.41 |
| 05/03/2000 | 456 / 453 | 99.34% | | | 2.97 | 0.1110 | 0.0137 | 0.1234 | 5.73 | 22.93 | | 437.35 |
| 06/15/2000 | 1032 / 300 | 29.07% | 6933 | 1361 | 0.00 | | 0.0097 | 0.0323 | 2.92 | 9.70 | | |
| 07/24/2000 | 936 / 934 | 99.79% | | | 5.67 | 2.1000 | 0.2370 | 0.0615 | | 57.41 | 338.50 | |
| 08/17/2000 | 576 / 16 | 2.78% | 7233 | 1420 | 3.53 | | 0.2257 | 0.1019 | 3.61 | 1.63 | 342.11 | 506.09 |
| 09/13/2000 | 648 / 161 | 24.85% | | | 2.47 | 1.8000 | 0,2036 | 0.0665 | | | | |
| 10/16/2000 | 792 / 406.2 | 51.29% | 4500 | 884 | 2.00 | 0.6500 | 0.0456 | 0.0402 | 18.54 | 16.32 | 393.43 | 533.13 |
| 11/09/2000 | 576 / 2.8 | 0.49% | 6750 | 1325 | 1.50 | 0.5200 | 0.0548 | 0.0302 | 0.15 | 0.08 | 393.58 | |
| 12/19/2000 | 960 / 786 | 81.88% | 6500 | 1276 | 1.00 | 0.2800 | 0.0284 | 0.0254 | 22.32 | 19.94 | 415.90 | 553.15 |
| 01/17/2001 | 696 / 1.5 | 0.22% | 6750 | | 0.00 | | 0.0232 | 0.0101 | 0.03 | 0.02 | | |
| 02/14/2001 | 672 / 457 | 68.01% | 6750 | 1325 | 0.00 | 0.1500 | 0.0158 | 0.0000 | | 0.00 | | |
| 03/27/2001 | 984 / 984 | 100.00% | 6750 | | 0.00 | | 0.0147 | 0.0000 | | 0.00 | | |
| 04/23/2001 | 648 / 1.1 | 0.17% | 7000 | 1374 | 0.00 | | 0.0131 | 0.0000 | | 0.00 | 437.68 | 553.16 |
| 05/21/2001 | 672 / 664 | 98.81% | 7083 | | 0.00 | 0.1100 | 0.0122 | 0.0000 | | 0.00 | | |
| 06/15/2001 07/12/2001 | 600 / 598 648 / 647 | 99.67% 99.85% | 7067 7000 | 1388 1374 | 1.20 | | 0.0110 | 0.0130 | | 7.78 | | 560.94 |
| 08/07/2001 | 624 / 600 | 99.85% | 7167 | 1407 | 0.00 | 0.0028 | 0.0056 0.0003 | 0.0129 0.0000 | | 8.36 0.00 | 455.97 456.16 | 569.30 569.30 |
| 09/28/2001 | 1248 / 1247 | 99.92% | | | | 0.0028 | 0.0003 | 0.0000 | | 0.00 | 456.53 | |
| 10/01/2001 | 72 / 24 | 33.33% | | | | 0.0028 | 0.0003 | 0.0000 | | 0.00 | 456.54 | 569.30 |
| 11/20/2001 | 1200 / 292 | 24.33% | | | | 0.0026 | 0.0003 | 0.0000 | | 0.00 | 456.59 | |
| 12/28/2001 | 912 / 648 | 71.05% | | | 1.87 | | 0.0002 | 0.0132 | | 8.56 | 456.72 | |
| 01/16/2002 | 456 / 444.3 | 97.43% | | | 3.50 | 0.9010 | | 0.0497 | 47.46 | 22.06 | 504.18 | |
| 02/20/2002 | 840 / 819.7 | 97.58% | | | 0.53 | 0.0195 | | 0.0466 | | 38.20 | 506.06 | |
| 03/26/2002 | 816 / 816 | 100.00% | | 1486 | 3.10 | | 0.0472 | 0.0419 | | 34.17 | 544.59 | |
| 04/16/2002 | 504 / 504 | 100.00% | | 1489 | 0.00 | 0.0050 | 0.0006 | 0.0360 | | 18.12 | 544.89 | 690.42 |
| 05/13/2002 | 648 / 648 | 100.00% | 7567 | 1486 | 1.23 | 0.005 | 0.0006 | 0.0143 | 0.37 | 9.25 | 545.26 | 699.67 |
| 06/14/2002 | 768 / 691 | 89.97% | 7833 | 1538 | 3.80 | | 0.0550 | 0.0593 | 38.00 | 40.99 | 583.26 | 740.65 |
| 07/23/2002 | 933 / 204 | 21.86% | | | 0.00 | | 0.0003 | 0.0447 | | 9.12 | | |
| 08/14/2002 | 528 / 528 | 100.00% | | 1489 | 0.00 | 0.0028 | 0.0003 | 0.0000 | 0.17 | 0.00 | | |
| 09/25/2002 | 1408 / 728 | 51.70% | | | | | | | | | 583.50 | |
| 11/12/2002 | 1152 / 0 | 0.00% | | | 0.93 | | 0.0057 | 0.0053 | | 0.00 | | |
| 12/18/2002 | 864 / 864 | 100.00% | | | 0.00 | | | 0.0107 | 1.64 | 9.28 | | |
| 01/31/2003 | 1056 / 1055 | 99.91% | | | 0.00 | | 0.0003 | 0.0000 | | 0.00 | | |
| 02/20/2003 | 480 / 103 | 21.46% | 7167 | 1407 | 0.00 | 0.0028 | 0.0003 | 0.0000 | | 0.00 | | |
| 03/17/2003 | / | | | | | | 0.0000 | 0.0000 | | 0.00 | | |
| 04/14/2003 | 1272 / 678 | 53.30% | | | 0.00 | | 0.0000 | 0.0000 | | 0.00 | | |
| 05/20/2003 | 864 / <u>864</u> | 100.00% | | | 0.18 | | 0.0003 | 0.0010 | | 0.87 | 585.80 | 759.92 |
| 06/09/2003 | 480 / 475 | 98.96% | 7417 | 1456 | 0.00 | 0.0043 | 0.0005 | 0.0020 | 0.24 | 0.95 | 586.04 | 760.87 |
| | | | | | | | | | | | | |

0.06

16.91

2.9

1367

6964

Notes:

Averages

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

68.3%

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 Di | scharge | Short Term | Discharge |
|------------|---------------|----------|----------|--------------|-----------|---------|------------|-----------|
| | | Influent | Effluent | Effluent | Allowable | Actual | Allowable | Actual |
| | | (ppmv) | (ppmv) | (ppmv) | (ug/m3) | (ug/m3) | (ug/m3) | (ug/m3) |
| 01/11/2000 | Benzene | 0.1600 | NS | 0.0120 | 0.120 | 0.010 | 30 | 0.600 |
| 01/11/2000 | Toluene | 0.1000 | NS | 0.0150 | 1400 | 0.020 | 100,000 | 1.000 |
| | Ethyl Benzene | 0.1200 | NS | 0.0007 | 2000 | 0.000 | 45,000 | 0.000 |
| | Xylenes | 0.4300 | NS | 0.0030 | 300 | 0.000 | 100,000 | 0.200 |
| 05/03/2000 | · · | 0.0200 | 0.0230 | 0.0140 | 0.120 | 0.010 | 30 | 0.700 |
| | Toluene | 0.0120 | 0.0140 | 0.0410 | 1400 | 0.040 | 100,000 | 2.700 |
| | Ethyl Benzene | 0.0093 | 0.0260 | 0.0770 | 2000 | 0.070 | 45,000 | 4.400 |
| | Xylenes | 0.0700 | 0.2400 | 0.1040 | 300 | 0.110 | 100,000 | 6.900 |
| 07/24/2000 | Benzene | NS | NS | 0.0940 | 0.120 | 0.070 | 30 | 4.600 |
| | Toluene | NS | NS | 0.0560 | 1400 | 0.060 | 100,000 | 3.700 |
| | Ethyl Benzene | NS | NS | 0.5100 | 2000 | 0.450 | 45,000 | 29.200 |
| | Xylenes | NS | NS | 1.4400 | 300 | 1.460 | 100,000 | 95.100 |
| 11/09/2000 | Benzene | 0.1900 | 0.0160 | 0.0037 | 0.120 | 0.000 | 30 | 0.200 |
| | Toluene | 0.0550 | 0.0120 | 0.0140 | 1400 | 0.010 | 100,000 | 0.800 |
| | 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 | Benzene | 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 | | 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 | 0.000 | 45,000 | 0.000 |
| | Xylenes | 0.0016 | NS | 0.0270 | 300 | 0.020 | 100,000 | 1.600 |
| 01/16/2002 | | 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 |
| 02/20/2002 | | ND | NS | ND | 0.120 | 0.000 | 30 | 0.000 |
| | Toluene | 0.0041 | NS NS | 0.0043 | 1400 | 0.000 | 100,000 | 0.300 |
| | Ethyl Benzene | 0.0045 | NS NC | ND 0.0044 | 2000 | 0.000 | 45,000 | 0.000 |
| | Xylenes | 0.0109 | NS | 0.0041 | 300 | 0.000 | 100,000 | 0.300 |

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) |
| 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 |
| 06/09/2003 | Benzene | ND | NS | ND | 0 | 0.000 | 30 | 0.000 |
| | Toluene | 0.0016 | NS | 0.0015 | 1400 | 6.100 | 100,000 | 6.100 |
| | Ethyl Benzene | ND | NS | ND | 2000 | 0.000 | 45,000 | 0.000 |
| | Xylenes | 0.0027 | NS | 0.0034 | 300 | 12.000 | 100,000 | 12.000 |

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 |

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 |
|----------|---|---------|---------|---------|---------|----------|---------|
| 5/13/02 | On / 11 | 1.31 | 1.06 | 0.79 | 0.76 | 1.73 | 1.46 |
| 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 |
| 6/9/03 | On/9.3 | 0.63 | NM | 0.93 | 0.87 | 0.81 | 1.04 |

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.

| | | 6/03 | | | 12/02 | | | 9/02 | |
|-----------|-------|-------|---------|-------|-------|---------|-------|-------|---------|
| 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 | ND | ND | ND | · NS | NS | NS | 29 | 92 | 18 |
| GW91-6 | 547 | 34 | ND | 2,619 | 1,271 | 1,100 | 2,628 | 1,420 | 1,200 |
| GW92-08 | 19 | 22 | ND | 85 | 21 | ND | 307 | 144 | 11 |
| GW-92-11D | 11 | ND | ND | 4 | ND | ND | 31 | ND | ND |
| GW92-11SH | 26 | 70 | ND | 32 | NS | NS | 14 | ND | ND |
| SPMP-1S | 246 | 1,713 | 73 | 454 | 2,148 | ND | 488 | 9,540 | 250 |
| SPMP-2S | 285 | 599 | 47 | 77 | 172 | ND | 296 | 734 | 45 |
| GW92-12 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| GW01-14 | 4,440 | 514 | 290 | 3,169 | 1,692 | 1,200 | 1,862 | 1,054 | 290 |
| GW01-15S | 626 | 217 | 49 | 545 | 455 | 250 | 2,691 | 1,770 | 1,300 |

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

NS** - Well dry

DMG - Sample damaged at lab

| | | 05/02 | | | 02/02 | | | 11/01 | |
|-----------|-------|-------|---------|-------|-------|---------|------|-------|---------|
| 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 | ND | ND | ND | 34 | ND | ND |
| GW91-6 | 2,279 | 133 | 630 | 1,974 | 136 | 330 | 1107 | 381 | 900 |
| GW92-08 | 197 | 17 | 17 | 1,475 | 130.2 | 61 | 504 | 181 | 12 |
| GW-92-11D | 5 | ND | ND | 506 | 26.6 | 71 | 8 | ND | ND |
| GW92-11SH | 41 | ND | ND | 7 | ND | ND | NS* | NS* | NS* |
| SPMP-1S | 263 | 1,375 | 29 | 268 | 2,102 | 80 | NS** | NS** | NS** |
| SPMP-2S | 234 | 253 | 23 | 277 | 616.9 | 42 | 232 | 653 | 40 |
| GW92-12 | NS | NS | NS | NS | NS | NS | ND | ND | ND |
| GW01-14 | 2,271 | 1,838 | 680 | 2,000 | 1,066 | 480 | NS | NS | NS |
| GW01-15S | 1,500 | 435 | 270 | 1,185 | 730.8 | 64 | NS | NS | NS |

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

NS** - Well dry

DMG - Sample damaged at lab

NYSEG Norwich - Former MGP Site Monitoring Well Data (ug/I)

| | | 8/01 | | | 6/01 | | | 5/01 | |
|-----------|------|-------|---------|------|-------|---------|-------|-------|---------|
| Well ID | VOCs | SVOCs | Naphth. | VOCs | SVOCs | Naphth. | VOCs | SVOCs | Naphth. |
| GW91-4SH | SN | SN | SN | SN | SN | SN | 2 | QN | QN |
| GW91-4D | SN | SN | SN | SN | SN | SN | - | Q | 9 |
| GW91-5 | + | QN | QN | က | QN | Q | SN | SN | SN |
| GW91-6 | 1510 | 440 | 1400 | SN | SN | SN | 2,545 | 3,518 | 1,800 |
| GW92-08 | 129 | 166 | 16 | 929 | 82 | Q | SN | SN | SN |
| GW-92-11D | 2 | QN | Q | SN | SN | SN | 82 | 61 | 12 |
| GW92-11SH | QN | QN | 2 | က | Q | Q | SN | SN | SN |
| SPMP-1S | 157 | 740 | 28 | NS | SN | SN | 139 | 1,965 | 330 |
| SPMP-2S | 195 | 222 | 48 | SN | SN | SN | 114 | 615 | 46 |
| GW92-12 | QN | QN | QV | S | QN | QN | NS | SN | SN |
| GW01-14 | SN | SN | SN | SN | SN | SN | SN | SN | SN |
| GW01-15S | SN | SN | SN | SN | SN | SN | SN | SN | SN |

Naphth. = Naphthalene (Method 8270) NS - Not Sampled

NS* - No recovery after well purging NS** - Well dry DMG - Sample damaged at lab

| | | 2/01 | | | 11/00 | | | 8/00 | - |
|-----------|-------|-------|---------|-------|-------|---------|-------|--------|---------|
| Well ID | VOCs | SVOCs | Naphth. | VOCs | SVOCs | Naphth. | VOCs | SVOCs | Naphth. |
| GW91-4SH | 11 | ND | ND | 30.9 | 40 | 6 | 16 | ND | ND |
| GW91-4D | ND | ND | ND | 14 | 86 | 18 | 9 | ND | 14 |
| GW91-5 | NS | NS | NS | NS | NS | NS | NS | NS | |
| GW91-6 | 1,300 | 2,400 | 3,100 | 1,357 | 3,433 | 3,200 | 1,110 | ND | 3200 |
| GW92-08 | NS | NS | NS | NS | NS | NS | 88 | 175 | ND |
| GW-92-11D | 0.5 | ND | ND | NS | NS | NS | 3 | ND | ND |
| GW92-11SH | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SPMP-1S | 167 | 4,860 | 110 | NS | NS | NS | 351 | 10,250 | 1,500 |
| SPMP-2S | 68 | 449 | 26 | NS | NS | NS | 103 | 1,061 | 92 |
| 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

DMG - Sample damaged at lab

| | 00/2 | 00 | | 2/00 | | | 2/99 | |
|-----------|---------|---------|--------|--------|---------|-------|-------|---------|
| Well ID | SVOCs | Naphth. | VOCs | SVOCs | Naphth. | VOCs | SVOCs | Naphth. |
| GW91-4SH | SN | SN | 3.0 | 324 | QN | 61.1 | 62.0 | SN |
| GW91-4D | SN | SN | 1.0 | QN | 22.0 | 29.9 | DMG | SN |
| GW91-5 | SN | SN | SN | SN | SN | 81.5 | 33.0 | SN |
| GW91-6 | SN | SN | 2,170 | Q | 5,500 | 2,229 | 586 | SN |
| GW92-08 | SN | SN | SN | SN | SN | 943.9 | SN | SN |
| GW-92-11D | SN | SN | 182 | 9 | 430 | 10.5 | SN | SN |
| GW92-11SH | SN | SN | SN | SN | SN | 3.5 | SN | SN |
| SPMP-1S | SN | SN | *4,901 | 10,460 | 1,600 | SN | SN | SN |
| SPMP-2S | **1,290 | SN | 00€₊ | DMG | 150.0 | SN | SN | SN |
| GW92-12 | SN | SN | SN | SN | SN | SN | SN | SN |
| GW01-14 | SN | SN | SN | SN | SN | SN | SN | SN |
| GW01-15S | SN | SN | SN | SN | SN | SN | SN | SN |

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging NS** - Well dry

DMG - Sample damaged at lab

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

* - Samples were collected in June, 2000

| | | 1998 | | | | | |
|-----------|-------|-------|---------|--|--|--|--|
| Well ID | VOCs | SVOCs | Naphth. | | | | |
| GW91-4SH | 37.6 | 134.3 | 8.0 | | | | |
| GW91-4D | 38.5 | 72.0 | 110 | | | | |
| GW91-5 | NS | NS | NS | | | | |
| GW91-6 | 2,432 | 210 | 3600 | | | | |
| GW92-08 | 898.5 | NS | NS | | | | |
| GW-92-11D | 70.1 | NS | NS | | | | |
| GW92-11SH | 3.0 | NS | NS | | | | |
| SPMP-1S | NS | NS | NS | | | | |
| SPMP-2S | NS | NS | NS | | | | |
| GW92-12 | NS | NS | NS | | | | |
| GW01-14 | NS | NS | NS | | | | |
| GW01-15S | NS | NS | NS | | | | |

Naphth. = Naphthalene (Method 8270)

NS - Not Sampled

NS* - No recovery after well purging

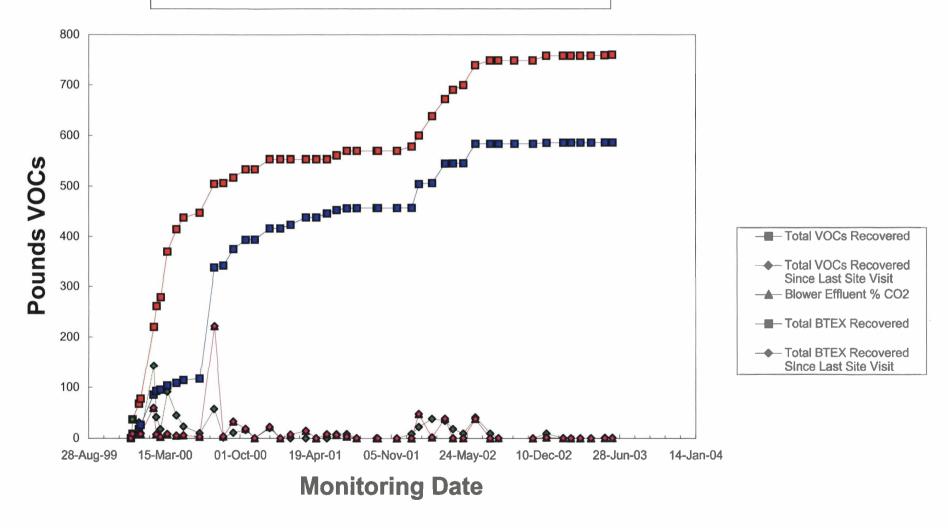
NS** - Well dry

DMG - Sample damaged at lab



Figure 1 - Soil Vapor Extraction System VOC Recovery

NYSEG Norwich



APPENDIX A LABORATORY ANALYTICAL RESULTS



PECEIVED

JUL 01

The Coco: 8A

Client:

SHAW ENVIRONMENTAL

Date of Report:

06/25/03

Address:

13 British American Blvd.

Date Received:

06/10/03

Latham, NY 12110

CAS Project No:

P2301124

Contact:

Mr. John Skaarup

Purchase Order:

Verbal

Client Project ID: NYSEG Norwich/108196

NY ELAP ID:

11221

Two (2) Tedlar Bag Samples labeled:

"SVE Final Effluent Leg-4" and "SVE Blower Effluent Leg-4"

The samples were received at the laboratory under chain of custody on June 10, 2003. 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 (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

Reviewed and Approved:

Svetlana Walsh Analytical Chemist

Air Quality Laboratory

Reviewed and Approved:

Chris Parnell

GCMS-VOA Team Leader

Air Quality Laboratory

Page 1 of 8



CAS Project No:

P2301124

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.

RESULTS OF ANALYSIS

Page 1 of 1

Client:

Shaw Environmental

Client Sample ID: SVE Final Effluent Leg-4

CAS Project ID: P2301124

Client Project ID: NYSEG Norwich/108196

CAS Sample ID: P2301124-001

Test Code:

Modified EPA TO-15

Instrument ID:

Sampling Media:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Tedlar Bag

Date Collected: 6/9/03

Date Received: 6/10/03

Date(s) Analyzed: 6/10/03 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 | |
| Y | 108-88-3 | Toluene | 5.8 | 5.0 | 1.5 | 1.3 | |
| فعدد | 100-41-4 | Ethylbenzene | ND | 5.0 | ND | 1.2 | |
| | 136777-61-2 | m,p-Xylenes | 15 | · 5.0 | 3.4 | 1.2 | |
| ľ | 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.

Date: 6/24/03 Verified By: Q

RESULTS OF ANALYSIS

Page 1 of 1

Client:

Shaw Environmental

Client Sample ID: SVE Final Effluent Leg-4

Client Project ID: NYSEG Norwich/108196

CAS Project ID: P2301124

CAS Sample ID: P2301124-001DUP

Test Code:

Modified EPA TO-15

Instrument ID:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Sampling Media:

Tedlar Bag

Date Collected: 6/9/03

Date Received: 6/10/03 Date(s) Analyzed: 6/10/03

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 |
|---|-------------|--------------|-----------------|--------------|----------------|-------------|-------------------|
| 1 | 71-43-2 | Benzene | ND | 5.0 | ND | 1.6 | |
| 1 | 108-88-3 | Toluene | 5.9 | 5.0 | 1.6 | 1.3 | - |
| _ | 100-41-4 | Ethylbenzene | ND | 5.0 | ND | 1.2 | - |
| | 136777-61-2 | m,p-Xylenes | 15 | 5.0 | 3.5 | 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.

Verified By: RC Date: 6/24/03

RESULTS OF ANALYSIS

Page 1 of 1

Client:

Shaw Environmental

Client Sample ID: SVE Blower Effluent Leg-4

CAS Project ID: P2301124

Client Project ID: NYSEG Norwich/108196

CAS Sample ID: P2301124-002

Date Collected: 6/9/03

Date Received: 6/10/03

Test Code:

Modified EPA TO-15

Instrument ID:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Tedlar Bag

Date(s) Analyzed: 6/10/03

Volume(s) Analyzed:

0.20 Liter(s)

Sampling Media:

Test Notes:

D.F. = 1.00

| | CAS# | Compound | Result µg/m³ | MRL μg/m³ | Result ppbV | MRL ppbV | Data Qualifier |
|----|-------------|--------------|-----------------|--------------|----------------|-------------|-------------------|
| ٦ | 71-43-2 | Benzene | ND | 5.0 | ND | 1.6 | |
| ľ | 108-88-3 | Toluene | 6.1 | 5.0 | 1.6 | 1.3 | |
| | 100-41-4 | Ethylbenzene | ND | 5.0 | ND | 1.2 | |
| ı | 136777-61-2 | m,p-Xylenes | 12 | 5.0 | 2.7 | 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.

RESULTS OF ANALYSIS

Page 1 of 1

Client:

Shaw Environmental

Client Sample ID: Method Blank

Client Project ID: NYSEG Norwich/108196

CAS Project ID: P2301124

Date Collected: NA

Date Received: NA

CAS Sample ID: P030610-MB

Test Code:

Modified EPA TO-15

Instrument ID:

HP5973/Tekmar AUTOCan Elite

Analyst:

Svetlana Walsh

Sampling Media:

Tedlar Bag

Date(s) Analyzed: 6/10/03 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 |
|---|-------------|--------------|-----------------|--------------|----------------|-------------|-------------------|
| 7 | 71-43-2 | Benzene | ND | 1.0 | ND | 0.31 | |
| ľ | 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 | |
| ľ | 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.

Columbia Analytical Services, Inc. Sample Acceptance Check Form

| Client: | Shaw Environmental | | _ | Work order: | P2301124 | | | |
|---|---|--------------------|-------------------------------------|------------------------------|-----------------------|--------------|-------------------------|------------|
| Project: | NYSEG Norwich/10 | 8196 | | _ | | | | |
| Sar | mple(s) received on: | 6/10/03 | Date opened: | 6/10/03 | 3 by | SM | | |
| ote: This form | m is used for <u>all</u> samples received | by CAS. The use | of this form for custody seals is | strictly meant to indicate | e presence/absence a | nd not as an | indication of | f |
| ompliance or n | nonconformity. Thermal preserva | tion and pH will o | only be evaluated either at the rec | quest of the client or as re | equired by the methor | | | |
| | | | | | | Yes | No | <u>N/A</u> |
| 1 | Were custody seals on or | utside of cool | er/Box? | | | | $\overline{\mathbf{x}}$ | |
| | Location of seal(s)? | | | _Sealing Lid? | | | | X |
| | Were signature and date i | ncluded? | | | | | | X |
| | Were seals intact? | | | | | | | X |
| | Were custody seals on outsi | de of sample c | ontainer? | | | | \mathbf{x} | |
| | Location of seal(s)? | | | Sealing Lid? | | | | X |
| | Were signature and date i | ncluded? | | | | | | X |
| | Were seals intact? | | | | | | | X |
| 2 | Were sample containers | marked with | client sample ID? | | | \boxtimes | | |
| 3 | Did sample containers a | rrive in good | condition? | | | X | | |
| 4 | Were chain-of-custody p | papers used an | nd filled out? | | | × | | |
| 5 | Did sample container la | bels and/or ta | ags agree with custody pa | pers? | | \boxtimes | | |
| 6 | Was sample volume rece | eived adequat | e for analysis? | | | X | | |
| 7 | Are samples within speci | ified holding | times? | | | X | | |
| 8 | Was proper temperature | e (thermal pre | eservation) of cooler at re- | ceipt adhered to? | | | | X |
| | (| Cooler Tempe | | _°C | | | | |
| | | Blank Temper | | _°C | | | | |
| 9 | - ` '- | • | according to method/SOP | _ | l information? | | × | |
| | | | itted samples are pH (acid) | preserved? | | | | × |
| | Were VOA vials checked | _ | | | | | | × |
| | Does the client/method/S | OP require that | t the analyst check the samp | le pH and <u>if necessa</u> | ry alter it? | | | X |
| | Lab Sample ID | | Required | Hq | | V |)A Heads | mace |
| | control to the control of the | | Hq | (as received, i | | | sence/Alt | |
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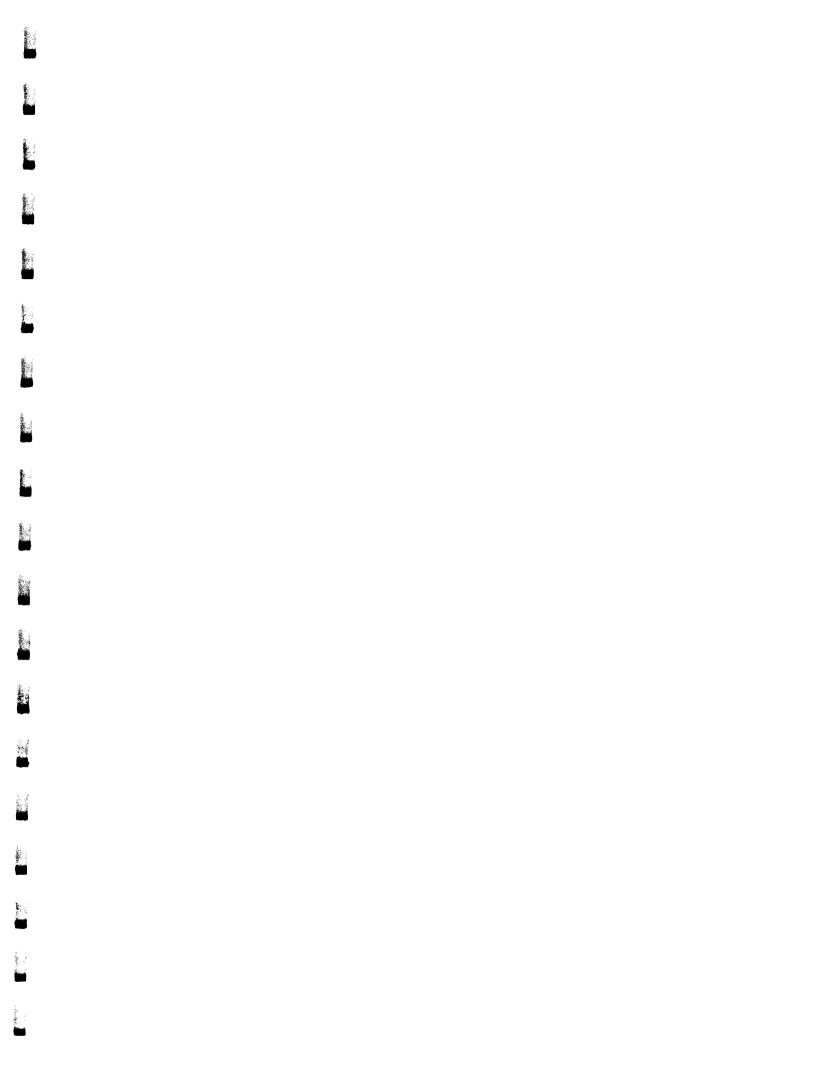
Performance Analytical Inc.

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 Shigu E | www. | matr1 | · | Phone | <u></u> | Fax | | ΔΝ | NALYSE | 35 | PAI Project No | |
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| Client Project Name / Location | | , | | 1 | 3 | | \ Oh, | / / | / | | | |
| Client Project Name / Location NYSE Co Numwich Westurch Wy. Contact Sampler (Signature) John Skrapsyp | | | | 10 | 8196 P.O. No | | (H | / / | / | / / | | |
| Contact | Sam | ipl or (S ignature) | | 1 | P. O. No |). | / X | ′ / | / | / | | |
| JOHN SKARRUP | | ton o | al Us | <u></u> | |) / | Sept and Market | | /: | | | |
| Client Sample ID | Date Collected | Time Collected | Lab Sample No. | Type of Sample | Container ID (Serial#) | Regulator ID (Serial#) | | / | / | Expected Turnaround Ti | me R | emarks |
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| | | | | | | | | | | | | |





Experience is the solution

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

RECEIVED
Route To: John Skearup

JUN 30

Proj: NYSEG-Norwich

File Cods: 8A

June 27, 2003

Sue Wolf

New York State Electric & Gas Corporation

Kirkwood Industrial Park

Corporate Drive

PO B

Binghamton, NY 13902

TEL: (607) 762-8787 FAX: (607) 762-8451

RE: Norwich

Order No.: 030610011

Dear Sue Wolf:

Adirondack Environmental Services, Inc received 3 samples on 6/10/2003 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709 AIHA#: 100307

Tara Daniels

Laboratory Manager

CC:

John Skaarup

Date: 27-Jun-03

CLIENT: Project:

New York State Electric & Gas Corporatio

Norwich

Lab Order:

030610011

Lab ID:

030610011-001

Collection Date: 6/9/2003

| Client Sample ID: Purge Water | | | | Matrix | : WATE | CK. |
|-------------------------------|--------|-----|------|--------|--------|----------------------|
| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
| SEMI-VOLATILE ORGANICS | | E6 | 25 | (E625) | | Analyst: M1 |
| 1,2,4-Trichlorobenzene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 1,2-Dichlorobenzene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 1,2-Diphenylhydrazine | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 1,3-Dichlorobenzene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 1,4-Dichlorobenzene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2,4,6-Trichlorophenol | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2,4-Dichlorophenol | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2,4-Dimethylphenol | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2,4-Dinitrophenol | < 500 | 500 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2,4-Dinitrotoluene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2,6-Dinitrotoluene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2-Chloronaphthalene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2-Chlorophenol | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 2-Nitrophenol | < 500 | 500 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 3,3'-Dichlorobenzidine | < 200 | 200 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 4,6-Dinitro-2-methylphenol | < 500 | 500 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 4-Bromophenyl phenyl ether | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 4-Chloro-3-methylphenol | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 4-Chlorophenyl phenyl ether | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| 4-Nitrophenol | < 500 | 500 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Acenaphthene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Acenaphthylene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Anthracene | 380 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benz(a)anthracene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benzidine | < 800 | 800 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benzo(a)pyrene | 200 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benzo(b)fluoranthene | 300 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benzo(e)pyrene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benzo(g,h,i)perylene | 210 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Benzo(k)fluoranthene | 210 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Bis(2-chloroethoxy)methane | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Bis(2-chloroethyl)ether | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Bis(2-chloroisopropyl)ether | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Bis(2-ethylhexyl)phthalate | 1400 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Butyl benzyl phthalate | 290 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Chrysene | 340 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Dibenz(a,h)anthracene | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Dibenzofuran | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Diethyl phthalate | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |
| Dimethyl phthalate | < 100 | 100 | | μg/L | 5 | 6/19/2003 9:24:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

^{* -} Value exceeds Maximum Contaminant Level

CLIENT: New York State Electric & Gas Corporatio 030610011 Lab Order: Project: Norwich **SEMI-VOLATILE ORGANICS** E625 (E625)Analyst: MT Di-n-butyl phthalate 110 100 5 6/19/2003 9:24:00 PM μg/L 5 Di-n-octyl phthalate < 100 100 μg/L 6/19/2003 9:24:00 PM Fluoranthene 840 100 μg/L 5 6/19/2003 9:24:00 PM 100 5 Fluorene 180 μg/L 6/19/2003 9:24:00 PM Hexachlorobenzene < 100 100 5 6/19/2003 9:24:00 PM μg/L 5 Hexachlorobutadiene < 100 100 μg/L 6/19/2003 9:24:00 PM < 100 100 μg/L 5 Hexachlorocyclopentadiene 6/19/2003 9:24:00 PM Hexachloroethane < 100 100 5 6/19/2003 9:24:00 PM μg/L Indeno(1,2,3-cd)pyrene 220 100 μg/L 5 6/19/2003 9:24:00 PM 5 Isophorone < 100 100 μg/L 6/19/2003 9:24:00 PM Methyl Anthracene < 100 100 μg/L 5 6/19/2003 9:24:00 PM 5 Naphthalene 170 100 μg/L 6/19/2003 9:24:00 PM 100 5 Nitrobenzene < 100 μg/L 6/19/2003 9:24:00 PM N-Nitrosodimethylamine < 100 100 5 6/19/2003 9:24:00 PM μg/L 5 N-Nitrosodi-n-propylamine < 100 100 μg/L 6/19/2003 9:24:00 PM < 100 100 5 6/19/2003 9:24:00 PM N-Nitrosodiphenylamine μg/L 500 5 < 500 Pentachlorophenol μg/L 6/19/2003 9:24:00 PM 100 5 Phenanthrene 870 μg/L 6/19/2003 9:24:00 PM Phenot < 100 100 5 6/19/2003 9:24:00 PM μg/L Pvrene 740 100 μg/L 5 6/19/2003 9:24:00 PM **VOLATILE ORGANICS** E624 Analyst: MG 1,1,1-Trichloroethane < 100 100 20 6/20/2003 6:27:00 PM μg/L 1,1,2,2-Tetrachloroethane < 100 100 20 6/20/2003 6:27:00 PM μg/L 20 < 100 100 1,1,2-Trichloroethane μg/L 6/20/2003 6:27:00 PM < 100 100 20 6/20/2003 6:27:00 PM 1,1-Dichloroethane μg/L 1,1-Dichloroethene < 100 100 μg/L 20 6/20/2003 6:27:00 PM 1,2-Dichloroethane < 100 100 μg/L 20 6/20/2003 6:27:00 PM 100 20 1,2-Dichloropropane < 100 6/20/2003 6:27:00 PM μg/L 2-Butanone < 200 200 μg/L 20 6/20/2003 6:27:00 PM < 200 200 20 2-Hexanone μg/L 6/20/2003 6:27:00 PM 4-Methyl-2-pentarione < 200 200 μg/L 20 6/20/2003 6:27:00 PM Acetone < 200 200 μg/L 20 6/20/2003 6:27:00 PM Benzene 1400 100 μg/L 20 6/20/2003 6:27:00 PM Bromodichloromethane < 100 100 μg/L 20 6/20/2003 6:27:00 PM 20 **Bromoform** < 100 100 μg/L 6/20/2003 6:27:00 PM Bromomethane < 200 200 20 6/20/2003 6:27:00 PM μg/L 200 Carbon disulfide < 200 20 μg/L 6/20/2003 6:27:00 PM Carbon tetrachloride 100 < 100 µg/L 20 6/20/2003 6:27:00 PM Chlorobenzene < 100 100 µg/L 20 6/20/2003 6:27:00 PM Chloroethane < 200 200 μg/L 20 6/20/2003 6:27:00 PM Chloroform < 100 100 20 μg/L 6/20/2003 6:27:00 PM Chloromethane < 200 200 20 μg/L 6/20/2003 6:27:00 PM cis-1,2-Dichloroethene < 100 100 μg/L 20 6/20/2003 6:27:00 PM cis-1,3-Dichloropropene < 100 100 20 μg/L 6/20/2003 6:27:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

Date: 27-Jun-03

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 27-Jun-03

| CLIENT: Project: | New York Sta Norwich | te Electric & Gas Corp | ooratio | | Lab Order: | 030610011 |
|---------------------|-------------------------|------------------------|---------|------|------------|----------------------|
| VOLATILE OF | RGANICS | | E624 | | | Analyst: MG |
| Dibromochloro | omethane | < 100 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Ethylbenzene | | 4300 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| m,p-Xylene | | 3500 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Methylene Ch | lorid e | < 100 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| o-Xylene | | 1900 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Styrene | | 570 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Tetrachloroeth | nene | < 100 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Toluene | | 4500 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| trans-1,2-Dich | loroethene | < 100 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| trans-1,3-Dich | loropropene | < 100 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Trichloroether | ne | < 100 | 100 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| Vinyl chloride | | < 200 | 200 | μg/L | 20 | 6/20/2003 6:27:00 PM |
| FLASH POINT | Г | | ASTM D9 | 3-80 | | Analyst: KS |
| Flash Point | | >200 | 60.0 | °F | 1 | 6/17/2003 |
| CYANIDE, RE | ACTIVE | | SW7.3.3 | 3.2 | | Analyst: MC |
| Reactive Cyar | nide | <1 | 1 | μg/g | 1 | 6/23/2003 |
| REACTIVE SU | JLFIDE | | SW7.3.4 | .2 | | Analyst: MC |
| Reactive Sulfi | de | < 10 | 10 | μg/g | 1 | 6/20/2003 |
| REACTIVELY | | | SW846 7 | .3.3 | | Analyst: MC |
| Reactivity | | Non Reactive | 0 | | 1 | 6/24/2003 |

B - Analyte detected in the associated Method Blank

^{* -} Value exceeds Maximum Contaminant Level

R - RPD outside accepted recovery limits

New York State Electric & Gas Corporatio

Date: 27-Jun-03

Lab Order:

030610011

Project: Norwich

CLIENT:

Lab ID: 030610011-002 Collection Date: 6/9/2003

| Client Sample ID: Carbon | | | Matı | rix: CARB | ON |
|---------------------------|---------------|-------------|---------|-----------|---------------|
| Analyses | Result | PQL Qual | Units | DF | Date Analyzed |
| TCLP VOLATILES | | SW1311/826 | 0 (SW13 | 11) | Analyst: AJ |
| 1,1-Dichloroethene-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| 1,2-Dichloroethane-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| 1,4-Dichlorobenzene-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| 2-Butanone-TCLP | < 170 | 170 | μg/L | 17 | 6/18/2003 |
| Benzene-TCLP | < 85 | 85 | µg/L | 17 | 6/18/2003 |
| Carbon tetrachloride-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| Chlorobenzene-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| Chloroform-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| Tetrachloroethene-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| Trichloroethene-TCLP | < 85 | 85 | μg/L | 17 | 6/18/2003 |
| Vinyl chloride-TCLP | < 170 | 170 | μg/L | 17 | 6/18/2003 |
| CORROSIVITY | | SW9040B | | | Analyst: PL |
| Corrosivity | Not Corrosive | 0 | | 1 | 6/25/2003 |
| CYANIDE, REACTIVE | | SW7.3.3.2 | | | Analyst: MC |
| Reactive Cyanide | < 1 | 1 | µg/g | 1 | 6/24/2003 |
| REACTIVE SULFIDE | | SW7.3.4.2 | | | Analyst: MC |
| Reactive Sulfide | < 10 | 10 | µg/g | 1 | 6/24/2003 |
| REACTIVTIY | | SW846 7.3.3 | 3 | | Analyst: MC |
| Reactivity | Non Reactive | 0 | | 1 | 6/24/2003 |

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Lab Order:

030610011

Project:

Norwich

Client Sample ID: Trip Blank Lot# 072

Lab ID:

030610011-003

Collection Date: 6/9/2003

Matrix: WATER

| Analyses | Result | PQL Qual | Units | DF | Date Analyzed |
|---------------------------|--------|----------|-------|----|----------------------|
| VOLATILE ORGANICS | | E624 | | | Analyst: MG |
| Chloromethane | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Bromomethane | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Vinyl chloride | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Chloroethane | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Methylene Chloride | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Acetone | 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Carbon disulfide | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,1-Dichloroethene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,1-Dichloroethane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| cis-1,2-Dichloroethene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| trans-1,2-Dichloroethene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Chloroform | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,2-Dichloroethane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 2-Butanone | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,1,1-Trichloroethane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Carbon tetrachloride | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Bromodichloromethane | < 5.0 | 5.0 | µg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,2-Dichloropropane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| cis-1,3-Dichloropropene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Trichloroethene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Dibromochloromethane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,1,2-Trichloroethane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Benzene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| trans-1,3-Dichloropropene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Bromoform | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 2-Hexanone | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 4-Methyl-2-pentanone | < 10 | 10 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Tetrachloroethene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| 1,1,2,2-Tetrachloroethane | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Toluene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Chlorobenzene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Ethylbenzene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| Styrene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| m,p-Xylene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |
| o-Xylene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 3:14:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits
E - Value above quantitation range

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

MUSEG- John R.

314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

| Environmental Services | s, Inc. | ıll service analytica | al research labo | oratory of | fering s | olution | ns to er | nvironmental concerns |
|-----------------------------|-------------------------|-------------------------|-------------------|------------------|------------|-------------|--------------|---|
| Client Name: | | Address: | | | | | | |
| Straw En | warm mento) | 13 BATTER | Anceis | ~Bluz | LA | 274, | 927 | NY. 12110 |
| Sena Report to: | | | | Samplers | (Names) |) | <i>.</i> . | <i>,</i> · |
| Client Phone No: 518 | 382mg. | NYSEC NO. PO Number: | ruch. | Samplers: | (Signature | ZJ | _H | 40E |
| Client Fax No: 5/8 | ·) &3 ~ 15 4 6 | r o regulaci. | | Jampiers. | (orginato | | _ | |
| 3/92 | 783-8397 | <u>'</u> | _ | Time | Sample | e Type | Number | 1 /yac |
| AES Sample Number | Cli Sample Identific | ent ation & Location | Date Sampled | A=a.m. P=p.m. | Matrix | Grab de | of Cont's | Analysis Required |
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| | Cproton | , | 6-9-07 | A / P | 1 | مدل | ١ ١ | Cores. Dity Reactine |
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| Turnaround Time Request: | | Special I | nstructions/Remai | | | | | |
| □ 1 Day □ 3 Da | _ | | , | | | | | |
| 🗆 2 Day 🗆 5 Da | y | | | | | | | |
| CC Report To: | | | | | | | | |
| Relinguished by: (Signature | | Received | i by: (Signature) | | | | | Date/Time |
| The M | Wall | | , (J., | | | | | 2414, 111110 |
| Relinguished by: (Signature | | Received | for Laborator b | | | | | Date/Time |
| TEMPER | RATURE | Por | PERLY PRESERVED | | | _ | Receive | D WITHIN HOLDING TIMES |
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| | | - | | | | | _ | |

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

3709



Experience is the solution

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

TERMS, CONDITIONS & LIMITATIONS

All Services rendered by **Adirondack Environmental Services**, **Inc.** are undertaken and all rates are based upon the following terms:

- Neither Adirondack Environmental Services, Inc., nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of Adirondack Environmental Services, Inc.'s performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against Adirondack Environmental Services, Inc. arising out of its work.
- All claims made must be in writing within forty-five (45) days after delivery of (b) the Adirondack Environmental Services, Inc. report regarding said work or such claim shall be deemed as irrevocably waived.
- Adirondack Environmental Services, Inc. reports are submitted in writing (c) and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an Adirondack Environmental Services, Inc. report by other than our customer does not constitute a representation of Adirondack Environmental Services, Inc. as to the accuracy of the contents thereof.
- In no event shall Adirondack Environmental Services, Inc., its employees (d) agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.
- (e) No deviation from the terms set forth herein shall bind Adirondack Environmental Services, Inc. unless in writing and signed by a Director of Adirondack Environmental Services, Inc.
- Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and Adirondack Environmental Services, Inc. is not responsible for the accuracy of this information.

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Experience is the solution

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

RECEIVED
Route To: John Skaarup

JUN 30

P-1: NISEG- Norwich

File Cores: 8A

June 27, 2003

John Ruspantini
New York State Electric & Gas Corporation
Kirkwood Industrial Park
Corporate Drive

Corporate Drive

PO B

Binghamton, NY 13902

TEL: (607) 762-8787 FAX: (607) 762-8451

RE: NYSEG Norwich

Order No.: 030610012

Dear John Ruspantini:

Adirondack Environmental Services, Inc received 11 samples on 6/10/2003 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709 AIHA#: 100307

Tara Daniels

Laboratory Manager

CC:

John Skaarup

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Lab Order:

030610012

Project:

NYSEG Norwich

Lab ID:

030610012-001

Collection Date: 6/9/2003

| Client Sample ID: GW-92-12 | | | Ma | trix: GROU | NDWATER |
|----------------------------|------------|--------|----------|------------|----------------------|
| Analyses | Result | PQL Qu | al Units | DF | Date Analyzed |
| EPA 8021 STARS LIST | | SW8021 | В | | Analyst: SO |
| Benzene | < 0.5 | 0.5 | μg/L | 1 | 6/16/2003 |
| Toluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Ethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| m,p-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| o-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Isopropylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Propylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,3,5-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| tert-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| sec-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 4-isopropyltoluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Naphthalene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 |
| Methyl tert-butyl ether | < 2.0 | 2.0 | μg/L | 1 | 6/16/2003 |
| POLYNUCLEAR AROMATIC HY | DROCARBONS | E625 | (E62 | 5) | Analyst: MT |
| 2-Methylnaphthalene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Acenaphthene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Acenaphthylene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Anthracene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Benz(a)anthracene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Benzo(a)pyrene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Benzo(b)fluoranthene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Benzo(g,h,i)perylene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Benzo(k)fluoranthene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Chrysene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Dibenz(a,h)anthracene | < 11 | 11 | μg/Ľ | 1 | 6/18/2003 3:50:00 PM |
| Dibenzofuran | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Fluoranthene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Fluorene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Indeno(1,2,3-cd)pyrene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Naphthalene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Phenanthrene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |
| Pyrene | < 11 | 11 | μg/L | 1 | 6/18/2003 3:50:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Lab Order:

030610012

Project:

NYSEG Norwich

Lab ID:

030610012-002

Collection Date: 6/9/2003

| Client Sample ID: GW-92-08 | | | Ma | trix: GROU | NDWATER |
|----------------------------|------------|--------|----------|------------|----------------------|
| Analyses | Result | PQL Qu | al Units | DF | Date Analyzed |
| EPA 8021 STARS LIST | | SW8021 | В | | Analyst: SO |
| Benzene | 2.7 | 0.5 | μg/L | 1 | 6/16/2003 |
| Toluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Ethylbenzene | 12 | 1.0 | μg/L | 1 | 6/16/2003 |
| m,p-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| o-Xylene | 3.5 | 1.0 | μg/L | 1 | 6/16/2003 |
| Isopropylbenzene | 1.2 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Propylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,3,5-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| tert-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| sec-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 4-Isopropyltoluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Naphthalene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 |
| Methyl tert-butyl ether | < 2.0 | 2.0 | μg/L | 1 | 6/16/2003 |
| POLYNUCLEAR AROMATIC HY | DROCARBONS | E625 | (E625 |) | Analyst: MT |
| 2-Methylnaphthalene | 12 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Acenaphthene | 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Acenaphthylene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Benz(a)anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Benzo(a)pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Benzo(b)fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Benzo(g,h,i)perylene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Benzo(k)fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Chrysene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Dibenz(a,h)anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Dibenzofuran | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Fluorene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Indeno(1,2,3-cd)pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Naphthalene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Phenanthrene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |
| Pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 4:40:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Lab Order:

030610012

Project:

NYSEG Norwich

Lab ID:

030610012-003

Collection Date: 6/9/2003

| Client Sample ID: GW-92-11S | | | Matrix | : GROU | NDWATER |
|-----------------------------|------------|----------|--------|--------|----------------------|
| Analyses | Result | PQL Qual | Units | DF | Date Analyzed |
| EPA 8021 STARS LIST | | SW8021B | | | Analyst: SO |
| Benzene | 8.8 | 0.5 | μg/L | 1 | 6/16/2003 |
| Toluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Ethylbenzene | 6.8 | 1.0 | μg/L | 1 | 6/16/2003 |
| m,p-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| o-Xylene | 5.3 | 1.0 | μg/L | 1 | 6/16/2003 |
| Isopropylbenzene | 2.5 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Propylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,3,5-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| tert-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,2,4-Trimethylbenzene | 2.2 | 1.0 | μg/L | 1 | 6/16/2003 |
| sec-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 4-Isopropyltoluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Naphthalene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 |
| Methyl tert-butyl ether | < 2.0 | 2.0 | μg/L | 1 | 6/16/2003 |
| POLYNUCLEAR AROMATIC HY | DROCARBONS | E625 | (E625) | | Analyst: MT |
| 2-Methylnaphthalene | 46 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Acenaphthene | 24 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Acenaphthylene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Anthracene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Benz(a)anthracene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Benzo(a)pyrene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Benzo(b)fluoranthene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Benzo(g,h,i)perylene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Benzo(k)fluoranthene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Chrysene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Dibenz(a,h)anthracene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Dibenzofuran | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Fluoranthene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Fluorene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Indeno(1,2,3-cd)pyrene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Naphthalene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Phenanthrene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |
| Pyrene | < 11 | 11 | μg/L | 1 | 6/18/2003 5:32:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

onmental selvices, the

Date: 27-Jun-03

Lab Order:

030610012

Project: NYSEG Norwich

CLIENT:

Lab ID: 030610012-004 **Collection Date:** 6/9/2003

New York State Electric & Gas Corporatio

Client Sample ID: GW-92-11D Matrix: GROUNDWATER

| Client Sample ID: GW-92-11D | NDWATER | | | | |
|---------------------------------------|-----------|--------|-----------|-----------|--|
| Analyses | Result | PQL Qu | ıal Units | DF | Date Analyzed |
| EPA 8021 STARS LIST | | SW8021 | В | | Analyst: SO |
| Benzene | 8.8 | 0.5 | μg/L | 1 | 6/16/2003 |
| Toluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Ethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| m,p-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| o-Xylene | 2.3 | 1.0 | μg/L | 1 | 6/16/2003 |
| Isopropylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Propylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,3,5-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| tert-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| sec-Butylbenzene | ·· < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 4-Isopropyltoluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Naphthalene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 |
| Methyl tert-butyl ether | < 2.0 | 2.0 | μg/L | 1 | 6/16/2003 |
| POLYNUCLEAR AROMATIC HYD | ROCARBONS | E625 | (E625 |) | Analyst: MT |
| 2-Methylnaphthalene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Acenaphthene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Acenaphthylene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Benz(a)anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Benzo(a)pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Benzo(b)fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Benzo(g,h,i)perylene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Benzo(k)fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Chrysene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Dibenz(a,h)anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Dibenzofuran | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Fluorene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| | ~ 10 | . • | F 0 - | | |
| Indeno(1,2,3-cd)pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 6:24:00 PM |
| Indeno(1,2,3-cd)pyrene Naphthalene | | _ | | 1 1 | 6/18/2003 6:24:00 PM 6/18/2003 6:24:00 PM |
| | < 10 | 10 | μg/L | | |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

New York State Electric & Gas Corporatio

NYSEG Norwich

Lab Order: 030610012

Date: 27-Jun-03

Project:

CLIENT:

Lab ID: 030610012-005 Collection Date: 6/9/2003

Client Sample ID: GW-91-5 Matrix: GROUNDWATER

| Analyses | Result | PQL Q | ual Units | DF | Date Analyzed |
|---------------------------------------|-----------|----------|--------------|--------|--|
| EPA 8021 STARS LIST | | SW802 | IB | | Analyst: SO |
| Benzene | < 0.5 | 0.5 | μg/L | 1 | 6/16/2003 |
| Toluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Ethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| m,p-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| o-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Isopropylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Propylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,3,5-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| tert-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 1,2,4-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| sec-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| 4-Isopropyitoluene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| n-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/16/2003 |
| Naphthalene | < 5.0 | 5.0 | μg/L | 1 | 6/16/2003 |
| Methyl tert-butyl ether | < 2.0 | 2.0 | μg/L | 1 | 6/16/2003 |
| POLYNUCLEAR AROMATIC HYD | ROCARBONS | E625 | (E625) |) | Analyst: MT |
| 2-Methylnaphthalene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Acenaphthene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Acenaphthylene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Benz(a)anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Benzo(a)pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Benzo(b)fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Benzo(g,h,i)perylene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Benzo(k)fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Chrysene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Dibenz(a,h)anthracene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Dibenzofuran | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Fluoranthene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Fluorene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| | • • | | | | |
| Indeno(1,2,3-cd)pyrene | < 10 | 10 | μg/L | 1 | 6/18/2003 7:14:00 PM |
| Indeno(1,2,3-cd)pyrene Naphthalene | | 10 10 | μg/L μg/L | 1 1 | |
| | < 10 | | | | 6/18/2003 7:14:00 PM 6/18/2003 7:14:00 PM 6/18/2003 7:14:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Project:

NYSEG Norwich

Lab Order:

030610012

Lab ID:

Client Sample ID: GW-91-6

030610012-006

Collection Date: 6/9/2003

Matrix: GROUNDWATER

PQL Qual Units Analyses Result DF **Date Analyzed EPA 8021 STARS LIST** SW8021B Analyst: SO 23 Benzene 0.5 µg/L 1 6/16/2003 Toluene 2.2 1.0 μg/L 1 6/16/2003 Ethylbenzene 72 1.0 μg/L 1 6/16/2003 7.0 1.0 6/16/2003 m,p-Xylene μg/L o-Xylene 49 1.0 μg/L 6/16/2003 7.8 Isopropylbenzene 1.0 1 6/16/2003 μg/L n-Propylbenzene 1.9 1.0 μg/L 1 6/16/2003 1,3,5-Trimethylbenzene 3.2 1 6/16/2003 1.0 μg/L tert-Butylbenzene < 1.0 1.0 μg/L 1 6/16/2003 1,2,4-Trimethylbenzene 40 1.0 μg/L 1 6/16/2003 sec-Butylbenzene 8.2 1.0 µg/L 1 6/16/2003 4-Isopropyltoluene < 1.0 1.0 µg/L 1 6/16/2003 n-Butylbenzene 2.5 1.0 μg/L 6/16/2003 330 50 6/17/2003 Naphthalene μg/L 10 Methyl tert-butyl ether < 2.0 2.0 μg/L 1 6/16/2003 (E625) POLYNUCLEAR AROMATIC HYDROCARBONS E625 Analyst: MT 2-Methylnaphthalene < 10 10 μg/L 6/18/2003 8:05:00 PM Acenaphthene 34 10 μg/L 6/18/2003 8:05:00 PM Acenaphthylene < 10 10 1 6/18/2003 8:05:00 PM μg/L Anthracene < 10 10 μg/L 1 6/18/2003 8:05:00 PM Benz(a)anthracene < 10 1 10 μg/L 6/18/2003 8:05:00 PM Benzo(a)pyrene < 10 10 µg/L 1 6/18/2003 8:05:00 PM < 10 1 Benzo(b)fluoranthene 10 μg/L 6/18/2003 8:05:00 PM Benzo(g,h,i)perylene < 10 10 μg/L 6/18/2003 8:05:00 PM Benzo(k)fluoranthene < 10 10 μg/L 1 6/18/2003 8:05:00 PM < 10 10 1 Chrysene µg/L 6/18/2003 8:05:00 PM Dibenz(a,h)anthracene 1 < 10 10 μg/L 6/18/2003 8:05:00 PM Dibenzofuran < 10 10 μg/L 1 6/18/2003 8:05:00 PM Fluoranthene < 10 10 1 6/18/2003 8:05:00 PM μg/L

10

10

10

10

10

μg/L

µg/L

μg/L

μg/L

μg/L

Qualifiers:

Fluorene

Pyrene

Naphthalene

Phenanthrene

indeno(1,2,3-cd)pyrene

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

< 10

< 10

< 10

< 10

< 10

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

6/18/2003 8:05:00 PM

New York State Electric & Gas Corporatio

NYSEG Norwich

Lab Order: 030610012

Date: 27-Jun-03

Project: NYSEG Norv

CLIENT:

Lab ID: 030610012-007 **Collection Date:** 6/9/2003

Client Sample ID: GW-01-14 Matrix: GROUNDWATER

| Analyses | Result | PQL Qu | al Units | DF | Date Analyzed |
|-------------------------|------------|---------|----------|----|----------------------|
| EPA 8021 STARS LIST | | SW8021I | 3 | | Analyst: SO |
| Benzene | 160 | 10 | μg/L | 20 | 6/17/2003 |
| Toluene | < 20 | 20 | μg/L | 20 | 6/17/2003 |
| Ethylbenzene | 630 | 20 | μg/L | 20 | 6/17/2003 |
| m,p-Xylene | 69 | 20 | μg/L | 20 | 6/17/2003 |
| o-Xylene | 240 | 20 | μg/L | 20 | 6/17/2003 |
| Isopropylbenzene | 60 | 20 | μg/L | 20 | 6/17/2003 |
| n-Propylbenzene | 23 | 20 | μg/L | 20 | 6/17/2003 |
| 1,3,5-Trimethylbenzene | 61 | 20 | μg/L | 20 | 6/17/2003 |
| tert-Butylbenzene | < 20 | 20 | μg/L | 20 | 6/17/2003 |
| 1,2,4-Trimethylbenzene | 330 | 20 | μg/L | 20 | 6/17/2003 |
| sec-Butylbenzene | 98 | 20 | μg/L | 20 | 6/17/2003 |
| 4-Isopropyltoluene | < 20 | 20 | μg/L | 20 | 6/17/2003 |
| n-Butylbenzene | 69 | 20 | μg/L | 20 | 6/17/2003 |
| Naphthalene | 2700 | 100 | μg/L | 20 | 6/17/2003 |
| Methyl tert-butyl ether | < 40 | 40 | μg/L | 20 | 6/17/2003 |
| POLYNUCLEAR AROMATIC HY | DROCARBONS | E625 | (E625) | ı | Analyst: MT |
| 2-Methylnaphthalene | 44 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Acenaphthene | 110 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Acenaphthylene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Anthracene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Benz(a)anthracene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Benzo(a)pyrene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Benzo(b)fluoranthene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Benzo(g,h,i)perylene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Benzo(k)fluoranthene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Chrysene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Dibenz(a,h)anthracene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Dibenzofuran | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Fluoranthene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Fluorene | 29 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Indeno(1,2,3-cd)pyrene | < 21 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Naphthalene | 290 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| Phenanthrene | 41 | 21 | μg/L | 2 | 6/19/2003 1:02:00 PM |
| | | | | | |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

Lab Order:

CLIENT:

New York State Electric & Gas Corporatio

Project:

NYSEG Norwich

030610012-008

-

030610012

Lab ID:

CDMD 1C

Collection Date: 6/9/2003

Matrix: GROUNDWATER

| Benzene 3.5 1.0 μg/L 2 6/18/2003 | Client Sample ID: SPMP-1S | | | Ma | atrix: GROU | NDWATER |
|--|---------------------------|------------|-------|------------|-------------|----------------------|
| Benzene 3.5 | Analyses | Result | PQL Q | Qual Units | DF | Date Analyzed |
| Toluene | EPA 8021 STARS LIST | | SW802 | :1B | | Analyst: SO |
| Ethylbenzene | Benzene | 3.5 | 1.0 | μg/L | 2 | 6/18/2003 |
| m,p-Xylene 4.3 2.0 µg/L 2 6/18/2003 o-Xylene 21 2.0 µg/L 2 6/18/2003 lsopropylbenzene 22.0 2.0 µg/L 2 6/18/2003 n-Propylbenzene 22.0 2.0 µg/L 2 6/18/2003 n-Propylbenzene 22.0 2.0 µg/L 2 6/18/2003 tert-Butylbenzene 111 2.0 µg/L 2 6/18/2003 tert-Butylbenzene 22.0 2.0 µg/L 2 6/18/2003 tert-Butylbenzene 313 2.0 µg/L 2 6/18/2003 sec-Butylbenzene 14 2.0 µg/L 2 6/18/2003 sec-Butylbenzene 14 2.0 µg/L 2 6/18/2003 sec-Butylbenzene 31 2.0 µg/L 2 6/18/2003 n-Butylbenzene 31 2 µg/L 1 6/18/2003 n-Butylbenzene 31 2 µg/L 1 6/18/2003 n-Butylbenzene 31 2 µg/L 1 6/18/2003 n-Butylbenzene 32 µg/L 1 6/18/2003 n-Butylbenzene 32 µg/L 1 6/18/2003 n-Butylbenzene 32 µg/L 1 6/18/2003 n-Butylbenzene 33 12 µg/L 1 6/18/2003 n-Butylbenzene 34 12 µg/L 1 6/18/2003 n-Butylbenzene 34 12 µg/L 1 6/18/2003 | Toluene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| o-Xylene 21 2.0 μg/L 2 6/18/2003 Isopropylbenzene < 2.0 | Ethylbenzene | 5.9 | 2.0 | μg/L | 2 | 6/18/2003 |
| Isopropylbenzene | m,p-Xylene | 4.3 | 2.0 | μg/L | 2 | 6/18/2003 |
| n-Propylbenzene < 2.0 2.0 μg/L 2 6/18/2003 1,3,5-Trimethylbenzene 11 2.0 μg/L 2 6/18/2003 1,2,4-Trimethylbenzene < 2.0 | o-Xylene | 21 | 2.0 | μg/L | 2 | 6/18/2003 |
| 1,3,5-Trimethylbenzene 11 2.0 μg/L 2 6/18/2003 tert-Butylbenzene < 2.0 | Isopropylbenzene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| tert-Butylbenzene < 2.0 2.0 µg/L 2 6/18/2003 1,2,4-Trimethylbenzene 13 2.0 µg/L 2 6/18/2003 sec-Butylbenzene 14 2.0 µg/L 2 6/18/2003 4-Isopropyltoluene 2.2 2.0 µg/L 2 6/18/2003 n-Butylbenzene 31 2.0 µg/L 2 6/18/2003 Naphthalene 140 10 µg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 4.0 µg/L 2 6/18/2003 POLYNUCLEAR AROMATIC HYDROCARBONS E625 (E625) Analyst 2-Methylnaphthalene 33 12 µg/L 1 6/18/2003 9/45:0 Acenaphthene 280 12 E µg/L 1 6/18/2003 9/45:0 Acenaphthylene 37 12 µg/L 1 6/18/2003 9/45:0 Anthracene 120 12 µg/L 1 6/18/2003 9/45:0 Benzo(a)anthracene 93 12 µg/L 1 6/18/2003 9/45:0 Benzo(a)pyrene 93 12 µg/L 1 6/18/2003 9/45:0 Benzo(b)fluoranthene 49 12 µg/L 1 6/18/2003 9/45:0 Benzo(b)fluoranthene 55 12 µg/L 1 6/18/2003 9/45:0 Benzo(b)fluoranthene 610 12 µg/L 1 6/18/2003 9/45:0 Chrysene 100 12 µg/L 1 6/18/2003 9/45:0 Dibenz(a,h)anthracene 612 12 µg/L 1 6/18/2003 9/45:0 Dibenzofuran 16 12 µg/L 1 6/18/2003 9/45:0 Dibenzofuran 16 12 µg/L 1 6/18/2003 9/45:0 Fluorene 120 12 µg/L 1 6/18/2003 9/45:0 Fluorene 120 12 µg/L 1 6/18/2003 9/45:0 Indeno(1,2,3-cd)pyrene 38 12 µg/L 1 6/18/2003 9/45:0 Indeno(1,2,3-cd)pyrene 38 12 µg/L 1 6/18/2003 9/45:0 | n-Propylbenzene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| 1,2,4-Trimethylbenzene 13 2.0 µg/L 2 6/18/2003 sec-Butylbenzene 14 2.0 µg/L 2 6/18/2003 4-Isopropyltoluene 2.2 2.0 µg/L 2 6/18/2003 n-Butylbenzene 31 2.0 µg/L 2 6/18/2003 n-Butylbenzene 31 2.0 µg/L 2 6/18/2003 Naphthalene 140 10 µg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 4.0 µg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 4.0 µg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 4.0 µg/L 1 6/18/2003 9:45:0 Acenaphthene 33 12 µg/L 1 6/18/2003 9:45:0 Acenaphthene 33 12 µg/L 1 6/18/2003 9:45:0 Acenaphthylene 37 12 µg/L 1 6/18/2003 9:45:0 Acenaphthylene 37 12 µg/L 1 6/18/2003 9:45:0 Acenaphthylene 120 12 µg/L 1 6/18/2003 9:45:0 Benz(a)anthracene 120 12 µg/L 1 6/18/2003 9:45:0 Benz(a)pyrene 93 12 µg/L 1 6/18/2003 9:45:0 Benzo(b)fluoranthene 49 12 µg/L 1 6/18/2003 9:45:0 Benzo(a)pyrene 39 12 µg/L 1 6/18/2003 9:45:0 Benzo(b)fluoranthene 49 12 µg/L 1 6/18/2003 9:45:0 Benzo(g,h,i)perylene 39 12 µg/L 1 6/18/2003 9:45:0 Benzo(k)fluoranthene 55 12 µg/L 1 6/18/2003 9:45:0 Benzo | 1,3,5-Trimethylbenzene | 11 | 2.0 | μg/L | 2 | 6/18/2003 |
| sec-Butylbenzene 14 2.0 μg/L 2 6/18/2003 4-Isopropyltoluene 2.2 2.0 μg/L 2 6/18/2003 n-Butylbenzene 31 2.0 μg/L 2 6/18/2003 Naphthalene 140 10 μg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 | tert-Butylbenzene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| 4-Isopropyltoluene 2.2 2.0 μg/L 2 6/18/2003 n-Butylbenzene 31 2.0 μg/L 2 6/18/2003 Naphthalene 140 10 μg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 | 1,2,4-Trimethylbenzene | 13 | 2.0 | μg/L | 2 | 6/18/2003 |
| n-Butylbenzene 31 2.0 μg/L 2 6/18/2003 Naphthalene 140 10 μg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 | sec-Butylbenzene | 14 | 2.0 | μg/L | 2 | 6/18/2003 |
| Naphthalene 140 10 μg/L 2 6/18/2003 Methyl tert-butyl ether < 4.0 4.0 μg/L 2 6/18/2003 POLYNUCLEAR AROMATIC HYDROCARBONS E625 (E625) Analyst 2-Methylnaphthalene 33 12 μg/L 1 6/18/2003 9:45:00 Acenaphthylene 37 12 μg/L 1 6/18/2003 9:45:00 Anthracene 120 12 μg/L 1 6/18/2003 9:45:00 Benz(a)anthracene 120 12 μg/L 1 6/18/2003 9:45:00 Benzo(a)pyrene 93 12 μg/L 1 6/18/2003 9:45:00 Benzo(b)fluoranthene 49 12 μg/L 1 6/18/2003 9:45:00 Benzo(g,h,i)perylene 39 12 μg/L 1 6/18/2003 9:45:00 Benzo(k)fluoranthene 55 12 μg/L 1 6/18/2003 9:45:00 Chrysene 100 12 μg/L 1 6/18/2003 9:45:00 Dibenz(a,h)anthrac | 4-Isopropyltoluene | 2.2 | 2.0 | μg/L | 2 | 6/18/2003 |
| Methyl tert-butyl ether < 4.0 μg/L 2 6/18/2003 POLYNUCLEAR AROMATIC HYDROCARBONS E625 (E625) Analyst 2-Methylnaphthalene 33 12 μg/L 1 6/18/2003 9:45:0 Acenaphthene 280 12 Ε μg/L 1 6/18/2003 9:45:0 Acenaphthylene 37 12 μg/L 1 6/18/2003 9:45:0 Anthracene 120 12 μg/L 1 6/18/2003 9:45:0 Benz(a)anthracene < 12 | n-Butylbenzene | 31 | 2.0 | μg/L | 2 | 6/18/2003 |
| POLYNUCLEAR AROMATIC HYDROCARBONS E625 (E625) Analyst 2-Methylnaphthalene 33 12 μg/L 1 6/18/2003 9:45:0 Acenaphthene 280 12 E μg/L 1 6/18/2003 9:45:0 Acenaphthylene 37 12 μg/L 1 6/18/2003 9:45:0 Anthracene 120 12 μg/L 1 6/18/2003 9:45:0 Benz(a)anthracene < 12 | Naphthalene | 140 | 10 | μg/L | 2 | 6/18/2003 |
| 2-Methylnaphthalene 33 12 μg/L 1 6/18/2003 9:45:0 Acenaphthene 280 12 E μg/L 1 6/18/2003 9:45:0 Acenaphthylene 37 12 μg/L 1 6/18/2003 9:45:0 Anthracene 120 12 μg/L 1 6/18/2003 9:45:0 Benz(a)anthracene < 12 | Methyl tert-butyl ether | < 4.0 | 4.0 | μg/L | 2 | 6/18/2003 |
| Acenaphthene 280 12 E μg/L 1 6/18/2003 9:45:0 Acenaphthylene 37 12 μg/L 1 6/18/2003 9:45:0 Anthracene 120 12 μg/L 1 6/18/2003 9:45:0 Benz(a)anthracene < 12 | POLYNUCLEAR AROMATIC HY | DROCARBONS | E62 | 5 (E62 | 5) | Analyst: MT |
| Acenaphthylene 37 12 μg/L 1 6/18/2003 9:45:0 Anthracene 120 12 μg/L 1 6/18/2003 9:45:0 Benz(a)anthracene < 12 | 2-Methylnaphthalene | 33 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Anthracene 120 12 μg/L 1 6/18/2003 9:45:0 Benz(a)anthracene < 12 | Acenaphthene | 280 | 12 | E μg/L | 1 | 6/18/2003 9:45:00 PM |
| Benz(a)anthracene < 12 | Acenaphthylene | 37 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Benzo(a)pyrene 93 12 μg/L 1 6/18/2003 9:45:0 Benzo(b)fluoranthene 49 12 μg/L 1 6/18/2003 9:45:0 Benzo(g,h,i)perylene 39 12 μg/L 1 6/18/2003 9:45:0 Benzo(k)fluoranthene 55 12 μg/L 1 6/18/2003 9:45:0 Chrysene 100 12 μg/L 1 6/18/2003 9:45:0 Dibenz(a,h)anthracene < 12 | Anthracene | 120 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Benzo(b)fluoranthene 49 12 μg/L 1 6/18/2003 9:45:0 Benzo(g,h,i)perylene 39 12 μg/L 1 6/18/2003 9:45:0 Benzo(k)fluoranthene 55 12 μg/L 1 6/18/2003 9:45:0 Chrysene 100 12 μg/L 1 6/18/2003 9:45:0 Dibenz(a,h)anthracene < 12 | Benz(a)anthracene | < 12 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Benzo(g,h,i)perylene 39 12 μg/L 1 6/18/2003 9:45:0 Benzo(k)fluoranthene 55 12 μg/L 1 6/18/2003 9:45:0 Chrysene 100 12 μg/L 1 6/18/2003 9:45:0 Dibenz(a,h)anthracene < 12 | Benzo(a)pyrene | 93 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Benzo(k)fluoranthene 55 12 μg/L 1 6/18/2003 9:45:0 Chrysene 100 12 μg/L 1 6/18/2003 9:45:0 Dibenz(a,h)anthracene < 12 | Benzo(b)fluoranthene | 49 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Chrysene 100 12 μg/L 1 6/18/2003 9:45:0 Dibenz(a,h)anthracene < 12 | Benzo(g,h,i)perylene | 39 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Dibenz(a,h)anthracene < 12 12 μg/L 1 6/18/2003 9:45:0 Dibenzofuran 16 12 μg/L 1 6/18/2003 9:45:0 Fluoranthene 190 12 μg/L 1 6/18/2003 9:45:0 Fluorene 120 12 μg/L 1 6/18/2003 9:45:0 Indeno(1,2,3-cd)pyrene 38 12 μg/L 1 6/18/2003 9:45:0 Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Benzo(k)fluoranthene | 55 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Dibenzofuran 16 12 μg/L 1 6/18/2003 9:45:0 Fluoranthene 190 12 μg/L 1 6/18/2003 9:45:0 Fluorene 120 12 μg/L 1 6/18/2003 9:45:0 Indeno(1,2,3-cd)pyrene 38 12 μg/L 1 6/18/2003 9:45:0 Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Chrysene | 100 | 12 | · · | 1 | 6/18/2003 9:45:00 PM |
| Fluoranthene 190 12 μg/L 1 6/18/2003 9:45:0 Fluorene 120 12 μg/L 1 6/18/2003 9:45:0 Indeno(1,2,3-cd)pyrene 38 12 μg/L 1 6/18/2003 9:45:0 Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Dibenz(a,h)anthracene | < 12 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Fluoranthene 190 12 μg/L 1 6/18/2003 9:45:0 Fluorene 120 12 μg/L 1 6/18/2003 9:45:0 Indeno(1,2,3-cd)pyrene 38 12 μg/L 1 6/18/2003 9:45:0 Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Dibenzofuran | 16 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Indeno(1,2,3-cd)pyrene 38 12 μg/L 1 6/18/2003 9:45:0 Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Fluoranthene | 190 | 12 | | 1 | 6/18/2003 9:45:00 PM |
| Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Fluorene | 120 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Naphthalene 73 12 μg/L 1 6/18/2003 9:45:0 | Indeno(1,2,3-cd)pyrene | 38 | 12 | μg/L | 1 | 6/18/2003 9:45:00 PM |
| Phenanthrene 220 12 E μg/L 1 6/18/2003 9:45:0 | Naphthalene | 73 | 12 | | 1 | 6/18/2003 9:45:00 PM |
| | Phenanthrene | 220 | 12 | E μg/L | 1 | 6/18/2003 9:45:00 PM |
| Pyrene 250 12 E μg/L 1 6/18/2003 9:45:0 | Pyrene | 250 | 12 | E μg/L | 1 | 6/18/2003 9:45:00 PM |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT: Project:

New York State Electric & Gas Corporatio

NYSEG Norwich

Lab Order:

030610012

Lab ID:

030610012-009

Collection Date: 6/9/2003

| Client Sample ID: SPMP-2S | | | M | atrix: GROU | NDWATER |
|---------------------------|------------|-----|------------|-------------|----------------------|
| Analyses | Result | PQL | Qual Units | DF | Date Analyzed |
| EPA 8021 STARS LIST | | SW8 | 021B | | Analyst: SO |
| Benzene | < 1.0 | 1.0 | μg/L | 2 | 6/18/2003 |
| Toluene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| Ethylbenzene | 50 | 2.0 | μg/L | 2 | 6/18/2003 |
| m,p-Xylene | 3.3 | 2.0 | μg/L | 2 | 6/18/2003 |
| o-Xylene | 43 | 2.0 | μg/L | 2 | 6/18/2003 |
| Isopropylbenzene | 7.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| n-Propylbenzene | 2.8 | 2.0 | μg/L | 2 | 6/18/2003 |
| 1,3,5-Trimethylbenzene | 3.2 | 2.0 | μg/L | 2 | 6/18/2003 |
| tert-Butylbenzene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| 1,2,4-Trimethylbenzene | 82 | 2.0 | μg/L | 2 | 6/18/2003 |
| sec-Butylbenzene | 26 | 2.0 | μg/L | 2 | 6/18/2003 |
| 4-Isopropyltoluene | < 2.0 | 2.0 | μg/L | 2 | 6/18/2003 |
| n-Butylbenzene | 8.5 | 2.0 | μg/L | 2 | 6/18/2003 |
| Naphthalene | 59 | 10 | μg/L | 2 | 6/18/2003 |
| Methyl tert-butyl ether | < 4.0 | 4.0 | μg/L | 2 | 6/18/2003 |
| POLYNUCLEAR AROMATIC HY | DROCARBONS | E6 | 25 (E6: | 25) | Analyst: MT |
| 2-Methylnaphthalene | 150 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Acenaphthene | 86 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Acenaphthylene | 37 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Anthracene | 30 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Benz(a)anthracene | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Benzo(a)pyrene | 12 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Benzo(b)fluoranthene | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Benzo(g,h,i)perylene | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Benzo(k)fluoranthene | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Chrysene | 14 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Dibenz(a,h)anthracene | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Dibenzofuran | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Fluoranthene | 34 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Fluorene | 44 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Indeno(1,2,3-cd)pyrene | < 11 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Naphthalene | 47 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Phenanthrene | 97 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| Pyrene | 48 | 11 | μg/L | 1 | 6/19/2003 2:43:00 PM |
| | | | | | |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Lab Order:

030610012

Project:

Lab ID:

NYSEG Norwich

030610012-010

Collection Date: 6/9/2003

| Client Sample ID: GW01-15S | | | Ma | trix: GROU | NDWATER |
|----------------------------|------------|-------|------------|------------|----------------------|
| Analyses | Result | PQL (| Qual Units | DF | Date Analyzed |
| EPA 8021 STARS LIST | | SW80: | 21B | | Analyst: SC |
| Benzene | 14 | 2.5 | μg/L | 5 | 6/18/2003 |
| Toluene | < 5.0 | 5.0 | μg/L | 5 | 6/18/2003 |
| Ethylbenzene | 76 | 5.0 | μg/L | 5 | 6/18/2003 |
| m,p-Xylene | 15 | 5.0 | μg/L | 5 | 6/18/2003 |
| o-Xylene | 40 | 5.0 | μg/L | 5 | 6/18/2003 |
| Isopropylbenzene | < 5.0 | 5.0 | μg/L | 5 | 6/18/2003 |
| n-Propylbenzene | < 5.0 | 5.0 | μg/L | 5 | 6/18/2003 |
| 1,3,5-Trimethylbenzene | 12 | 5.0 | μg/L | 5 | 6/18/2003 |
| tert-Butylbenzene | < 5.0 | 5.0 | μg/L | 5 | 6/18/2003 |
| 1,2,4-Trimethylbenzene | 43 | 5.0 | μg/L | 5 | 6/18/2003 |
| sec-Butylbenzene | 16 | 5.0 | μg/L | 5 | 6/18/2003 |
| 4-isopropyltoluene | < 5.0 | 5.0 | μg/L | 5 | 6/18/2003 |
| n-Butyibenzene | 10 | 5.0 | μg/L | 5 | 6/18/2003 |
| Naphthalene | 400 | 25 | μg/L | 5 | 6/18/2003 |
| Methyl tert-butyl ether | < 10 | 10 | μg/L | 5 | 6/18/2003 |
| POLYNUCLEAR AROMATIC HY | DROCARBONS | E62 | 5 (E62 | 5) | Analyst: MT |
| 2-Methylnaphthalene | 18 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Acenaphthene | 77 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Acenaphthylene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Anthracene | 14 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Benz(a)anthracene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Benzo(a)pyrene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Benzo(b)fluoranthene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Benzo(g,h,i)perylene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Benzo(k)fluoranthene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PN |
| Chrysene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Dibenz(a,h)anthracene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Dibenzofuran | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Fluoranthene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Fluorene | 22 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Indeno(1,2,3-cd)pyrene | < 10 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Naphthalene | 49 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Phenanthrene | 24 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PM |
| Pyrene | 13 | 10 | μg/L | 1 | 6/19/2003 3:34:00 PN |

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 27-Jun-03

CLIENT:

New York State Electric & Gas Corporatio

Project:

NYSEG Norwich

Lab Order:

030610012

Lab ID:

030610012-011

Collection Date: 6/9/2003

Client Sample ID: Trip Blank Lot#069

Matrix: WATER

| Analyses | Result | PQL Qua | Units | DF | Date Analyzed | |
|-------------------------|--------|---------|-------|----|--------------------|--|
| EPA 8021 STARS LIST | | SW8021B | | | Analyst: SO | |
| Benzene | < 0.5 | 0.5 | μg/L | 1 | 6/17/2003 | |
| Toluene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| Ethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| m,p-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| o-Xylene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| Isopropylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| n-Propylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| 1,3,5-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| tert-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| 1,2,4-Trimethylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| sec-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| 4-Isopropyltoluene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| n-Butylbenzene | < 1.0 | 1.0 | μg/L | 1 | 6/17/2003 | |
| Naphthalene | < 5.0 | 5.0 | μg/L | 1 | 6/17/2003 | |
| Methyl tert-butyl ether | < 2.0 | 2.0 | μg/L | 1 | 6/17/2003 | |

R - RPD outside accepted recovery limits

NYSEG-John Ruspantini

314 North Pearl Street Albany, New York 12207 518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

| Environmental Service | es. Inc. | ull service analytical | research labo | ratory of | fering s | solutio | ns to e | nvironmer | ntal concer | าร |
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| Client Name: | | Address: | | | | | | | | |
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| Send Report To: Schol Skaping · N45E(Client Phone No: 518-783-1956 Project Name N45E(PO Number: | | Project Name (Location | ne (Location) Nowch Nf. | | Hames | | | | | |
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| | -783-875 | | _ | | | 5 6 | W K | Vila | _ | |
| AES Sample Number | CI | ient cation & Location | Date Sampled | Time A=a.m. P=p.m. | Sampi Matrix | e Type | Number of Cont's | | | ıd |
| 001 | 6W-92- | <u>بر</u> | 6/5/03 | 130 E | Cay | X | 13 | | | رو مر |
| 02 pl | aw 98-08 | ~ | | 13N A | | | | | | |
| 003_ | Coliforts C | | | 1320 A | | | | | | |
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| 004 | CW5211D | ns | | 1330 A | | | \coprod | | <u> </u> | , j |
| | CW 12 11 B | MSP | | /330 A | | | 11_ | | | • |
| 005 | 6w91-5 | , | | 1345 P | | | 1 | | | |
| 00% | Cu91-6 | · | | 1350 P | | | | | <u> </u> | |
| 007 | 6w01-14 | | | 190 P | | | ╽ | | | |
| 008 | SPMp-15 | | | 14/CP | | _ | | - | | |
| 009 | 5pmp -25 | | 1, | 1420 P | | - | - | | | |
| 010 | 6W01-155 | | W | 1430 P | V | | \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \ | | | |
| 01/_ | TRIP BLANK | LOT # 069 | | P | WA | - X | 2 | 4 | <u>-</u> | |
| Turnaround Time Reques | <u> </u> | Snecial to | structione/Remai | P | | | | | | |
| □ 1 Day □ 3 C | | | | | | | | | | |
| □ 2 Day 5 D | | | 03 | 0610 | 012 | L | | | | |
| CC Report To: | | | | | | | | | | |
| Relinquished by: (Signatu | ure) | Received | by: (Signature) | | | | | | Date/Time | |
| Relinggished by (Signatu | ure) | Received | for Laboratory by | |) | | | c/il | Date/Time | |
| TEMPERATURE PRO Ambient of Chilled | | PERLY PRESERVED | | | RECEIVED WITHIN HOLDING TIMES | | | | | |
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- Neither Adirondack Environmental Services, Inc., nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of Adirondack Environmental Services, Inc.'s performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against Adirondack Environmental Services, Inc. arising out of its work.
- (b) All claims made must be in writing within forty-five (45) days after delivery of the Adirondack Environmental Services, Inc. report regarding said work or such claim shall be deemed as irrevocably waived.
- Adirondack Environmental Services, Inc. reports are submitted in writing (c) and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an Adirondack Environmental Services, Inc. report by other than our customer does not constitute a representation of Adirondack Environmental Services, Inc. as to the accuracy of the contents thereof.
- (d) In no event shall Adirondack Environmental Services, Inc., its employees agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.
- No deviation from the terms set forth herein shall bind Adirondack (e) **Environmental Services, Inc.** unless in writing and signed by a Director of Adirondack Environmental Services, Inc.
- Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and Adirondack Environmental Services, Inc. is not responsible for the accuracy of this information.

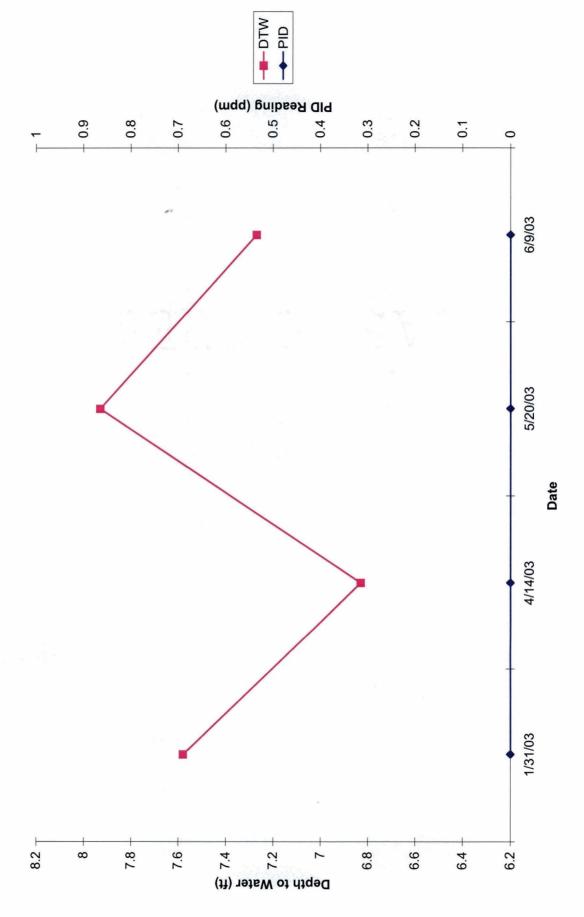
| APPENDIX B SITE MAP |
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Page 1

Depth to Water (GW91-6) Versus Blower Effluent PID Readings (Leg 4)



Page 1

M:/195reps/Nyseg Norwich/Chart 2



