Stearns & Wheler Companies

50th Anniversary

April 2, 2001

FILE: S\CITY OF NEWBURGH - WWTP EXPANSION

Mr. James Osborne
Town Engineer
Town of Newburgh
308 Gardnertown Road
Newburgh, NY 12550

Re: Summary of findings
Newburgh WWTF Subsurface Investigation
S&W No. L10030.0

Dear Mr. Osborne,

This letter report summarizes field activities, laboratory data, and findings in connection with the recently completed soil and groundwater investigation at the Newburgh Water Pollution Control Facility (the Site). The investigation was conducted to assess environmental conditions at the proposed location of construction related to an expansion of the Newburgh Waste Water Treatment Facility (WWTF). Stearns & Wheler observed the field investigation, which was completed under the direction of Blasland, Bouck, & Lee (BB&L).

INTRODUCTION

The Newburgh WWTF is located along River Street in the City of Newburgh, NY (Figure 1). The WWTF is located approximately 100 feet east and down gradient of a former manufactured gas plant (MGP) operation, which is currently owned by Central Hudson Electric and Gas (Central Hudson). Environmental impacts related to the MGP site are currently being investigated by Central Hudson under an October 1995 Order on Consent with the NYSDEC. Information from soil boring and groundwater data, collected as part of a Remedial Investigation, indicated that non-aqueous phase liquid (NAPL) is present in the subsurface beneath the WWTF, and groundwater sample analyses have indicated that monitoring wells contain elevated levels of volatile and semi-volatile organic compounds (VOCs and SVOCs, respectively) across the site.

Due to concerns that construction of the proposed WWTF expansion would affect the ability to remediate MGP impacts, the Town of Newburgh retained Stearns & Wheler to:

1. Investigate the occurrence of NAPL beneath the proposed expansion area.
2. Evaluate the potential to recover NAPL within the expansion area, since this could impede construction.
3. Determine if concentrations of VOCs and SVOCs in shallow soils and groundwater might require special construction practices (e.g. treatment of excavation groundwater, disposal of excavated soils) relating to the planned WWTF expansion.

The following scope of work was completed to address these questions:

Stearns & Wheler, LLC • S&W Services, Inc. • S&W Redevelopment, LLC

One Remington Park Drive • Cazenovia, New York 13035 • (315) 655-4949 • fax: (315) 655-5459

METHODS

SOIL BORINGS. Stearns & Wheler observed the installation of six (6) soil borings (TB-70 through TB-75) adjacent and north of the WWTF primary settling tanks (Figure 2), in the area of proposed construction. This work was completed under the direction of BB&L, who is conducting an investigation on behalf of Central Hudson relating to the former MGP site. Stearns & Wheler's role was to observe the work on behalf of the Town, and collect supplemental samples that will allow for the assessment of environmental conditions within the proposed WWTF construction zone, which is the upper 15 feet (approximately) of the subsurface. Borings were initially advanced to a depth of 18 feet, so that groundwater samples could be collected from appropriate locations. Following the sample collection, borings were continued to depths of up to 36 feet. Soil borings were completed by driving a 2-inch split spoon sampling device with a tractor-mounted geoprobe®. Soil samples were collected continuously, described by a Stearns & Wheler geologist, placed into containers and screened with a PID for VOCs.

SAMPLING. Groundwater samples were collected from soil borings TB-71, TB-72, TB-73, TB-74, and TB-75, in order to determine whether special handling and treatment of water might be required during the planned construction. Groundwater samples were collected by lowering a ½-inch microbailer into the open boring and removing a volume of water. The water was then put into appropriate laboratory containers, placed in an ice filled cooler, and sent to a New York State certified laboratory to be analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and semi-volatile organic compounds (SVOCs).

One composite soil sample was collected from boring TB-75 and sent to a New York State certified laboratory to undergo a full TCLP analysis, to determine whether excavated soils might require special handling or disposal. The sample was a composite of the upper 16 feet of the boring.

FINDINGS

Appendix A contains Tables 1 through 2, which provide a summary of laboratory analytical data. Soil boring logs can be found in Appendix B.

Soils across the area are generally homogenous in nature. The upper 16 feet of each boring consisted of brown sandy silt fill. At depths greater than 16 feet, alternating layers of poor to well sorted sands and gravels were generally observed with occasional silt. Field observations indicated that NAPL (free phase tar) occurred in narrow (<3-inch) seams within the coarse sand and gravel layers beyond approximately 16 feet deep.

Within the upper 15 to 16 feet, screening of soils with a PID did not identify significant organic vapors in the construction zone. However, at greater depths, VOC vapors were present and generally coincided with layers in which free phase coal tar was observed.

Groundwater samples collected above 18 feet deep did not contain detectable concentrations of VOCs. The groundwater samples did contain detectable levels of SVOCs. Concentrations were generally low, however, with individual compounds present at less than 10 parts per billion (ppb). With the exception of benzo(b)fluoranthene, which was present in concentrations that ranged from 2 to 5 ppb, none of the detected SVOCs exceeded Class GA standards or guidance values.

The composite soil sample that was collected for TCLP analysis, did not contain detectable concentrations of target parameters.

CONCLUSIONS

The observation of narrow NAPL seams in the sand and gravel zone below the proposed WWTF expansion area suggests that migration of NAPL has occurred. This is currently under investigation by BB&L. Based on verbal communication between Stearns & Wheler and NYSDEC representatives, it appears that NYSDEC is confident that NAPL can be recovered, and piezometers installed at the WWTF indicate that NAPL collection via piezometers is a possibility. To assess actual recoverability of NAPL using piezometers, additional monitoring of the piezometers over an appropriate duration would be required, perhaps 3 months, and we understand that BB&L is currently monitoring the recently installed piezometers for this reason. Since NAPL is apparently mobile, it should be possible to recover NAPL outside of the proposed expansion area, which will allow for the completion of the WWTF expansion.

Regarding construction issues relating to the WWTF expansion, the groundwater and soils within the upper 15 to 18 feet do not appear to have been affected by the presence of NAPL in the underlying sand and gravel. This conclusion is based on the collection and analysis of five (5) groundwater samples and one soil sample, from within the proposed expansion footprint. Laboratory analysis of groundwater and soil samples indicates that no special handling, treatment, or disposal of excavated materials should be required.

If you have any questions regarding the finding presented above, please feel free to call.

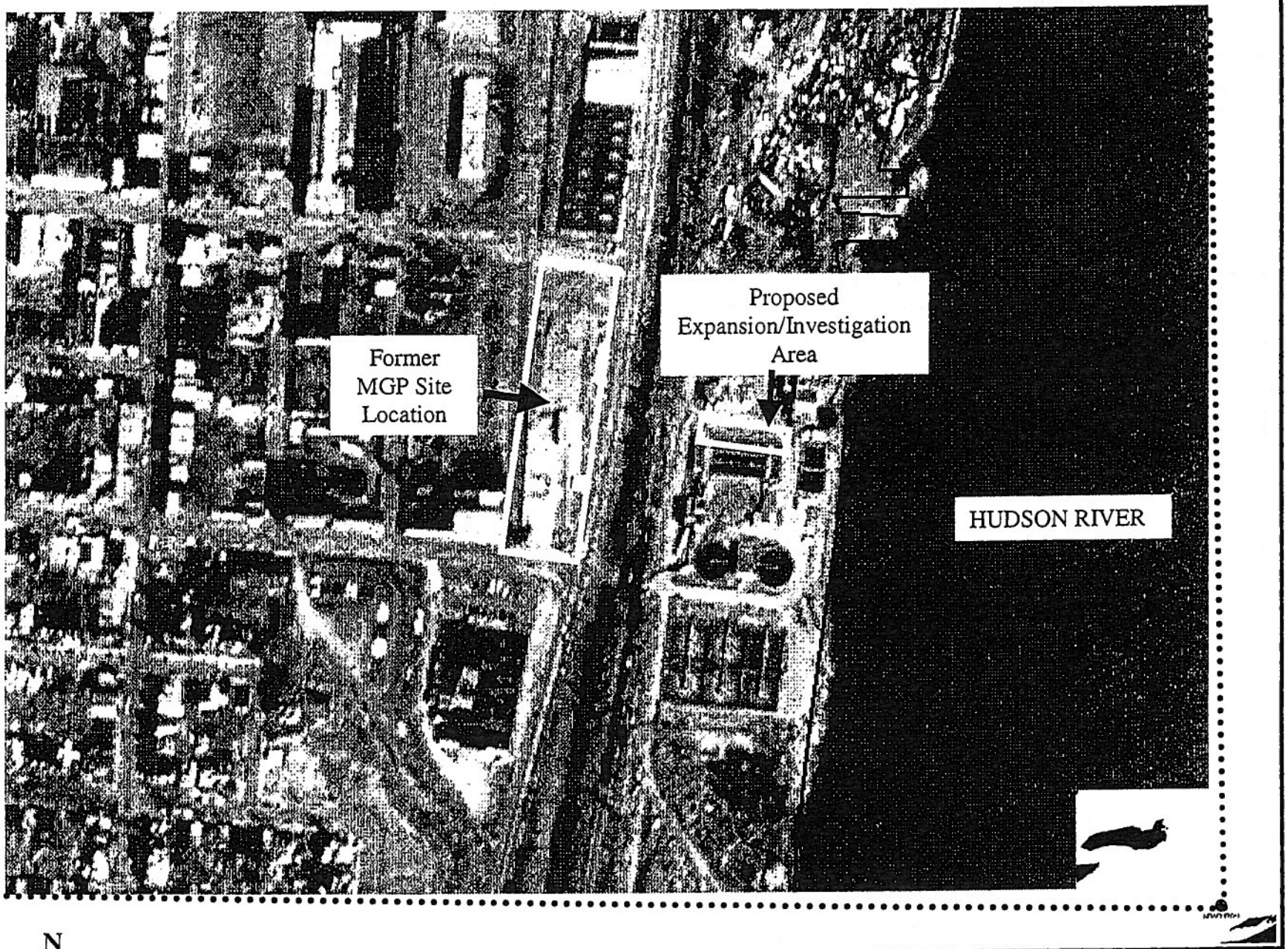
Very truly yours,

David W. Stoner, CPG
Executive Vice President

attachments

DWS/lsj

FIGURES



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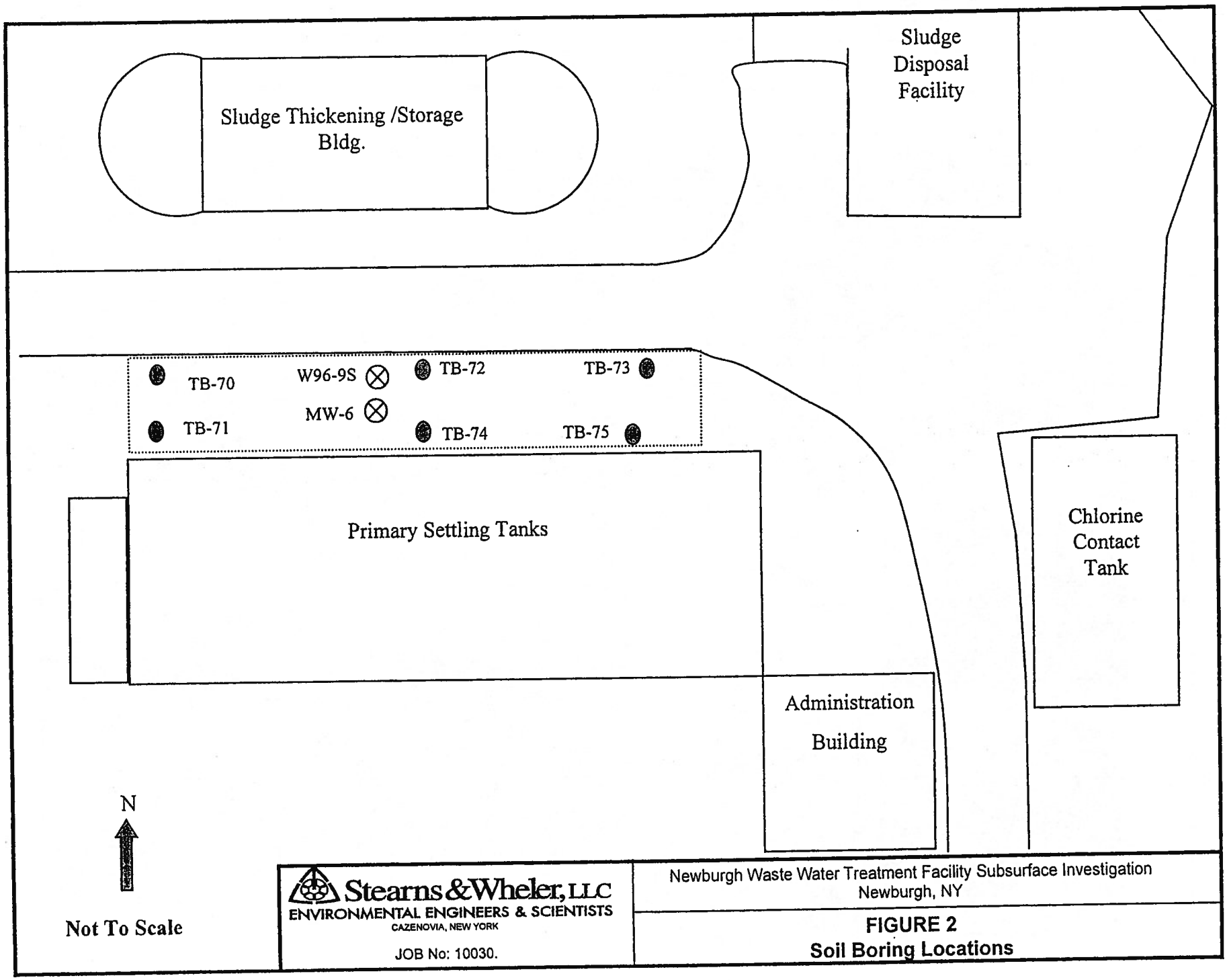
ENVIRONMENTAL ENGINEERS & SCIENTISTS
CAZENOVIA, NEW YORK

JOB No: 10030.

Newburgh Waste Water Treatment Facility Subsurface Investigation
Newburgh, New York

FIGURE 1
SITE LOCATION



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Newburgh Waste Water Treatment Facility Subsurface Investigation
Newburgh, NY

FIGURE 2
Soil Boring Locations

APPENDICES

APPENDIX A

ANALYTICAL DATA SUMMARY TABLES

Table 1
Town of Newburgh
Waste Water Treatment Facility Expansion Area Subsurface Investigation
Groundwater Analytical Results
March 2001

Volatile Organic Compounds

Compound (ug/l)	Std.	Std.	TB-72	TB-73	TB-74	TB-75
Benzene	1	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND	ND

Polyaromatic Hydrocarbons

Compound (ug/l)	Std.	TB-71	TB-72	TB-73	TB-74	TB-75
Acenaphthylene		ND	ND	ND	ND	ND
Acenaphthene	20G	ND	ND	ND	ND	ND
Anthracene	50G	ND	ND	ND	ND	ND
Benzo(a)anthracene	.002G	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	.002G	ND	ND	ND	ND	ND
Benzo(a)pyrene		1.98	ND	ND	ND	ND
Benzo(ghi)perylene		3.25	ND	ND	ND	ND
Chrysene	.002G	1.89	ND	ND	ND	ND
Dibenz(a,h)anthracene		ND	ND	ND	ND	ND
Fluoranthene	50G	ND	ND	1.92	ND	ND
Fluorene	50G	4.77	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	.002G	ND	ND	ND	ND	ND
Napthalene	10G	2.32	8.26	ND	ND	1.63
Phenanthrene	50G	ND	ND	ND	ND	ND
Pyrene	50G	4.33	ND	1.7	ND	ND
Benzo(B)fluoranthene	.002G	5.11	ND	2.28	2.8	2.22
2-Chloronapthalene	10G	ND	ND	ND	ND	ND

ND- indicates that the concentrations were not present above laboratory detection limits.
Blank cell indicates no groundwater standard is available.
G-indicates a NYSDEC groundwater guidance level.

Table 2
Town of Newburgh
Waste Water Treatment Facility Expansion Area Subsurface Investigation
TCLP Analysis Results
March 2001

Compound (mg/L)	Units	Regulatory Level[1]	TB-75
TCLP Volatiles			
Benzene	mg/l	0.5	<0.10
Carbon Tetrachloride	mg/l	0.5	<0.10
Chlorobenzene	mg/l	100	<0.10
Chloroform	mg/l	6	<0.10
1,2-Dichloroethane	mg/l	0.5	<0.10
1,1-Dichloroethylene	mg/l	0.7	<0.10
2-Butanone	mg/l		<0.10
Tetrachloroethylene	mg/l	0.7	<0.10
Trichloroethylene	mg/l	0.5	<0.10
Vinyl Chloride	mg/l	0.2	<0.10
1,4-Dichlorobenzene	mg/l	7.5	<0.10
TCLP Semi Volatiles			
Pyridine	mg/l	5	<0.050
Pentachlorophenol	mg/l	100	<0.050
Nitrobenzene	mg/l	2	<0.050
Hexachloroethane	mg/l	3	<0.050
Hexachlorobutadiene	mg/l	0.5	<0.050
Hexachlorobenzene	mg/l	0.13	<0.050
2,4-Dinitrotoluene	mg/l	0.13	<0.050
Total Cresol	mg/l	200	<0.050
2,4,5-Trichlorophenol	mg/l	400	<0.050
2,4,6-Trichlorophenol	mg/l	2	<0.050
Hazrdous Waste Characteristics			
Corrosivity (pH) Solid	corrosive	<2/>12.5	<10
CN reactivity	mg/kg	NA	<1.0
Flashpoint	degrees F	<140	>150
pH	std. units	NA	7.4
Sulfide Reactivity	mg/kg	NA	<50

Compound (mg/L)	Units	Regulatory Level[1]	TB-75
TCLP Metals			
Arsenic	mg/l	5	<1.0
Barium	mg/l	100	<2.0
Cadmium	mg/l	1	<0.05
Chromium	mg/l	5	<0.10
Lead	mg/l	5	<0.50
Mercury	mg/l	0.2	<0.02
Selenium	mg/l	1	<1.0
Silver	mg/l	5	<0.10
TCLP Herbicides			
2,4- D	mg/l	10	<0.010
2,4,5-TP	mg/l	1	<0.010
TCLP Pesticides			
Chlordane	mg/l	0.03	<0.020
Endrin	mg/l	0.02	<0.005
Heptachlor	mg/l	0.008	<0.005
Heptachlor epoxide	mg/l	0.008	<0.005
Methoxychlor	mg/l	10	<0.005
Toxaphene	mg/l	0.5	<0.020
Lindane	mg/l	0.4	<0.005

[1] Regulatory Level from 6 NYCRR PART 371.3
Blank cell indicates no regulatory level is available.

APPENDIX B

SOIL BORING LOGS

Boring/ Well ID: TB-70

Project Name:	Newburgh MGP
Job. No.	10030.20.6601
Start Date & Time:	2/19/01; 12:35 PM
Finish Date & Time:	2/19/01; 2:40 PM
Drilling Co.:	Parratt Wolff
Driller:	Doug and Jeff
S&W Inspector:	DSS
Drill Rig Type:	Tractor-mounted Geoprobe
Drilling Method:	Geoprobe borings
Weather:	sunny, cold/dry; 40F

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1							grass, silty sand, some clay	1	
2		0		24				2	
3								3	
4		0.1		24			brown silty sand, some clay, brick fragments (FILL)	4	
5								5	
6		0		2			brown sand, some silt, rock fragments (FILL)	6	
7								7	
8		0		3			brown sitly sand; FILL	8	
9								9	
10		0		12			gray/brown clayey SILT; low density and plasticity	10	
11								11	
12		0.5		12			brown, fine-grained silt; f/c silty SAND	12	
13								13	
14		0.4						14	
15								15	
16		0		12			wet, gray coarse SAND, some gravel (FILL)	16	
17								17	
18		0.5		3			wet gray silty SAND; slight odor detected	18	
19								19	
20		51.5		12			gray sand and GRAVEL; free product (Coal Tar)	20	
21							Tar orange/brown w/ strong MGP odor	21	
22		73.6		36				22	
23							gray coarse sand and gravel. No apparent impacts	23	
24		748		24				24	
25								25	
26		742		12			clayey silt and sand; grade to gray CLAY	26	

Boring/ Well ID: TB-71

Project Name:	Newburgh MGP
Job. No.	
Start Date & Time:	2/20/01; 8:00 AM
Finish Date & Time:	2/20/2001; 10:10 AM
Drilling Co.:	Parratt Wolff
Driller:	Doug and Jeff
S&W Inspector:	DSS
Drill Rig Type:	Tractor-mounted Geoprobe
Drilling Method:	Geoprobe borings
Weather:	cold, overcast; 32F

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description
1							
2		NR					
3							
4		0.2		4			moist Brown sandy silt, some clay with brick (FILL)
5							
6		0.9		2			
7							
8		0.3		2			
9							
10		0.1		2			
11							
12		0.3		8			moist gray silty SAND
13							
14		0.2		3			
15							
16		0.2		6			
17							
18		0.3		12			
19							saturated gray/brown SAND and GRAVEL
20		0.2					
21							
22				7			wet gray silt with SAND and GRAVEL, slight tar odor
23							
24		7.1		18			
25							SAA, coal tar present; strong odor
26		103		12			
27							
28		521		18			SAA, coal tar
29							
30		233		19			
31							gray f/c SILT and SAND; some clay and gravel
32		178		24			

Depth (ft)	Well Diagram
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	

Boring/ Well ID: TB-72

Project Name:	Newburgh MGP
Job. No.	
Start Date & Time:	2/20/01; 10:45 AM
Finish Date & Time:	2/20/01
Drilling Co.:	Parratt Wolff
Driller:	Doug and Jeff
S&W Inspector:	DSS
Drill Rig Type:	Tractor-mounted Geoprobe
Drilling Method:	Geoprobe borings
Weather:	cold, overcast; 32F

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1								1	
2		4.5		2			brown f/c SAND and SILT; grass and roots	2	
3								3	
4		0.7		17				4	
5								5	
6		1.7		7				6	
7								7	
8		1.2		6			brown SILT; white pasty material	8	
9								9	
10		3		5				10	
11							moist gray silty clay, some sand and gravel	11	
12		1.6		2				12	
13								13	
14		1.7					wet f/c SAND and SILT	14	
15								15	
16		1.7						16	
17							wet gray SAND and GRAVEL	17	
18		7.9		16				18	
19								19	
20		16.2						20	
21								21	
22		217						22	
23							wet black coarse sand and GRAVEL; coal tar staining	23	
24		559						24	
25								25	
26		1177						26	
27							SAA; some clay; coal tar staining	27	
28		1379		24				28	
29								29	
30		299		18				30	
31							wet black dense clayey SILT; some gravel; tar odor	31	
32		7.3						32	

Boring/ Well ID: TB-73

Project Name:	Newburgh MGP
Job. No.	
Start Date & Time:	2/20/01
Finish Date & Time:	2/20/01
Drilling Co.:	Parratt Wolff
Driller:	Doug and Jeff
S&W Inspector:	DSS
Drill Rig Type:	Tractor-mounted Geoprobe
Drilling Method:	Geoprobe borings
Weather:	cold, overcast; 32F

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description
1							brown f/c SAND and SILT; grass and roots
2		0					
3							black/brown sandy silt, wood, some gravel (FILL)
4		0					
5							
6		1					
7							
8		0.6					
9							brown/gray clayey silt
10		2					
11							
12		0.5					
13							
14		2.3					brown/gray sandy GRAVEL
15							
16		3.1					
17							
18		6.4		21			
19							wet f/c SAND and GRAVEL
20		31.2					
21							wet silty clay
22		14		22			
23							f/c SAND and GRAVEL
24		9.4		24			
25							
26		13.6		12			
27							SAA, some silt; tar present
28		48		14			
29							
30		294		12			
31							gray silty SAND and GRAVEL, some silty clay; some tar
32		417		12			
33							f/c SAND and GRAVEL w/ some silt; coal tar present on silt layer
34		49.1		10			
35							saturated; SAA
36				20			

Well Diagram

Boring / Well ID: TB-74

Project Name:	Newburgh MGP
Job. No.	
Start Date & Time:	2/21/2001; 8:15AM
Finish Date & Time:	2/21/2001; 10:30AM
Drilling Co.:	Parratt Wolff
Driller:	Doug and Jeff
S&W Inspector:	DSS
Drill Rig Type:	Tractor-mounted Geoprobe
Drilling Method:	Geoprobe borings
Weather:	overcast, 40F

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: Sent for Lab Analysis
NAPL Key: NAPL Observed
Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1								1	
2		1.2		12			dry brown sandy SILT	2	
3								3	
4		2		12			dry brown sand and silt, some clay and brick (FILL)	4	
5								5	
6		2.2		12				6	
7								7	
8		2.9		18				8	
9								9	
10		4.4		18			wet brown sandy and silt; some white pasty material	10	
11								11	
12		2.6		5			wet gray/brown sandy silt; some gravel	12	
13								13	
14		3.9		0				14	
15								15	
16		1.7		21			wet gray f/c SAND; grade to f/c sand and gravel	16	
17								17	
18		2.5						18	
19								19	
20		4.6		17			SAA, grade to wet gray sandy silt, f/c sand	20	
21								21	
22		96.5		17			wet SAND and GRAVEL, coal tar present	22	
23								23	
24		704		17				24	
25								25	
26		4824		20			damp gray silt, with f/c sand	26	
27								27	
28		9604		19			moist black silty clay, some coal tar	28	
29								29	
30								30	

Boring/ Well ID: TB-75

Project Name:	Newburgh MGP
Job. No.	
Start Date & Time:	2/21/2001; 10:50
Finish Date & Time:	2/21/01
Drilling Co.:	Parratt Wolff
Driller:	Doug and Jeff
S&W Inspector:	DSS
Drill Rig Type:	Tractor-mounted Geoprobe
Drilling Method:	Geoprobe borings
Weather:	cold, overcast; 32F

Groundwater Observations	
Time:	
Casing Depth:	
Boring Depth:	
Depth to Water:	
Below Surface:	
Below Meas. Point:	
Surface Elevation:	
Measuring Point Elevation:	
Groundwater Elevation:	

Sample Log Key: ■ Sent for Lab Analysis
NAPL Key: ▨ NAPL Observed
▼ Depth to Groundwater

Depth (ft)	Blow Counts	PID (PPM)	Sample Log	Recovery (inches)	NAPL	Lithology	Sample Description	Depth (ft)	Well Diagram
1							brown f/c SAND and SILT; grass and roots	1	
2		1.7		18				2	
3							black/brown sandy silt, wood, some gravel (FILL)	3	
4		1.8		24				4	
5								5	
6		2.9		12				6	
7								7	
8		1.7		14				8	▼
9							brown/gray clayey silt; some sand	9	
10		3.2		6				10	
11								11	
12		2.7		6				12	
13							brown/gray sandy GRAVEL; some clay	13	
14		3.5		16				14	
15								15	
16		2.4						16	
17								17	
18		1.7		16				18	
19								19	
20		1.5		20			wet f/c SAND and SILT; some organic matter	20	
21								21	
22		1.2		15			wet clayey silt; dense	22	
23								23	
24		3.4		16			saturated f/c SAND, some silt and gravel	24	
25								25	
26		7.8		24				26	
27								27	
28		7.9					SAA; with some clayey silt	28	
29								29	
30		30.4		10			saturated f/c SAND with some fine gravel; coal tar present	30	
31								31	
32		51.6		17			gray silty SAND and GRAVEL, some silty clay; some tar	32	
33								33	
34		2.9		19			f/c SAND and GRAVEL w/ some silt; coal tar present	34	

APPENDIX C

LABORATORY REPORT

Environmental
LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park, North Syracuse, NY 13212
(315) 458-8033, FAX (315) 458-0249, (800) 842-4667

STEARNS AND WHELER, LLC
ENGINEERS & SCIENTISTS
ONE REMINGTON PARK DRIVE
CAZENOVIA NY 13035
ATTN: MR. DON SORBELLO

PROJECT #: 996100
RECEIVED: 02/22/01

P.O. #
CLIENT JOB NUMBER:

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 210648 CLIENT SAMPLE ID: TRIP BLANK				**DATE SAMPLED: 02/12/01**	
VOL. AROMATICS - BTEX		UG/L	02/27/01	EPA 602	SKW
BENZENE	<0.7				
ETHYLBENZENE	<1.0				
TOLUENE	<1.0				
XYLENES (TOTAL)	<1.0				
SAMPLE #: 210649 CLIENT SAMPLE ID: TB-73				**DATE SAMPLED: 02/20/01**	
VOL. AROMATICS - BTEX		UG/L	03/06/01	EPA 602	SKW
BENZENE	<10				
ETHYLBENZENE	<10				
TOLUENE	<10				
XYLENES (TOTAL)	<10				
SAMPLE #: 210650 CLIENT SAMPLE ID: TB-74				**DATE SAMPLED: 02/21/01**	
VOL. AROMATICS - BTEX		UG/L	03/06/01	EPA 602	SKW
BENZENE	<0.7				
ETHYLBENZENE	<1.0				
TOLUENE	<1.0				
XYLENES (TOTAL)	<1.0				
SAMPLE #: 210651 CLIENT SAMPLE ID: TB-72				**DATE SAMPLED: 02/20/01**	
VOL. AROMATICS - BTEX		UG/L	03/06/01	EPA 602	SKW
BENZENE	<10				
ETHYLBENZENE	<10				
TOLUENE	<10				
XYLENES (TOTAL)	<10				

STEARNS AND WHELER, LLC
ENGINEERS & SCIENTISTS
ONE REMINGTON PARK DRIVE
CAZENOVIA NY 13035
ATTN: MR. DON SORBELLO

P.O. #
CLIENT JOB NUMBER:

PROJECT #: 996100
RECEIVED: 02/22/01

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 210652 CLIENT SAMPLE ID: TB-75				**DATE SAMPLED: 02/21/01**	
VOL. AROMATICS - BTEX		UG/L	03/06/01	EPA 602	SKW
BENZENE	<0.7				
ETHYLBENZENE	<1.0				
TOLUENE	<1.0				
XYLENES (TOTAL)	<1.0				
SAMPLE #: 210655 CLIENT SAMPLE ID: TB-71				**DATE SAMPLED: 02/20/01**	
VOL. AROMATICS - BTEX		UG/L	03/06/01	EPA 602	SKW
BENZENE	<10				
ETHYLBENZENE	<10				
TOLUENE	<10				
XYLENES (TOTAL)	<10				
SAMPLE #: 210656 CLIENT SAMPLE ID: TB-71				**DATE SAMPLED: 02/20/01**	
SEMIVOL. ORGANICS - PAH	*	UG/L	02/28/01	EPA 625	SKW
ACENAPHTHENE	<1.75				
ACENAPHTHYLENE	<1.75				
ANTHRACENE	<1.75				
BENZO(A)ANTHRACENE	<1.75				
BENZO(B)FLUORANTHENE	5.11				
BENZO(K)FLUORANTHENE	<1.75				
BENZO(G,H,I)PERYLENE	3.25				
BENZO(A)PYRENE	1.98				
CHRYSENE	1.89				
2-CHLORONAPTHALENE	<1.75				
DIBENZO(A,H)ANTHRACENE	<1.75				
FLUORANTHENE	4.77				
FLUORENE	<1.75				
INDENO(1,2,3-CD)PYRENE	2.32				

STEARNS AND WHELER, LLC
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P.O. #
CLIENT JOB NUMBER:

PROJECT #: 996100
RECEIVED: 02/22/01

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
AMPLE #: 210656 CLIENT SAMPLE ID: TB-71				**DATE SAMPLED: 02/20/01**	
SEMIVOL. ORGANICS - PAH	*	UG/L	02/28/01	EPA 625	SKW
NAPHTHALENE	<1.75				
PHENANTHRENE	<1.75				
PYRENE	4.33				
AMPLE #: 210660 CLIENT SAMPLE ID: TB-75				**DATE SAMPLED: 02/21/01**	
SEMIVOL. ORGANICS - PAH		UG/L	02/28/01	EPA 625	SKW
ACENAPHTHENE	<1.0				
ACENAPHTHYLENE	<1.0				
ANTHRACENE	<1.0				
BENZO(A)ANTHRACENE	<1.0				
BENZO(B)FLUORANTHENE	2.22				
BENZO(K)FLUORANTHENE	<1.0				
BENZO(G,H,I)PERYLENE	<1.0				
BENZO(A)PYRENE	<1.0				
CHRYSENE	<1.0				
2-CHLORONAPTHALENE	<1.0				
DIBENZO(A,H)ANTHRACENE	<1.0				
FLUORANTHENE	<1.0				
FLUORENE	<1.0				
INDENO(1,2,3-CD)PYRENE	<1.0				
NAPHTHALENE	1.63				
PHENANTHRENE	<1.0				
PYRENE	<1.0				
MPLE #: 210661 CLIENT SAMPLE ID: TB-73				**DATE SAMPLED: 02/20/01**	
SEMIVOL. ORGANICS - PAH		UG/L	02/28/01	EPA 625	SKW
ACENAPHTHENE	<1.0				
ACENAPHTHYLENE	<1.0				

STEARNS AND WHELER, LLC
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ONE REMINGTON PARK DRIVE
CAZENOVIA NY 13035
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P.O. #
CLIENT JOB NUMBER:

PROJECT #: 996100
RECEIVED: 02/22/01

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 210661 CLIENT SAMPLE ID: TB-73				**DATE SAMPLED: 02/20/01**	
SEMIVOL. ORGANICS - PAH		UG/L	02/28/01	EPA 625	SKW
ANTHRACENE	<1.0				
BENZO(A)ANTHRACENE	<1.0				
BENZO(B)FLUORANTHENE	2.28				
BENZO(K)FLUORANTHENE	<1.0				
BENZO(G,H,I)PERYLENE	<1.0				
BENZO(A)PYRENE	<1.0				
CHRYSENE	<1.0				
2-CHLORONAPTHALENE	<1.0				
DIBENZO(A,H)ANTHRACENE	<1.0				
FLUORANTHENE	1.92				
FLUORENE	<1.0				
INDENO(1,2,3-CD)PYRENE	<1.0				
NAPHTHALENE	<1.0				
PHENANTHRENE	<1.0				
PYRENE	1.70				
AMPLE #: 210662 CLIENT SAMPLE ID: TB-72				**DATE SAMPLED: 02/20/01**	
SEMIVOL. ORGANICS - PAH	*	UG/L	02/28/01	EPA 625	SKW
ACENAPHTHENE	<1.29				
ACENAPHTHYLENE	<1.29				
ANTHRACENE	<1.29				
BENZO(A)ANTHRACENE	<1.29				
BENZO(B)FLUORANTHENE	2.68				
BENZO(K)FLUORANTHENE	<1.29				
BENZO(G,H,I)PERYLENE	<1.29				
BENZO(A)PYRENE	<1.29				
CHRYSENE	<1.29				
2-CHLORONAPTHALENE	<1.29				
DIBENZO(A,H)ANTHRACENE	<1.29				
FLUORANTHENE	<1.29				

STEARNS AND WHELER, LLC
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P.O. #
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PROJECT #: 996100
RECEIVED: 02/22/01

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 210662 CLIENT SAMPLE ID: TB-72				**DATE SAMPLED: 02/20/01**	
SEMIVOL. ORGANICS - PAH	*	UG/L	02/28/01	EPA 625	SKW
FLUORENE	<1.29				
INDENO(1,2,3-CD)PYRENE	<1.29				
NAPHTHALENE	8.26				
PHENANTHRENE	<1.29				
PYRENE	<1.29				
SAMPLE #: 210663 CLIENT SAMPLE ID: TB-74				**DATE SAMPLED: 02/21/01**	
SEMIVOL. ORGANICS - PAH	*	UG/L	02/28/01	EPA 625	SKW
ACENAPHTHENE	<1.35				
ACENAPHTHYLENE	<1.35				
ANTHRACENE	<1.35				
BENZO(A)ANTHRACENE	<1.35				
BENZO(B)FLUORANTHENE	2.80				
BENZO(K)FLUORANTHENE	<1.35				
BENZO(G,H,I)PERYLENE	<1.35				
BENZO(A)PYRENE	<1.35				
CHRYSENE	<1.35				
2-CHLORONAPTHALENE	<1.35				
DIBENZO(A,H)ANTHRACENE	<1.35				
FLUORANTHENE	<1.35				
FLUORENE	<1.35				
INDENO(1,2,3-CD)PYRENE	<1.35				
NAPHTHALENE	<1.35				
PHENANTHRENE	<1.35				
PYRENE	<1.35				

* Elevated detection limit due to lack of sample volume.

STEARNS AND WHELER, LLC
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CLIENT JOB NUMBER:

PROJECT #: 996100
RECEIVED: 02/22/01

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 210664 CLIENT SAMPLE ID: TB-75			DATE SAMPLED: 02/21/01		
CORROSIVITY - PH (SOLID)	NON	CORROSIVE	02/22/01	SW846 9045A	GS
CYANIDE REACTIVITY	<10	MG/KG	02/27/01	SW846 9010	11246 (NY)
FLASHPOINT	>150	DEGREES F	03/02/01	EPA 1010	DMP
HYDROGEN ION (PH)	7.40	UNITS	02/22/01	SW846 9045C	GS
SULFIDE REACTIVITY	<50	MG/KG	02/27/01	SW846 9030	11246 (NY)
METALS DIGESTION - TCLP	YES		02/26/01	EPA 3010	BRD
TCLP ARSENIC	<1.0	MG/L	02/27/01	EPA 6010	WU
TCLP BARIUM	<2.0	MG/L	02/27/01	EPA 6010	WU
TCLP CADMIUM	<0.05	MG/L	02/27/01	EPA 6010	WU
TCLP CHROMIUM	<0.10	MG/L	02/27/01	EPA 6010	WU
TCLP LEAD	<0.50	MG/L	02/27/01	EPA 6010	WU
TCLP MERCURY	<0.02	MG/L	02/27/01	EPA 7470A	BRD
TCLP PREPARATION, NON VOLATILE	YES		02/25/01	EPA 1311	BRD
TCLP PREPARATION, VOLATILE	YES		02/26/01	EPA 1311	BRD
TCLP SELENIUM	<1.0	MG/L	02/27/01	EPA 6010	WU
TCLP SILVER	<0.10	MG/L	02/27/01	EPA 6010	WU
HERBICIDES - TCLP		MG/L	03/20/01	EPA 8151	SKW
2,4-D	<0.010				
2,4,5-TP (SILVEX)	<0.010				
PESTICIDES - TCLP		MG/L	03/01/01	EPA 8081A	SKW
CHLORDANE	<0.020				

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PROJECT #: 996100
RECEIVED: 02/22/01

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
SAMPLE #: 210664 CLIENT SAMPLE ID: TB-75				DATE SAMPLED: 02/21/01	
PESTICIDES - TCLP		MG/L	03/01/01	EPA 8081A	SKW
ENDRIN	<0.005				
HEPTACHLOR	<0.005				
HEPTACHLOR EPOXIDE	<0.005				
METHOXYCHLOR	<0.005				
TOXAPHENE	<0.020				
LINDANE	<0.005				
TCLP SEMIVOLATILES ANALYSIS		MG/L	02/28/01	EPA 8270	SKW
TOTAL CRESOL	<0.050				
2,4-DINITROTOLUENE	<0.050				
HEXACHLOROBENZENE	<0.050				
HEXACHLOROBUTADIENE	<0.050				
HEXACHLOROETHANE	<0.050				
NITROBENZENE	<0.050				
PENTACHLOROPHENOL	<0.050				
PYRIDINE	<0.050				
2,4,5-TRICHLOROPHENOL	<0.050				
2,4,6-TRICHLOROPHENOL	<0.050				
TCLP VOLATILES ANALYSIS		MG/L	03/02/01	EPA 8260	SKW
BENZENE	<0.10				
CARBON TETRACHLORIDE	<0.10				
CHLOROBENZENE	<0.10				
CHLOROFORM	<0.10				
1,2-DICHLOROETHANE	<0.10				
1,1-DICHLOROETHYLENE	<0.10				
2-BUTANONE (MEK)	<0.10				
TETRACHLOROETHYLENE	<0.10				
TRICHLOROETHYLENE	<0.10				
VINYL CHLORIDE	<0.10				
1,4-DICHLOROBENZENE	<0.10				

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ONE REMINGTON PARK DRIVE
CAZENOVIA NY 13035
ATTN: MR. DON SORBELLO

P.O. #
CLIENT JOB NUMBER:

PROJECT #: 996100
RECEIVED: 02/22/01

Douglas W. Mendrala
Laboratory Director

03/09/01
Date

All tests performed under NYS ELAP Laboratory Certification # 11375 unless otherwise stated.

Environmental LABORATORY SERVICES

and Authorization for Analysis

7280 Caswell Street, Hancock Air Park North Syracuse, NY 13212
(315) 458-8033 FAX (315) 458-0249 (800) 843-8265

Name Don Sorbello | Title
Company SEW | Dept.
Address | Job/PO No.
City, State, Zip

The following services may result in additional charges: Express Service
☐ Telephone Results Telephone No. _____ Advance Agreement Required
☐ Fax Results Fax No. _____ ☐ 1 Week ☐ 48 Hour

To be completed by Sampler. Please remember to record this information on the container label.

ELS Number	*Date	*Time	*Comp.	*Grab	*Matrix	*Sampling Location	Number of Containers	Plastic/No Preservatives	Plastic/HNO_3	Plastic/H_2SO_4	Plastic/NaOH+Ascorbic Acid	Plastic/NaOH+Zinc Acetate	Glass/No Preservative	Glass/Sodium Thiosulfate	Amber Glass/No Pres.	Amber Glass/H_2SO_4	Other: (specify) VOC	Analyses Required, Remarks, and/or Special Instructions
210648	2/12/01	8:25			WA	Trip Blank	2										X	BTEX
210649	2-20-01	3:30		X	WA	TB-73	2										X	
210650	2-21-01	9:25		X	WA	TB-74	2										X	
210651	2-20-01	11:30		X	WA	TB-72	2										X	
210652	2-21-01	12:30		X	WA	TB-75	2										X	
210653							2										X	
210654							2										X	
210655	2-20-01	9:00		X	WA	TB-71	2										X	
210656							2										X	

				Date	Time
Containers Dispensed by:		Date 2/12/01	Time 6:25	Container(s) Received by:		
Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by:	Date	Time
Your signature authorizes ELS to analyze the sample(s) as indicated. Relinquished by:		Date 2-22-01	Time 9:10	Received at Lab by:	Date 2-22-01	Time 9:10
Sampler Signature:						

White - LABORATORY Canary - ACCOMPANIES RESULTS Pink - CLIENT
Please return completed form and all sample containers to Environmental Laboratory Services.

Environmental LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park North Syracuse, NY 13212
(315) 458-8033 FAX (315) 458-0249 (800) 843-8265

CHAIN OF CUSTODY RECORD and Authorization for Analysis

Name Don Sachello | Title
Company SEW | Dept.
Address | Job/PO No.
City, State, Zip

The following services may result in additional charges: Express Service
☐ Telephone Results Telephone No. _____ Advance Agreement Required
☐ Fax Results Fax No. _____ ☐ 1 Week ☐ 48 Hour

To be completed by Sampler. Please remember to record this information on the container label.

ELS Number	*Date	*Time	*Comp.	*Grab	*Matrix	*Sampling Location	Number of Containers	Container Type/Preservative: Plastic/No Preservatives	Plastic/HNO_3	Plastic/H_2SO_4	Plastic/NaOH+Ascorbic Acid	Plastic/NaOH+Zinc Acetate	Glass/No Preservative	Glass/Sodium Thiosulfate	Amber Glass/No Pres.	Amber Glass/H_2SO_4	Other: (specify)	Analyses Required, Remarks, and/or Special Instructions
210656	2-20-01	9:00		X	WA	TB-71	1							X				PAH by 625
210657							1							X				
210658							1							X				
210659							1							X				
210660	2-21-01	12:30		X	WA	TB-75	1							X				
210661	2-20-01	3:20		X	WA	TB-73	1							X				
210662	2-20-01	11:30		X	WA	TB-72	1							X				
210663	2-21-01	9:25		X	WA	TB-74	1							X				
210664	2-21-01	12:30	X		SO	TB-75	2						X					Full TCLP w/characteristics

Containers Dispensed by:	Date 2/17/01	Time 3:25	Container(s) Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Your signature authorizes ELS to analyze the sample(s) as indicated. Relinquished by:	Date 2.22.01	Time 9:10	Received at Lab by:	Date 2.22.01	Time 9:10
Sampler Signature:					

White - LABORATORY Canary - ACCOMPANIES RESULTS Pink - CLIENT

Please return completed form and all sample containers to Environmental Laboratory Services.

2217.ELS..202.9310

JLC Environmental Consultants, Inc.

243 West 30th St. - Suite 701 New York, NY 10001
Phone: (212) 420-8119 - Fax: (212) 420-6092

Hudson Valley Environmental
51 Old Quaker Hill Road
Monroe NY 10950

ELAP Lab Code: 11029
AIHA Lab Code: 100273

Project No: 12-0983-075
Analyte: ASBESTOS
Date Received: 07/19/2012
Date Analyzed: 07/22/2012
Batch #: 0443126

SUMMARY OF ANALYTICAL RESULTS - TEM

SITE: *Newburgh Waste Water Treatment Plant Newburgh, NY*

This report contains data that were produced under subcontract by Warren and Panzer, NYS-ELAP# 11251

SAMPLE # / COLLECTED / LAB #	DESCRIPTION / LOCATION	COLOR	Asbestos Detected?	Asbestos Constituents (%)		Non-Asbestos Constituents (%)	
3 07/17/2012 0443126-003	Window Caulk Front Window	Gray	No	0		Non-Fibrous	100

*Insufficient material submitted **Weight of Residue is <1%, Analysis Unnecessary ***Not Analyzed Positive Stop

Sample Analysis by:
Transmission Electron Microscopy (TEM)

Method of Sample Preparation and Analysis:
All samples were prepared and analyzed in accordance with the EPA "TEM Method for Identifying and Quantifying Asbestos in Non-Fibrous Organically Bound Bulk Samples" Revision 198.4, 8/3/92.

Quantitative transmission electron microscopy is currently the only method that can be used to determine absolutely if this material can be considered or treated as non-asbestos containing.

This "Summary of Analytical Results" shall not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

DISCLAIMER: JLC Environmental Consultants, Inc. did not collect the analyzed samples and thus accepts no liability with regard to their collection and/or maintenance. JLC relies on the client for all sample information prior to delivery at JLC.

Approved Signatory
Report Date: July 23, 2012

JLC Environmental Consultants, Inc.

243 West 30th St. - Suite 701 New York, NY 10001
Phone: (212) 420-8119 - Fax: (212) 420-6092

Hudson Valley Environmental
51 Old Quaker Hill Road
Monroe, NY 10950

ELAP Lab Code: 11029
AIHA Lab Code: 100273

Project No:	12-0983-073
Analyte:	LEAD (paint)
Date Received:	07/19/2012
Date Analyzed:	07/23/2012
Batch #:	0443124

SUMMARY OF ANALYTICAL RESULTS

SITE: *Newburgh Waste Water Treatment Plant*

SAMPLE # COLLECTED LAB #	DESCRIPTION / LOCATION	COLOR	LEAD CONTENT %
1 07/17/2012 0443124-001	Pipe Near DAFT/ Green		0.18
2 07/17/2012 0443124-002	On DAFT/ Green		0.02

*ppm = parts per million

**COMPOSITE = Multiple Layers of Paint

Sample Analysis by:
Varian FS-220: Atomic Absorption Spectrometry (AAS) using an air-acetylene flame with background correction.

Method of Sample Preparation and Analysis:
All samples were prepared and analyzed in accordance with the Environmental protection Agency Method EPA SW846-3050/7000B.

Minimum Detection Limit = < 0.01% or < 100 ppm

HUD Guidelines define paint containing lead levels equal to or greater than 1.0 milligrams per square centimeter (1.0 mg/cm2) or 0.5% by weight (5,000 PPM) as Lead Based Paint (LBP).

DISCLAIMER: JLC Environmental Consultants, Inc. did not collect the analyzed samples and thus accepts no liability with regard to their collection and/or maintenance. JLC relies on the client for all sample information prior to delivery at JLC.
* This report contains data that were produced under subcontract by Enviro-Probe, Inc., NYS-ELAP# 11404.

Collected By: CLIENT
Analyzed By: LK

Approved Signatory
Report Date: July 23, 2012

AMERISCI BOSTON

CHAIN OF CUSTODY RECORD

AMERISCI BOSTON
8 School Street
Weymouth, MA
02189
888.724.5221
781.337.9334
FAX 781.337.7642

AMERISCI JOB NO:

DUE DATE:
☐ RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☑ 5 DAY ☐ 7 DAY ☐ 10 DAY

DATE ___/___/___ TIME ___:___ ___ REQUESTED

TEMP UPON RECEIPT:

DATA PACKAGE: 12-0983-073 044324

P.O.#

COMPANY: Hudson Valley Environmental
ADDRESS: 5100 Quaker Hill Road Monroe N.Y. 10950
PHONE: 845.505.1988 | FAX: | EMAIL RESULTS: | MOBILE:
CLIENT CONTACT: Seth Piker | EMAIL: Sethpiker@gmail.com
PROJECT NAME: Newburgh waste water treatment plant | PROJECT NUMBER: | PROJECT STATE:

MATRIX: **A**-WATER **S**-SOIL/SOLIDS **SL**-SLUDGE **OIL**-OIL **CH**-CHIPS **WI**-WIPES **C**-CASSETTES **W**-WASTE **O**-OTHER

CONTAINER: **P**-PLASTIC **G**-GLASS **V**-VOA

LAB ID	CLIENT SAMPLE IDENTIFICATION	MATRIX	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING INFORMATION DATE	SAMPLING INFORMATION TIME	SAMPLING INFORMATION TECH	GRAB (G) OR COMPOSITE (C)	PRESERVATIVES	SAMPLE pH AT LOGIN	Notes:
1	Pipe near DAFT (Green)	CH				7/17/12	1400		✓			
2	On DAFT (Green)	↓				↓	↓		✓			

SAMPLED BY: (PRINT) Seth Piker DATE: 7/17/12
(SIGN) TIME:
RELINQUISHED BY: (PRINT) Seth Piker DATE: 7/18/12
(SIGN) TIME:
RELINQUISHED BY: (PRINT) DATE:
(SIGN) TIME:

RECEIVED BY: (PRINT) DATE: 7/19/12
(SIGN) TIME: 15:30
RECEIVED BY: (PRINT) DATE:
(SIGN) TIME:
RECEIVED FOR LABORATORY BY: DATE:
(SIGN) TIME:

JLC Environmental Consultants, Inc.

243 West 30th St. - Suite 701 New York, NY 10001
Phone: (212) 420-8119 - Fax: (212) 420-6092

Hudson Valley Environmental
51 Old Quaker Hill Road
Monroe NY 10950

ELAP Lab Code: 11029
AIHA Lab Code: 100273

Project No:	12-0983-075
Analyte:	ASBESTOS
Date Received:	07/19/2012
Date Analyzed:	07/20/2012
Batch #:	0443126
Analyst:	RB

SUMMARY OF ANALYTICAL RESULTS - PLM

SITE: *Newburgh Waste Water Treatment Plant Newburgh, NY*

SAMPLE # COLLECTED LAB #	DESCRIPTION / LOCATION	COLOR	Asbestos Detected?	Asbestos Constituents (%)		Non-Asbestos Constituents (%)	
1 07/17/2012 0443126-001	Elbow Insulation, Gray Roof Leader Pipe at Knockout Wall	Gray	Yes	Chrysotile	40%	Cellulose Fiber Non-Fibrous Material	Trace 60%
2 07/17/2012 0443126-002	Elbow Insulation, Gray Hot Water Pipe	Gray	Yes	Chrysotile	36.3%	Cellulose Fiber Non-Fibrous Material	Trace 63.7%
3 07/17/2012 0443126-003	Window Caulk, Gray Note: Recommend TEM Front Window	Gray	No	Inconclusive			

*Insufficient material submitted **TEM recommended ***Not analyzed positive stop

Sample Analysis by:
Polarized Light Microscopy-Dispersion Staining (PLM-DS)

Method of Sample Preparation and Analysis:
All samples were prepared and analyzed in accordance with the EPA "Method for the Determination of Asbestos in Bulk Building Materials" USEPA/ 600/R-93/116, July, 1993

Instrumentation:
Olympus PLM, Model BH-2/VM stereomicroscope Model VMZ 1x-4x.

Analytical results reflect the make up of the materials only in the areas sampled. This "Summary of Analytical Results" shall not be reproduced except in full, without the written approval of JLC Laboratory, and it must not be used by client to claim product endorsement by NVLAP or any agency of the U.S. Government. This method is not applicable to samples containing large amounts of fine fibers below the resolution of the light microscope. The value of this method is limited to the quantitative identification of asbestos and the semi-quantitative determination of asbestos content of bulk samples, expressed as a percentage of the projected area. Quantitation of asbestos content was determined with a visual volume estimate, a calibrated visual area estimate, and/or point counting procedure. CAUTION: Other fibers with optical properties similar to asbestos may give positive interferences and will be considered asbestos under this methodology. Also, PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

DISCLAIMER: JLC Environmental Consultants, Inc. did not collect the analyzed samples and thus accepts no liability with regard to their collection and/or maintenance. JLC relies on the client for all sample information prior to delivery at JLC.

Approved Signatory
Report Date: July 20, 2012

Hudson Valley Environmental

CHAIN OF CUSTODY RECORD

51 Old Quaker Hill Rd.
Monroe NY
Phone: (845) 249-1987

4
12-0983-075
543126

HUDSON VALLEY CLIENT:: Malcolm Piker	HUDSON VALLEY CLIENT ADDRESS:		P.O.#:

PROJECT INFORMATION	ANALYSIS TYPE	TURNAROUND TIME (X) 6-8 HR 12 Hr	24 Hr	48 Hr	72 Hr	5 DAY	OTHER	Material Type	
NAME: Newburgh waste water treatment plant	NY ELAP PLM/TEM w/ NOB Prep					✓		Bulk	✓
ADDRESS:	TEMIBULK							Dust	
CITY, STATE, ZIP: Newburgh, NY								Water	
JOB DESCRIPTION: Survey	PLM	RUSH				✓		POSITIVE STOP	
	OTHER:							OTHER:	

RESULTS To: Seth Piker	RETURN SAMPLES	YES NO
EMAIL To: sethpiker@gmail.com	PHONE:	845.249.1987
INVOICE To: Seth Piker	CELL::	
COMMENTS:	HYGEINIST:	Seth Piker

SAMPLE ID	SAMPLE LOCATION	SAMPLE DISCRIPTION	LAB ID #
1	Roof vent pipe ext Knockout wall	Elbow Insulation PLM	
2	Hot water pipe	&	
3	Front window	window caulk NOB	

Analyzed By RBurley
7/20/12 - 9Am

SAMPLED BY: DATE/TIME	7/17/12	RECEIVED BY:	DATE/TIME: 7/19/12 1530
RELINQUISHED BY: DATE/TIME	7/18/12	RECEIVED IN LAB BY:	DATE/TIME: