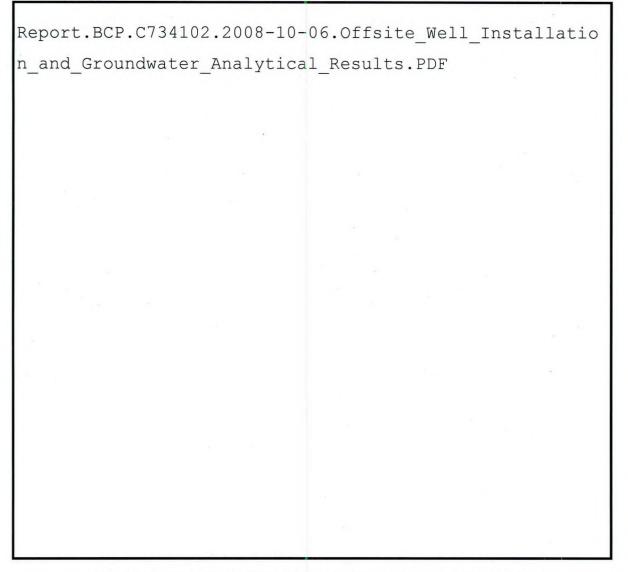




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430 East Genesee Street Suite 401 Syracuse NY 13202

tel. (315) 422-4949 fax.(315) 422-2124 web. www.swredev.com

October 6, 2008

Ms. Tara Blum, P.E. Project Manager NYSDEC Region 7 615 Erie Boulevard West Syracuse, New York 13204-2400

Re: Offsite Bedrock Well Installation and Groundwater Analytical Results, July 2008
 P&S Boyd Ave Site
 BCP Site No. C734102

007 - 7 2008

Dear Ms. Blum:

This letter report describes activities completed at the Pass and Seymour site (Figure 1) in June and July 2008, including the installation of three (3) off-site bedrock monitoring wells, and groundwater sample collection from the newly installed wells and four (4) existing on-site bedrock monitoring wells. These NYSDEC-approved activities were conducted to supplement previous Remedial Investigation (RI) analytical data for bedrock groundwater at the site.

Four (4) bedrock groundwater monitoring wells (BR07-29, -30, -31, and -32) were installed as part of the RI in October 2007, and bedrock groundwater samples were collected in November 2007 pursuant to the RI. Analytical data from these bedrock wells indicated the presence of chlorinated volatile organic compounds (Cl-VOCs) in bedrock groundwater near the downgradient (north) BCP site boundary. Consequently, at the request of the New York State Department of Environmental Conservation (NYSDEC), Pass & Seymour agreed to install three (3) bedrock monitoring wells downgradient (north) of the site to characterize the nature and extent of contamination off-site (Figure 2).

The three off-site bedrock monitoring well locations were approved by NYSDEC on May 2, 2008. An access agreement with National Grid, the owner of the property on which the wells were installed, was obtained by Pass & Seymour prior to installing the wells. The off-site monitoring well locations are shown on the attached Figure 1, along with bedrock monitoring wells previously installed in 2007, as part of the BCP RI.

#### Drilling/Monitoring Well Installation Methods.

The three bedrock wells were installed between June 19 and 25, 2008 by drilling through the overburden with hollow stem augers. An NYSDEC field representative was present to observe drilling and well installation activities. When auger refusal was reached, a 4

Ms. Tara Blum NYSDEC – Region 7

inch inside diameter steel casing was grouted in place within each borehole to create a water tight seal at the overburden/bedrock interface. After the grout had cured (minimum 24 hours), drilling resumed by coring approximately 15-feet into bedrock, which is comparable to the depth of previous on-site bedrock wells. Three (3) five-foot core sections were retrieved from each of the boreholes.

Two inch diameter PVC monitoring wells were installed in the completed borings. Each bedrock well received five (5) feet of 0.01 inch slot screen set at the bottom of the borehole. The well construction included a sand filter pack extending from the bottom of the boring to two feet above the well screen. A bentonite seal was placed on the top of the sand pack and extended to the top of the bedrock. The remaining space was backfilled with a Portland cement grout. Bedrock boring logs are provided in Attachment A.

#### **Groundwater Monitoring Results**

Table 1 presents the depths of the new off-site bedrock wells, their top-of-PVC elevations, the depth to groundwater, and the depth to bedrock encountered at each of the well locations is also included. Figure 3 is a bedrock groundwater contour map based on July 2008 depth to water measurements. The contour pattern indicates bedrock groundwater flows in the same prevailing direction as overburden, towards the north as expected, and consistent with the topographic slope of the area. Bedrock well BR07-32, near the southern site boundary, is upgradient, and off-site bedrock wells BR08-33, 0-34, and -35, north of the site, are downgradient.

Groundwater samples were collected on July 29, 2008 from the three new off-site bedrock wells (BR08-33, -34, and -35) and previously installed on-site bedrock monitoring wells (BR07-29, -30, -31, and -32). Laboratory analytical results are included as Attachment 2 to this letter. Table 2 summarizes the analytical results for the July 2008 sampling event, along with previous analytical data for groundwater samples collected in November 2007 from on-site bedrock wells BR07-29 through -32.

The July 2008 groundwater samples from on-site wells BR07-29, BR07-30, BR07-231, and BR07-32 generally confirm analytical results from November 2007, as shown in Figure 4. Bedrock analytical data are presented on Figure 3 in text boxes adjacent to the respective monitoring wells. Bedrock well BR07-30 is located downgradient (north) of the former manufacturing facility, which corresponds to the area where historical overburden groundwater contamination was detected at the highest levels. West of this area, the bedrock groundwater sample from BR07-31 contained 6.5  $\mu$ g/L of TCE in July 2008, compared to 7.1 $\mu$ g/L of TCE in November 2007. North of the eastern parking lot bedrock well BR07-29 contained 250  $\mu$ g/L of TCE in November 2007, compared to 120  $\mu$ g/L of TCE in July 2008. The upgradient bedrock monitoring well, BR07-32, did not contain any TCE above laboratory detection limits in July 2008, compared to 7.6  $\mu$ g/L of TCE in November 2007.

Ms. Tara Blum NYSDEC – Region 7 October 6, 2008 Page 3

Downgradient (north) of the site, one of the newly installed off-site bedrock wells, BR08-33, contained TCE at a concentration of 3.3  $\mu$ g/L, which is below New York State groundwater quality standards. The other off-site downgradient wells, BR08-34 and BR08-35, did not contain any TCE above laboratory detection limits.

#### **Conclusions**

Analytical results from the 2007 monitoring event are similar to the results in the 2008 event. The 2008 analytical data for downgradient off-site wells BR08-33, BR08-34, and BR08-35, indicate the downgradient extent of contamination found in on-site well BR07-30 is limited, barely extending off-site. Monitoring well BR08-33 is approximately 290-feet downgradient of BR07-30, and did not contain any VOCs above standards.

Based on the 2008 and 2007 groundwater analytical results, no further off-site investigation is proposed. It is recommended that the NYSDEC accept this letter as an addendum to the previously submitted Remedial Investigation Report, and that the Remedial Investigation be considered complete.

If you have any questions please feel free to call me at (315) 422-4949.

Very truly yours, S&W REDEVELOPMENT OF NORTH AMERICA, LLC

In

David W. Stoner, CPG President

Daniel P. Ours, CPG Senior Project Manager

pc: Mr. Phil DeCicca, Pass & Seymour
 Ms. Doreen Simmons, Hancock & Estabrook, LLP
 Ms. Melissa Menetti, NYSDOH

# Figures

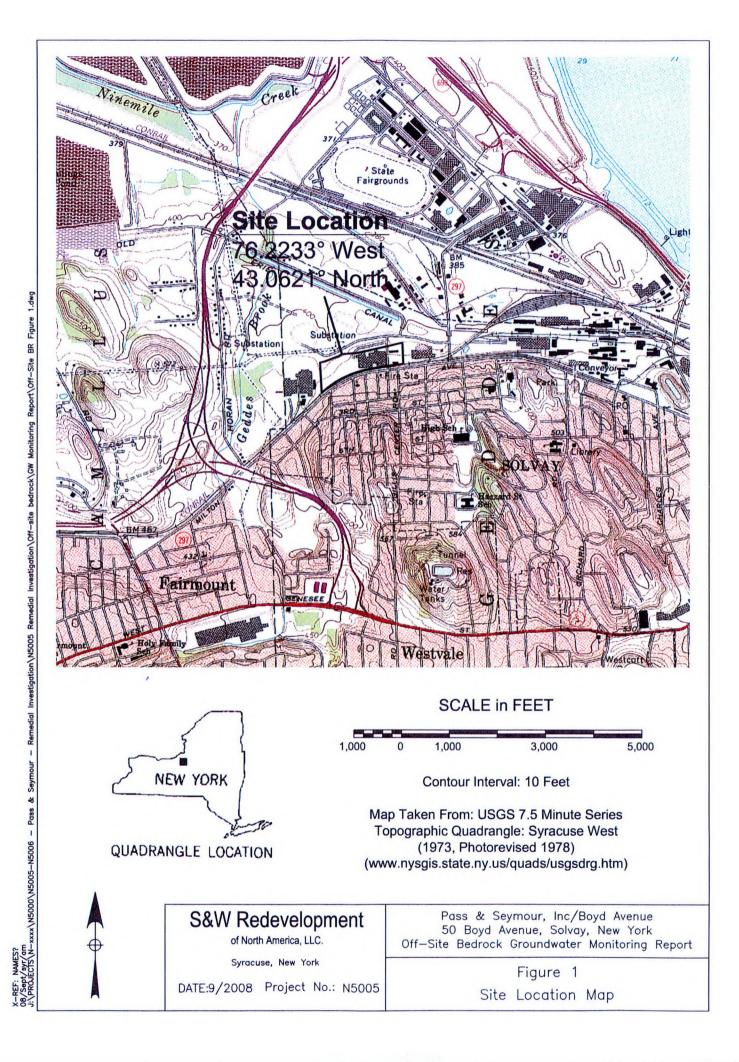
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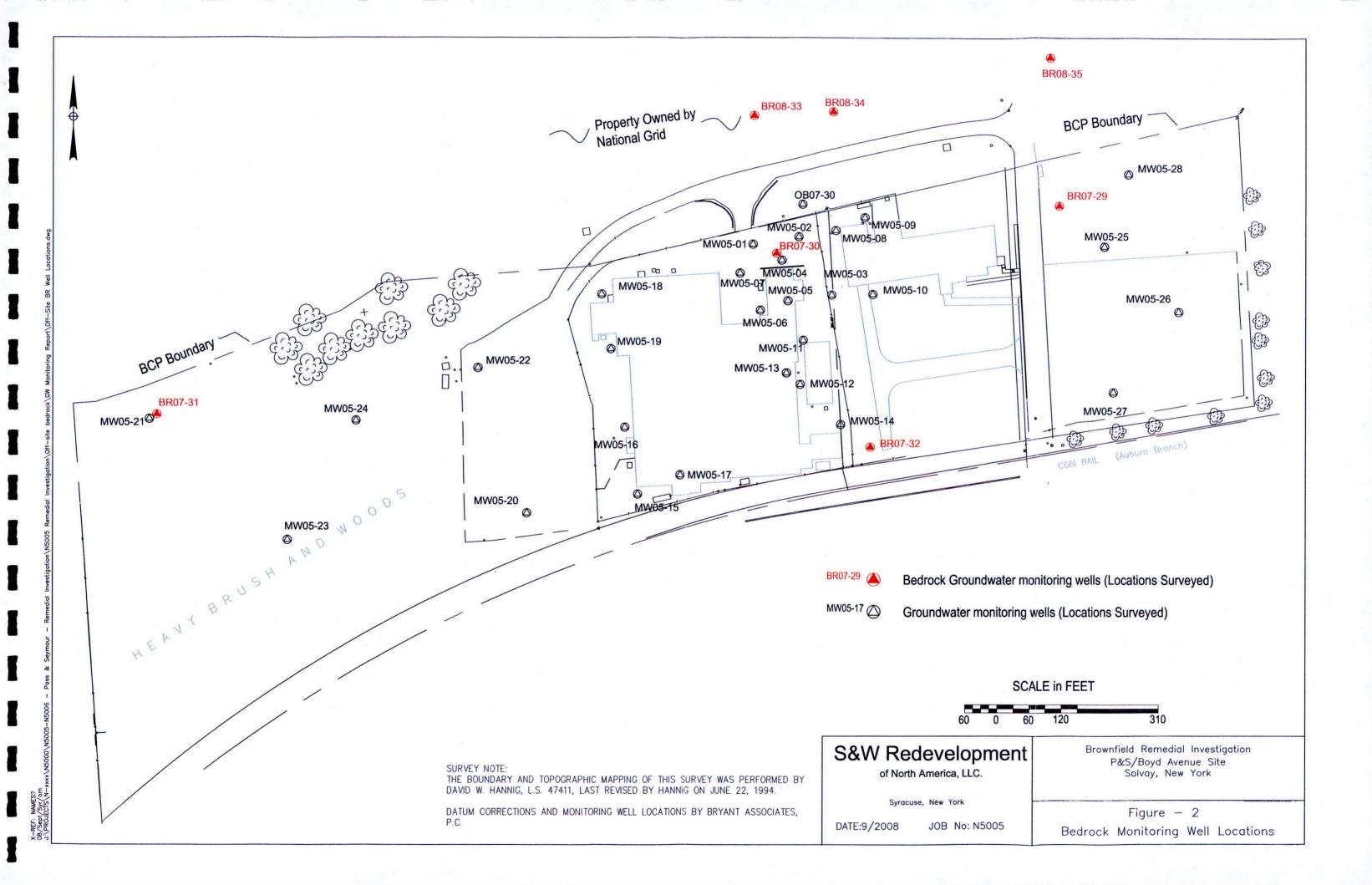
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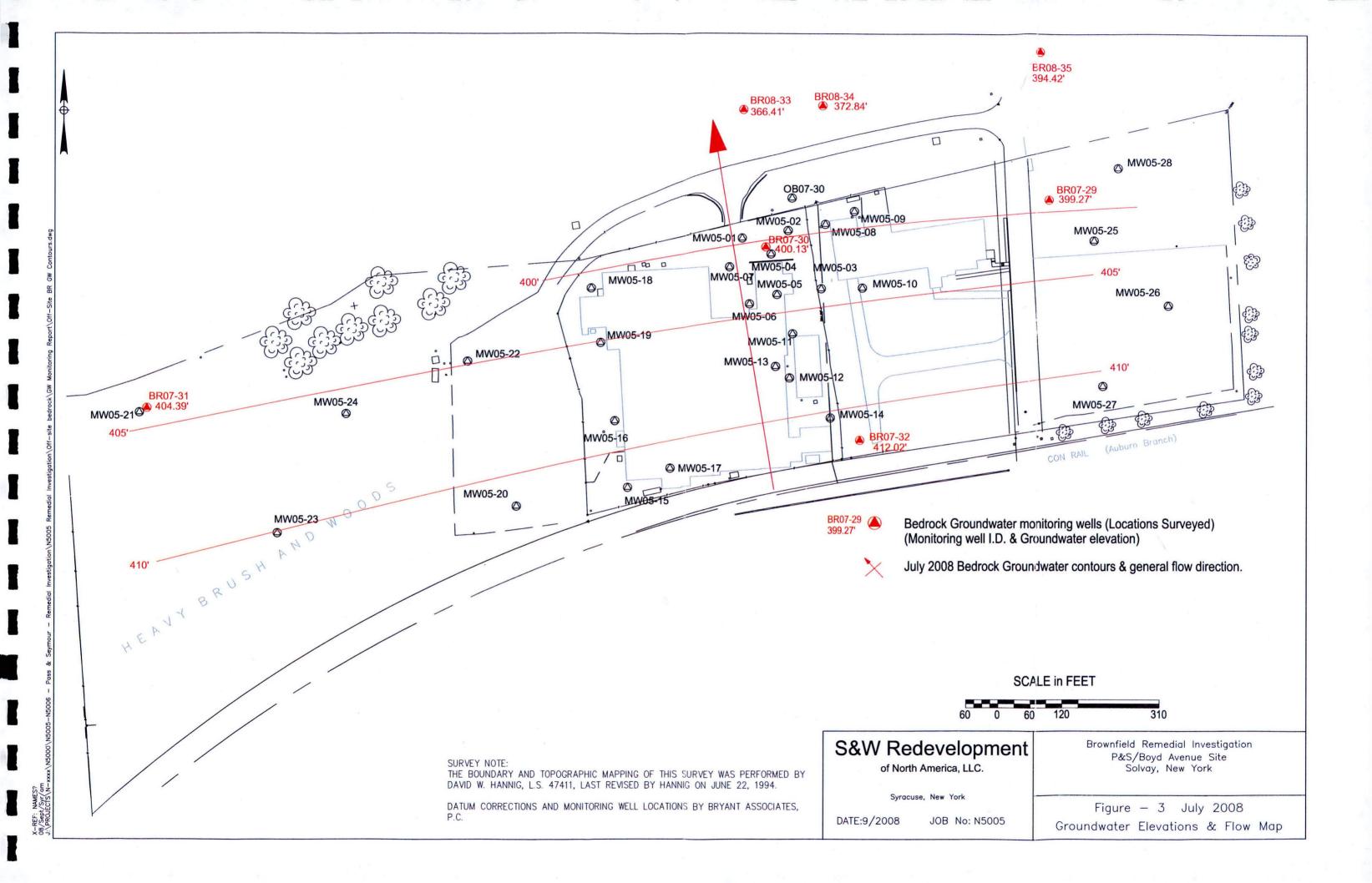
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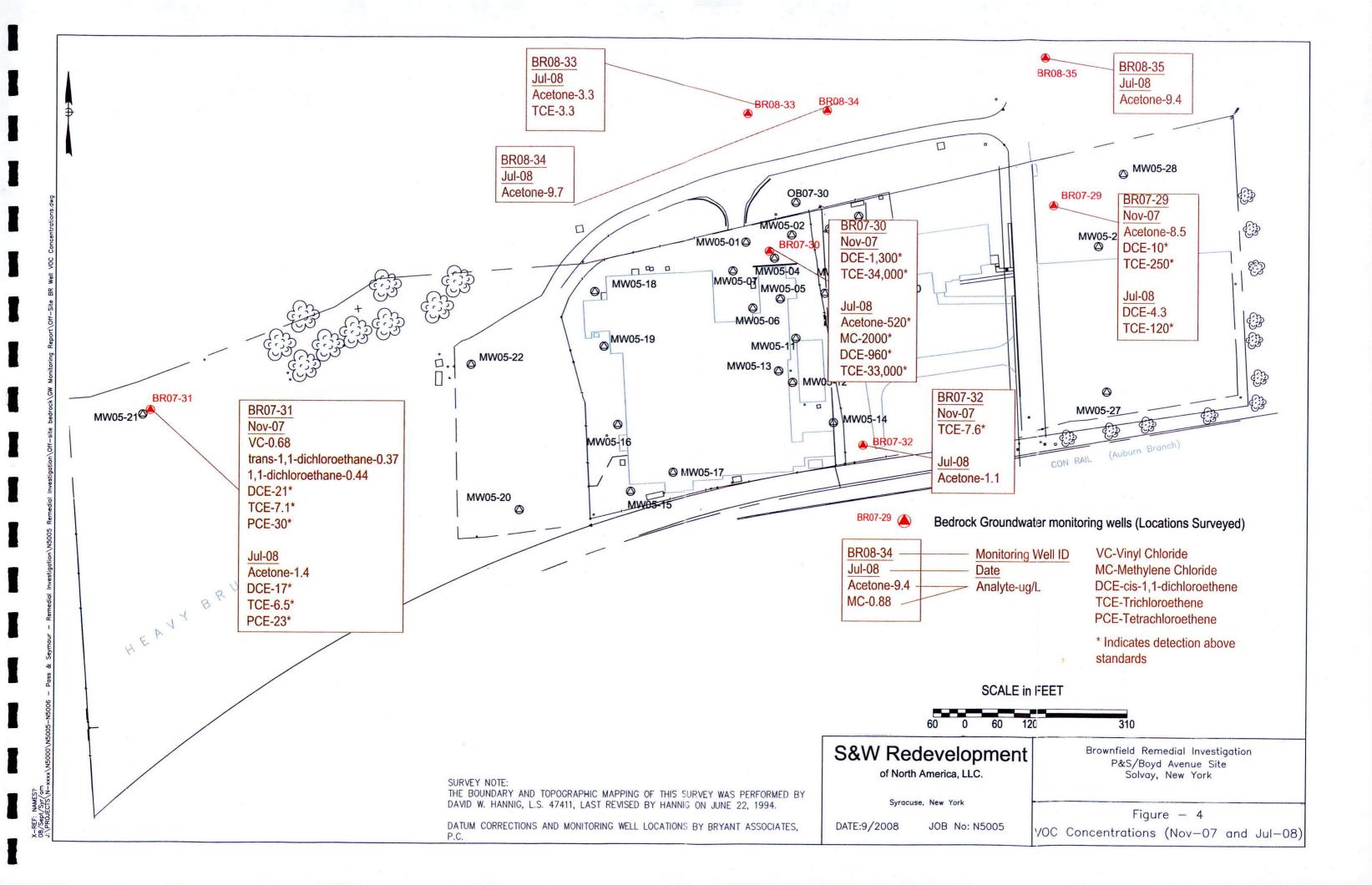
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# Tables

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Monitoring Well ID	Date	Reference Point	Top of PVC Elev (ft amsl)	DTW (ft)	TDW (ft)	Groundwater Elevation (ft)	DTB (ft)	Location
BR07-29	Nov-07 Jul-08	Top of PVC	416.56	16.75	29.18	399.81	18.0	On-site,
		Top of PVC	416.56	17.29	28.18	399.27		downgradient
BR07-30	Nov-07	Top of PVC	419.63	15.84	21.8	403.79	0.0	On-site,
2.107.00	Jul-08	Top of PVC	419.63	19.5	21.8	400.13	9.0	downgradient
BR07-31	Nov-07	Top of PVC	408.77	3.47	19.91	405.3	7.0	On-site,
BROTOT	Jul-08	Top of PVC	408.77	4.28	19.91	404.49	7.0	downgradient
BR07-32	Nov-07	Top of PVC	427.42	15.18	18.65	412.24	0.0	On-site,
BILOT OF	Jul-08	Top of PVC	427.42	15.4	18.65	412.02	9.0	upgradient
BR08-33	Nov-07	Top of PVC	408.11	-	-	-	00.0	Off-site,
51100 00	Jul-08	Top of PVC	408.11	41.7	42.5	366.41	26.0	downgradient
BR08-34	Nov-07	Top of PVC	407.7	-	-	-	00.0	Off-site,
21100 04	Jul-08	Top of PVC	407.7	34.86	42.5	372.84	26.0	downgradient
BR08-35	Nov-07	Top of PVC	408.57	-	-	-	10.5	Off-site,
2.100 00	Jul-08	Top of PVC	408.57	14.15	31.15	394.42	18.5	downgradient

Table 1. Groundwater Elevation Data. Bedrock Wells. Pass & Seymour, July 2008

Reference elevations were surveyd by Bryant Associates, P.C.

DTW-Depth to Water

TDW-Total Depth of Well

DTB-Depth to Bedrock

Table 2. Groundwater Sample Analysis Results, VOCs. Pass & Seymour. July 2008

Sample Number	TOGS <sup>2</sup>	BRO	7-29	BR	07-30	BRO	07-31	BR0	7-32	BR08-33	BR08-34	
Collection Date	GW	11/26/07	7/29/08	11/26/07	7/29/08	11/26/07	7/29/08	11/26/07	7/29/08	7/29/08	100 00 5-8 18-1 55 18-1	BR08-35
Analyte				10 10 10 10 10 10 10 10 10 10 10 10 10 1			1125/00	11/20/07	1/29/08	//29/08	7/29/08	7/29/08
VOCs (8260)		U	U	U		U	U	U	U	U	U	U
Chloromethane		U	U	U		U	Ŭ	Ŭ	U	U	U	
Vinyl chloride	2	U	U	U		0.68 JM	1 J	U	U	U U	U	
Bromomethane	5	U	U	U		U	Ŭ	U	U	U	-	0
Chloroethane	5	U	U	U		Ŭ	U	U	U	U	U	0
1 1-Dichloroethene	5	U	U	U		Ŭ	U	U			U	0
Carbon disulfide	60 G	U	U	U		Ű	U	U	U	U	U	U
Acetone	50 G	8.6 JMB	Ŭ	UM	520 J#	UМ	1.4 J	U	U	U	U	U
Methylene chloride	5	UM	Ŭ	U	2000 J #	U	1.4 J U		1.1 J	1 J	9.7 J	9.4 J
trans-1 2-Dichloroethene	5	U	U		. 2000 5 #	0.37 JM	U	U	U	U	U	U
1 1-Dichloroethane	5	Ŭ	U	U	0	0.44 JM	U	U	U	U	Û	U
cis-1 2-Dichloroethene	5	10 J#	4.3 J	1,300 J#	960 J#	21 #	U 17 #	U	U	U U	U	U
2-Butanone (MEK)	50 G	U U	U	1,000 0 # U	300 J #			U	U	U	U	U
Chloroform	7	U	U	U		U	U	U	U	U	U	U
1 1 1-Trichloroethane	5	Ŭ	U	U		. U	U	U	U	U	.U	U
Carbon tetrachloride	5	U	U	Ŭ			U	U	U	U	U	U
Benzene	1	Ű	U U	U		U U	U	U	U	U	U	U
1 2-Dichloroethane	0.6	U	U	U			U	U	U	·U	U	U
Trichloroethene	5	250 #	120 #	34,000 #	33,000 #	U	U	U	U	, U	U	U
1 2-Dichloropropane	1	200 <i>#</i>	120 # U	54,000 # U	33,000 #	7.1 #	6.5 #	7.6 #	U	3.3 J	U	U
Bromodichloromethane	50 G	U	U	U		U	U	U	U	U	U	U
cis-1 3-Dichloropropene	0.4 3	U	U	U		U	U	· U	U	U	U	·U
4-Methyl-2-pentanone (MIBK)	0.4	U	U	U		U	U	U	U	u U	U	U
Toluene	5	U	U	U		U	U	U	U	U	U	U
trans-1 3-Dichloropropene	0.4 3	U	U	U		U	U	U	U	U	U	U
1 1 2-Trichloroethane	1	U	U	U		U	U	U	U	U	U	U
Tetrachloroethene	5	U	U			U U	U	U	U	U	U	U
2-Hexanone	50 G	U U	U	U		30 #	23 #	U	Ù	U	U	U
Dibromochloromethane	50 G	U				U	U	U	U	U	U	U
Chlorobenzene	5	U	U U	U		U	U	u U	U	U	U	U
Ethylbenzene	5	U		U		U	U	U	U	U	U	U
Styrene	5	U	U	U		U	U	U	U	U	U	U
Bromoform	5 50 G	U	U	U		U	U	U	U	U	U	U
1 1 2 2-Tetrachloroethane	5		U	U		U	U	U	U	U	U	U
the second s	5 5	U	U	U		U	U	U	U	U	U	U
Xylenes (total) Total VOC's	Ð	U 268.6	U 104.0	U		U	U	U	U	U	U	U
<sup>1</sup> - Volatile Organic Compounds (VOCs),		208.6	124.3	35300	36480	59.59	48.9	7.6	1.1	4.3	9.7	9.4

<sup>2</sup> - NYSDEC Division of Water Technical & Operational Guidance Series (1.1.1) Ambient Water Quality Standards

& Guidance Values & Groundwater Effluent Limitations (TOGS) Class GA Standards & Guidance Values

<sup>3</sup> - Standard applies to the sum of cis- & trans-1,3-dichloropropene.

<sup>G</sup> - Guidance Value

# - Exceeds applicable NYSDEC TOGS Class GA Standard

U - Analyte was not detected at or above the reporting limit.

B - Compound was found in the blank.

J - Result (Organic) is an estimated value below the reporting limit or a tentatively identified compound (TIC). M - Manually integrated compound. Analytical instrument misjudged the shape of the chromatogram peak, so the analyst manually determined its shape. ND - Not Detected

# APPENDICES

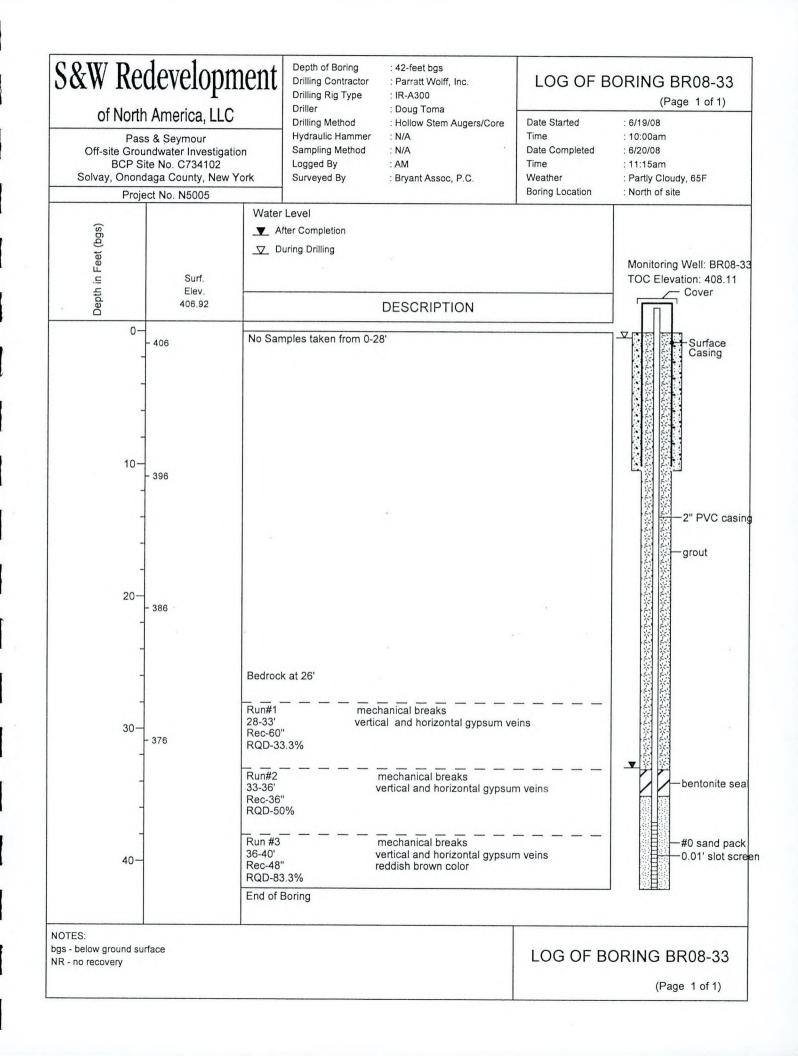
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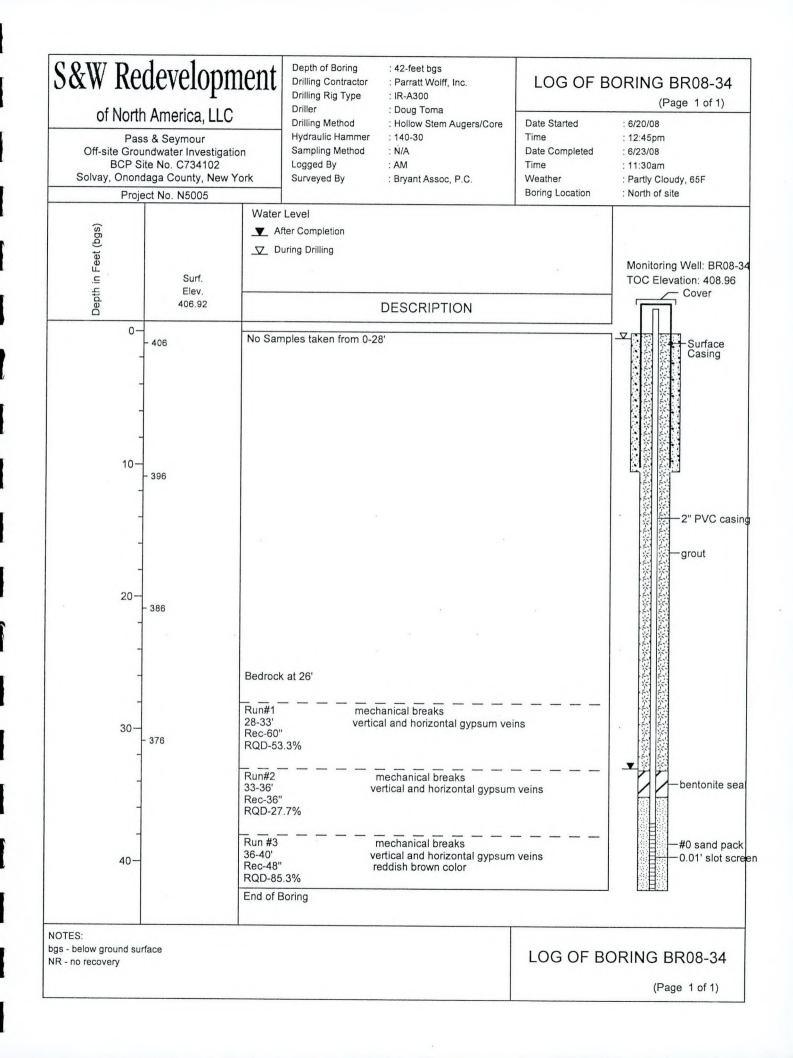
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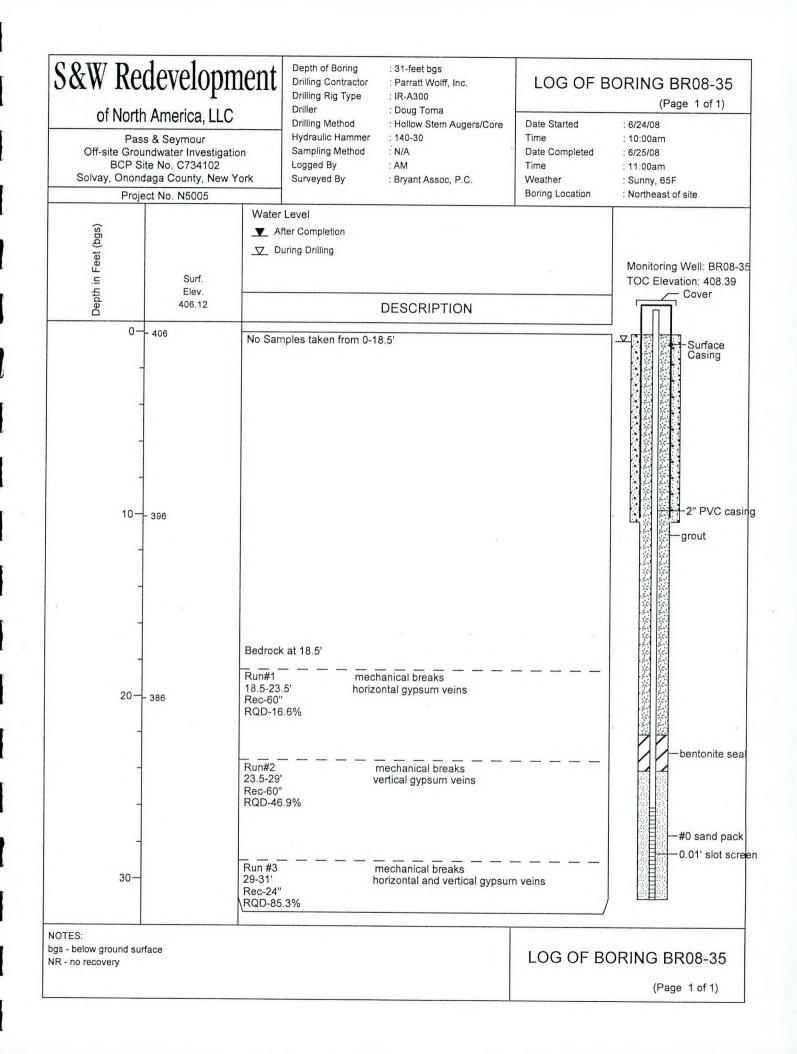
Appendix A Bedrock Boring Logs

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Appendix B Laboratory Analytical Results





600 Rock Raymond Road Downingtown, PA 19335 Phone: 610 - 269 - 9989 Fax: 610 - 269 - 9989

# ORGANIC & INORGANIC DATA VALIDATION REPORT

# **S & W REDEVELOPMENT**

# **PASS & SEYMOUR SITE**

# ANALYZED BY TESTAMERICA

# JOB No.: 220-6024

REVIEWED BY: Analytical Assurance Associates (A<sup>3</sup>) 600 Rock Raymond Road Downingtown, PA 19335

#### S & W REDEVELOPMENT PASS & SEYMOUR SITE CASE NO.: 220-6024

#### **INTRODUCTION**

This quality assurance review is based upon a review of all data generated from eight (8) aqueous samples including one field blank, collected on July 29, 2008. Samples were received by TestAmerica laboratory on July 30, 2008 and analyzed for specific volatile organic compounds (VOCs) using SW 846, Method 8260B.

The following samples are evaluated and included in this data package review.

BR07-29 BR07-30 BR07-31 BR07-32 BR08-33 BR08-33 BR08-35 DUPLICATE

MS/MSD analysis was performed on sample BR07-31 from this batch.

The reported analytical data for the above samples were evaluated in accordance with the following parameters and summarized in this report.

#### **QUALITY ASSURANCE REVIEW**

The findings offered in this report are based upon a review of the following criteria:

- Data Completeness
- Holding Times
- Calibrations
- Blanks
- Surrogate Recoveries
- Internal Standards Recovery
- Matrix Spike/Spike Duplicate/Blank Spike Analyses
- Instrument Performance
- Field Duplicate Results
- Sample Results

S & W Redevelopment Pass & Seymour, Site Job No.: 220-6024

#### **DATA COMPLETENESS**

The data package completeness is satisfactory.

#### HOLDING TIME

Samples were analyzed within 10-day from the VTSR. Samples were preserved at pH <2 unit.

#### CALIBRATION

All response factors were within the control limits. The following %RSDs and %Ds were above 30% and 25% control limits established by the Region II data validation:

Compound	IC 7-28-08	CC 8-01-08 @ 9:40	CC 8-05-08 @ 12:33	CC 8-07-08 @ 8:50
Bromomethane	35.1			
Chloromethane	х.		30.9	
Carbon disulfide		46		
Tetrachloroethene			33.5	29.7
Chloroethane	38.1			29.4
Samples	BR07-30	BR07-29	BR08-33	BR07-30
	<b>BR08-35</b>		BR07-32	BR08-35
	BR07-31		DUP	BR07-31
	BR08-34			BR08-34
	MS/MSD			MS/MSD

The reported sample results and non-detected values were qualified estimated (J & UJ).

Note: These eight samples were analyzed under six initial and continuing calibrations. Many non-TLC compounds were included in the calibration standards that make review of the data very time consuming.

#### **BLANKS**

The laboratory method blanks, trip blank, and storage blank had methylene chloride at maximum level of 0.8 ug/L. The reported sample results up to ten times the blank contamination level were considered as the laboratory artifact and qualified "U".

#### SURROGATE RECOVERIES

Samples were spiked with four surrogate compounds prior to analysis. The recoveries were within the control limits with the exception 4-bromofluorobenzene (71%) in MSD sample. Sample data was not impacted since the analysis of matrix spike fulfilled the reanalysis requirement.

S & W Redevelopment Pass & Seymour, Site Job No.: 220-6024

#### MATRIX SPIKE/SPIKE DUPLICATE ANALYSIS

Matrix spike/spike duplicate analysis was performed on sample BR07-31 and an alternate sample 220-599-G-1 from the other site. Recoveries were within the control limits with the exception of tetrachloroethene (57/47 %) in BR07-31 MS/MSD. Sample data was not impacted since the recoveries were above 10%.

Three LCSs and two blank spike samples were analyzed with this batch. The recoveries for carbon disulfide (30.6%) and styrene (63%) in LCSs analyzed on 8-01-08 and 8-07-08 respectively were below the lower control limits established by the laboratory. Sample data was not impacted since the recoveries were within the control limits in MS/MSD and both blank spike samples.

#### **INTERNAL STANDARD**

The recoveries and retention times were within the control limits.

#### FIELD DUPLICATE

Field duplicate analysis was performed on samples BR07-32/Duplicte. Target compounds were not detected in these two samples at levels above CRQLs.

#### SAMPLE RESULTS

All samples were analyzed at one-fold dilutions with the exception of sample BR07-30. This sample was originally analyzed at a 400-fold dilution. Trichloroethene was detected in this sample at very high level. Sample results and non-detected values were considered biased and qualified estimated.

An intensive peak was detected in samples BR07-32 & BR07-33 chromatograms which suppressed the other peaks. Sample data was accepted unqualified since the surrogate and internal standard recoveries were within the control limits in these two samples.

#### SUMMARY

The cooler temperature (0.2°C) was reported and considered acceptable.

All data have been validated in accordance with the data quality assurance set forth in NYSDEC ASP for Evaluating Organic analyses. The USEPA Region II Data Validation SOP # HW-6 Revision 14, (September 2006) was utilized to review the data completeness and data quality. The analysis problems were discussed in the above sections. If you have any questions or comments on this data review, please contact Zohreh Hamid at (610) 269-9989.

1. Appendix A- Glossary of Data Qualifier

Appendix II: Crossily of Data Quantum
 Appendix B- Data Summary Forms
 Appendix C- Laboratory Results
 Appendix D- Support Documentation

Appendix A Glossary of Data Qualifiers

#### **GLOSSARY OF DATA QUALIFIERS**

#### **CODES RELATING TO IDENTIFICATION**

(confidence concerning presence or absence of compounds):

- U = NOT DETECTED SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN LABORATORY OR FIELD BLANKS. [Substantially is equivalent to a result less than 10 times the blank level for common contaminants (methylene chloride, acetone and 2- butanone in the VOA analyses, and common phthalates in the BNA analyses, along with tentatively identified compounds) or less than 5 times the blank level for other target compounds.]
- R = UNUSABLE RESULT. THE PRESENCE OR ABSENCE OF THIS ANALYTE CANNOT BE VERIFIED. SUPPORTING DATA NECESSARY TO CONFIRM RESULT.
- N = NEGATED COMPOUND. THERE IS PRESUMPTIVE EVIDENCE TO MAKE A TENTATIVE IDENTIFICCATION.

#### **CODES RELATING TO QUATITATION**

(can be used for both positive results and sample quantitation limits):

- J = ANALYTE WAS POSITIVELY IDENTIFIED. REPORTED VALUE MAY NOT BE ACCURATE OR PRECISE.
- UJ = ANALYTE WAS NOT DETECTED. THE REPORTED QUATITATION LIMIT IS QUALIFIED ESTIMATED.

#### **OTHER CODES**

 $\mathbf{Q} = \mathbf{NO} \mathbf{ANALYTICAL} \mathbf{RESULT}.$ 

# Appendix B Data Summary

#### ANALYTICAL ASSURANCE ASSOCIATES (A3) VOLATILE ANALYSIS

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Site ID: Pass & Seymour		DDAT AA	0007.00							
Client Sample ID:		BR07-29	BR07-30	BR07-31	BR07-32	BR07-33	BR07-34	BR07-35	DUPLICATE	
Lab Sample ID: 220-6024-		1	2	3	4	5	6	7	8	
Matrix:		Water								
Dilution Factor		1	400	1	1	1	1	1	1	
Units		ug/L								
	Reporting	Sample								
Target Compound	Limit	Result								
cetone	10		520 J	1.4 J	1.1 J	1 J	9.7 J	9.4 J	5.8 J	
Benzene	5		UJ							
Bromodichloromethane	5		UJ							
Bromoform	5		·UJ							
Bromomethane	5		UJ	UJ			UJ	UJ		
Methyl ethyl ketone	10		UJ							
Carbon disulfide	5	UJ	UJ							
Carbon tetrachloride	5		UJ							
Chlorobenzene	5		UJ							
hloroethane	5		UJ	UJ			UJ	UJ		
hloroform	5		UJ							
chloromethane	5		UJ		UJ	UJ			UJ	
Dibromochloromethane	5		UJ							
,1-Dichloroethane	5		UJ							
,2-Dichloroethane	5		UJ							
,1-Dichloroethene	5		UJ							
,2-Dichloropropane	5		UJ							
is-1,3-Dichloropropene	5		UJ							
rans-1,3-Dichloropropene	5		UJ							
thylbenzene	5		UJ							
-Hexanone	10		UJ							
lethylene chloride	5		2000 UJ				5 U	5 U		
Aethyl Isobutyl ketone	10		UJ							
Styrene	5		UJ							
,1,2,2-Tetrachloroethane	5		UJ							
etrachloroethene	5		UJ	23 J	UJ	UJ	UJ	UJ	UJ	
oluene	5		UJ							
,1,1,Trichloroethane	5		UJ							
,1,2-Trichloroethane	5		UJ							
richloroethene	5	120	33000 J	6.5		3.3 J				
inyl Chloride	5		UJ	1 J						
ylenes, Total	5		UJ	10.04						
is-1,2-Dichloroethene	5	4.3 J	960 J	17						
rans-1,2-Dichloroethene	5		UJ							

Appendix C Laboratory Reported Results

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#### Client: S & W Redevelopment LLC

Water

# Client Sample ID:BR07-29Lab Sample ID:220-6024-1

Client Matrix:

Job Number: 220-6024-1 Sdg Number: 220-6024

Date Sampled:07/29/20081105Date Received:07/30/20080932

Method:	8260B	Analysis Batch: 220-18673	Instrument ID:	HP 5890	/5971 GC/MS
Preparation:	5030B		Lab File ID:	L8458.D	
Dilution:	1.0		Initial Weight/Vo	lume:	5 mL
Date Analyzed:	08/01/2008 1714		Final Weight/Vol	lume:	5 mL
Date Prepared:	08/01/2008 1714				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10	U	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U.	1.1	10
Carbon disulfide	5.0	U* V1	0.90	5.0
Carbon tetrachloride	5.0	L U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	Ŭ	0.55	5.0
1,1-Dichloroethane	5.0	Ŭ	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	Ŭ	0.83	5.0
1,2-Dichloropropane	5.0	Ŭ	0.71	5.0
cis-1,3-Dichloropropene	5.0	Ŭ	0.28	5.0
rans-1,3-Dichloropropene	5.0	Ŭ	0.57	5.0
Ethylbenzene	5.0	Ŭ	0.87	5.0
2-Hexanone	10	Ŭ	1.1	10
Methylene Chloride	5.0	Ŭ	0.78	5.0
nethyl isobutyl ketone	10	Ŭ	0.38	10
Styrene	5.0	Ŭ	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	Ŭ	0.81	5.0
Fetrachloroethene	5.0	Ŭ	0.81	5.0
Foluene	5.0	Ŭ	0.72	5.0
1,1,1-Trichloroethane	5.0	Ŭ	0.69	5.0
1.1.2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	120	1	0.62	5.0
/inyl chloride	5.0	U	0.99	5.0
Kylenes, Total	5.0	U	2.3	5.0
sis-1,2-Dichloroethene	4.3	J /	0.99	5.0
rans-1,2-Dichloroethene	5.0	U	0.99	5.0
Surrogate	%Rec		Accent	ance Limits
1,2-Dichloroethane-d4 (Surr)	80		53 - 1	
4-Bromofluorobenzene	99		53 - 1 73 - 1	
Dibromofluoromethane	80			
Foluene-d8 (Surr)	80		54 - 1	
oluene-uo (Sult)	88		63 - 1	121

# Client: S & W Redevelopment LLC

220-6024-2

Water

# Client Sample ID: BR07-30

Lab Sample ID:

Client Matrix:

.

Job Number: 220-6024-1 Sdg Number: 220-6024

 Date Sampled:
 07/29/2008
 1020

 Date Received:
 07/30/2008
 0932

Method: Preparation:	8260B 5030B	Analysis Batch: 220-18786	Instrument ID: Lab File ID:	HP 689 W7978	90/5973 GC/MS 3.D	
Dilution: Date Analyzed: Date Prepared:	(400) 08/07/2008 1423 08/07/2008 1423		Initial Weight/Vo Final Weight/Vo		5 mL 5 mL	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	520	J/ J	410	4000
Benzene	2000	U UJ	300	2000
Bromodichloromethane	2000	U .,	190	2000
Bromoform	2000	U	180	2000
Bromomethane	2000	U	850	2000
Methyl Ethyl Ketone	4000	U	440	4000
Carbon disulfide	2000	U	360	2000
Carbon tetrachloride	2000	U	430	2000
Chlorobenzene	2000	U	290	2000
Chloroethane	2000	U	420	2000
Chloroform	2000	U	270	2000
Chloromethane	2000	U	440	2000
Dibromochloromethane	2000	U	220	2000
1,1-Dichloroethane	2000	U	410	2000
1,2-Dichloroethane	2000	U	290	2000
1,1-Dichloroethene	2000	U	330	2000
1,2-Dichloropropane	2000	U	280	2000
cis-1,3-Dichloropropene	2000	U	110	2000
trans-1,3-Dichloropropene	2000	U	230	2000
Ethylbenzene	2000	U ,	350	2000
2-Hexanone	4000	U	440	4000
Methylene Chloride	loov -320-	J/ UJ	310	2000
methyl isobutyl ketone	4000	UCS	150	4000
Styrene	2000	U*	260	2000
1,1,2,2-Tetrachloroethane	2000	U	320	2000
Tetrachloroethene	2000	U	320	2000
Toluene	2000	U	290	2000
1,1,1-Trichloroethane	2000	υĻ	280	2000
1,1,2-Trichloroethane	2000	U	260	2000
Trichloroethene	33000 +4	/)	250	2000
Vinyl chloride	2000	υUS	400	2000
Xylenes, Total	2000		910	2000
cis-1,2-Dichloroethene	960	J 13	400	2000
trans-1,2-Dichloroethene	2000	ون U	300	2000
Surrogate	%Rec		Accepta	ance Limits
1,2-Dichloroethane-d4 (Surr)	112	na na stran an a	53 - 1	
4-Bromofluorobenzene	79		73 - 1	
Dibromofluoromethane	97		54 - 1	
Toluene-d8 (Surr)	82		63 - 1	

#### Client: S & W Redevelopment LLC

#### **Client Sample ID:**

Lab Sample ID:

Client Matrix:

BR07-31

220-6024-3

Water

Job Number: 220-6024-1 Sdg Number: 220-6024

Date Sampled: 07/29/2008 0910 Date Received: 07/30/2008 0932

Method:	8260B	Analysis Batch: 220-18786	Instrument ID:	HP 6890/	5973 GC/MS
Preparation:	5030B		Lab File ID:	W7981.D	
Dilution:	1.0		Initial Weight/Vo	lume:	5 mL
Date Analyzed:	08/07/2008 1543		Final Weight/Vo	lume:	5 mL
Date Prepared:	08/07/2008 1543				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.4	J 🖊	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	UUT	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U UJ	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U *	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U,	0.81	5.0
Tetrachloroethene	23	13	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U,	0.65	5.0
Trichloroethene	6.5	-/	0.62	5.0
Vinyl chloride	1.0	J /	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	17	1	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0
Surrogate	%Rec		Accept	ance Limits
1,2-Dichloroethane-d4 (Surr)	118	$\label{eq:static} \left\  (x,y) - y(y,y) \right\ _{L^2} = \left\  (x,y) - y(y,y) - y(y,y) \right\ _{L^2} = \left\  (x,y) - y(y,y$	53 - 1	The second
4-Bromofluorobenzene	80		73 - 1	
Dibromofluoromethane	99		54 - 1	
Toluene-d8 (Surr)	84			
	04		63 - 1	21

#### Client: S & W Redevelopment LLC

220-6024-4

Water

# Client Sample ID: BR07-32

Lab Sample ID:

Client Matrix:

Job Number: 220-6024-1 Sdg Number: 220-6024

 Date Sampled:
 07/29/2008
 1040

 Date Received:
 07/30/2008
 0932

Method: Preparation:	8260B 5030B	Analysis Batch: 220-18738		ument ID: File ID:	HP 68 V7185	90/5973 GC	C/MS	
Dilution: Date Analyzed: Date Prepared:	1.0 08/06/2008 0032 08/06/2008 0032			l Weight/Vo Weight/Vol		5 mL 5 mL		
Analyte		Result (ug/L)	Qualifier	MDL		RL		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.1	J .	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	11	0.67	5.0
Chloromethane	5.0	IV J	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	Ŭ	0.71	5.0
cis-1,3-Dichloropropene	5.0	Ŭ	0.28	5.0
rans-1,3-Dichloropropene	5.0	Ŭ	0.57	5.0
Ethylbenzene	5.0	Ŭ	0.87	5.0
2-Hexanone	10	Ŭ	1.1	10
Methylene Chloride	5.0	Ŭ	0.78	5.0
nethyl isobutyl ketone	10	Ŭ	0.38	10
Styrene	5.0	Ŭ	0.64	5.0
,1,2,2-Tetrachloroethane	5.0	Ŭ	0.81	5.0
etrachloroethene	5.0	U-U1	0.81	5.0
oluene	5.0	U	0.72	5.0
,1,1-Trichloroethane	5.0	U	0.69	5.0
,1,2-Trichloroethane	5.0	U	0.65	5.0
richloroethene	5.0	U	0.62	5.0
/inyl chloride	5.0	U	0.99	
(ylenes, Total	5.0	U		5.0
is-1,2-Dichloroethene	5.0	U	2.3 0.99	5.0
rans-1,2-Dichloroethene	5.0	U		5.0
	5.0	U	0.76	5.0
Gurrogate	%Rec		Accept	ance Limits
,2-Dichloroethane-d4 (Surr)	121	e an e service de la construction de la constructio	53 - 1	
Bromofluorobenzene	99		73 - 1	
Dibromofluoromethane	117		54 - 1	
Foluene-d8 (Surr)	106		54 - 1 63 - 1	
(our)	100		03 - 1	21

#### Client: S & W Redevelopment LLC

220-6024-5

Water

# Client Sample ID: BR08-33

Lab Sample ID:

**Client Matrix:** 

Job Number: 220-6024-1 Sdg Number: 220-6024

 Date Sampled:
 07/29/2008
 0935

 Date Received:
 07/30/2008
 0932

Method:	8260B	Analysis Batch: 220-18738	Instrument ID:	HP 6890/	5973 GC/MS
Preparation:	5030B		Lab File ID:	V7180.D	
Dilution:	1.0		Initial Weight/Volu	ume:	5 mL
Date Analyzed:	08/05/2008 2219		Final Weight/Volu	ume:	5 mL
Date Prepared:	08/05/2008 2219		9		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.0	J	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U U1	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	Ŭ	0.57	5.0
Ethylbenzene	5.0	Ŭ	0.87	5.0
2-Hexanone	10	Ŭ	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	Ŭ	0.38	10
Styrene	5.0	Ŭ	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	Ŭ	0.81	5.0
Tetrachloroethene	5.0	UU UJ	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	Ŭ	0.69	5.0
1,1,2-Trichloroethane	5.0	Ŭ,	0.65	5.0
Trichloroethene	3.3	J /	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0
Surrogate	%Rec		Accent	ance Limits
1,2-Dichloroethane-d4 (Surr)	115	$(a_1) = (a_1,a_2,a_3,\ldots,a_n,a_n) = (a_1,a_2,\ldots,a_n) = (a_1,a_2,\ldots,a_n)$	53 - 1	
4-Bromofluorobenzene	97			
Dibromofluoromethane	112		73 - 1	
Toluene-d8 (Surr)			54 - 13	
	102		63 - 12	21

#### Client: S & W Redevelopment LLC

220-6024-6

Water

# Client Sample ID: BR08-34

Lab Sample ID:

Client Matrix:

Job Number: 220-6024-1 Sdg Number: 220-6024

 Date Sampled:
 07/29/2008
 1000

 Date Received:
 07/30/2008
 0932

Method:	8260B	Analysis Batch: 220-18786	Instrument ID:	HP 6890/5	973 GC/MS
Preparation:	5030B		Lab File ID:	W7987.D	
Dilution:	1.0		Initial Weight/Vo	olume: 5	mL
Date Analyzed:	08/07/2008 1824		Final Weight/Vo	lume: 5	mL
Date Prepared:	08/07/2008 1824				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	9.7	J	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	L	0.46	5.0
Bromomethane	5.0	UUJ	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U-U1	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U -	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0 4.6	SIU	0.78	5.0
methyl isobutyl ketone	10	Ú	0.38	10
Styrene	5.0	U *	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U-U1	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	U	0.69	5.0
1,1,2-Trichloroethane	5.0	U	0.65	5.0
Trichloroethene	5.0	U	0.62	5.0
Vinyl chloride	5.0	U	0.99	5.0
Xylenes, Total	5.0	U	2.3	5.0
cis-1,2-Dichloroethene	5.0	U	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0
Surrogate	%Rec		Accept	ance Limits
1,2-Dichloroethane-d4 (Surr)	121	53 - 125		
4-Bromofluorobenzene	92		73 - 1	
Dibromofluoromethane	105		54 - 1	
Toluene-d8 (Surr)	90		63 - 1	

#### Client: S & W Redevelopment LLC

220-6024-7

Water

# Client Sample ID: BR08-35

Lab Sample ID:

Client Matrix:

Job Number: 220-6024-1 Sdg Number: 220-6024

 Date Sampled:
 07/29/2008
 1130

 Date Received:
 07/30/2008
 0932

Method:	8260B	Analysis Batch: 220-18786	Instrument ID:	HP 689	0/5	973 GC/MS
Preparation:	5030B		Lab File ID:	W7980	D	
Dilution:	1.0		Initial Weight/Vo	lume:	5	mL
Date Analyzed:	08/07/2008 1517		Final Weight/Vo	lume:	5	mL
Date Prepared:	08/07/2008 1517					
Date Prepared:	08/07/2008 1517					

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	9.4	J /	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	6	0.46	5.0
Bromomethane	5.0	UUJ	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	UVS	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	U	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	U	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
rans-1,3-Dichloropropene	5.0	U	0.57	5.0
Ethylbenzene	5.0	U	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0 0.88	++-V	0.78	5.0
nethyl isobutyl ketone	10	U	0.38	10
Styrene	5.0	U *	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
letrachloroethene	5.0	U U1	0.81	5.0
Toluene	5.0	U	0.72	5.0
,1,1-Trichloroethane	5.0	U	0.69	5.0
,1,2-Trichloroethane	5.0	U	0.65	5.0
Frichloroethene	5.0	Ū	0.62	5.0
/inyl chloride	5.0	Ŭ	0.99	5.0
(ylenes, Total	5.0	Ŭ	2.3	5.0
sis-1,2-Dichloroethene	5.0	Ŭ	0.99	5.0
rans-1,2-Dichloroethene	5.0	U	0.76	5.0
Surrogate	%Rec		Accent	ance Limits
,2-Dichloroethane-d4 (Surr)	113	an and an an an and an	53 - 1	
l-Bromofluorobenzene	78		73 - 1	
Dibromofluoromethane	95			
foluene-d8 (Surr)	80	54 - 137 63 - 121		

#### Client: S & W Redevelopment LLC

#### Client Sample ID: DUPLICATE

220-6024-8

Water

Lab Sample ID:

Client Matrix:

Job Number: 220-6024-1 Sdg Number: 220-6024

 Date Sampled:
 07/29/2008
 0000

 Date Received:
 07/30/2008
 0932

Method:	8260B	Analysis Batch: 220-18738	Instrument ID:	HP 6890/59	973 GC/MS
Preparation:	5030B		Lab File ID:	V7181.D	
Dilution:	1.0		Initial Weight/Volu	ume: 5	mL
Date Analyzed:	08/05/2008 2246		Final Weight/Volu	ime: 5	mL
Date Prepared:	08/05/2008 2246		0		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.8	J ,	1.0	10
Benzene	5.0	U	0.74	5.0
Bromodichloromethane	5.0	U	0.48	5.0
Bromoform	5.0	U	0.46	5.0
Bromomethane	5.0	U	2.1	5.0
Methyl Ethyl Ketone	10	U	1.1	10
Carbon disulfide	5.0	U	0.90	5.0
Carbon tetrachloride	5.0	U	1.1	5.0
Chlorobenzene	5.0	U	0.72	5.0
Chloroethane	5.0	U	1.1	5.0
Chloroform	5.0	U	0.67	5.0
Chloromethane	5.0	UUJ	1.1	5.0
Dibromochloromethane	5.0	U	0.55	5.0
1,1-Dichloroethane	5.0	U	1.0	5.0
1,2-Dichloroethane	5.0	U	0.72	5.0
1,1-Dichloroethene	5.0	U	0.83	5.0
1,2-Dichloropropane	5.0	Ū	0.71	5.0
cis-1,3-Dichloropropene	5.0	U	0.28	5.0
trans-1,3-Dichloropropene	5.0	Ŭ	0.57	5.0
Ethylbenzene	5.0	Ū	0.87	5.0
2-Hexanone	10	U	1.1	10
Methylene Chloride	5.0	U	0.78	5.0
methyl isobutyl ketone	10	Ū	0.38	10
Styrene	5.0	U	0.64	5.0
1,1,2,2-Tetrachloroethane	5.0	U	0.81	5.0
Tetrachloroethene	5.0	U V1	0.81	5.0
Toluene	5.0	U	0.72	5.0
1,1,1-Trichloroethane	5.0	Ŭ	0.69	5.0
1,1,2-Trichloroethane	5.0	Ŭ	0.65	5.0
Trichloroethene	5.0	Ŭ	0.62	5.0
Vinyl chloride	5.0	Ŭ	0.99	5.0
Xylenes, Total	5.0	Ŭ	2.3	5.0
cis-1,2-Dichloroethene	5.0	Ŭ	0.99	5.0
trans-1,2-Dichloroethene	5.0	U	0.76	5.0
Surrogate	%Rec		Accent	ance Limits
1,2-Dichloroethane-d4 (Surr)	115		53 - 1	
4-Bromofluorobenzene	98		73 - 1	
Dibromofluoromethane	113			
Toluene-d8 (Surr)	104		54 - 1	
	104		63 - 1	21

Appendix D Support Documentation/Resubmission If Applicable