SHIELD ENGINEERING, INC.

October 18, 2011

RECEIVED
OCT 21 2011
SOUTHERN REAL ESTATE

Mr. David Peacock
Brownfields Compliance Coordinator
NC Brownfields Program
Mail Service Center 1646
Raleigh, North Carolina 27699-1646

Subject: Report of Groundwater Sampling
City West Commons
1520-1560 West Blvd
Charlotte, North Carolina
Shield Project No. 1110155

Dear Mr. Peacock:

Shield Engineering, Inc. (Shield) submits for your review our findings of sampling of MW-1 and MW-2 at City West Commons located at 1520 – 1560 West Boulevard (see Figures 1 and 2 for Site Location and Site Plan maps). These activities were conducted pursuant to your Notice of Noncompliance dated August 5, 2011.

Background

Monitoring wells MW-1 and MW-2 are required to be sampled every two years in accordance with the Brownfields Agreement Land Use Restrictions (LUR) as noted in the Notice of Noncompliance dated August 5, 2011 from the North Carolina Department of Natural Resources (NCDENR). The most recent sampling event conducted in June 2009 by Enviroassessments indicated that tetrachloroethene (PCE) exceeded the applicable North Carolina Administrative Code, 15A 2L Class GA Standards (2L Standards).

Scope of Work and Findings

As required by the LUR, Shield collected groundwater samples from monitoring wells MW-1 and MW-2 and had the samples analyzed by Environmental Protection Agency (EPA) Method 8260. A laboratory Trip Blank was also be analyzed for Method 8260. The groundwater samples were analyzed by SGS North America, Inc., a North Carolina certified laboratory.

The laboratory results of the groundwater samples identified two constituents above the laboratory detection limits in monitoring wells MW-1 and MW-2. Chloroform was detected at 0.16 ug/L and 1.01 ug/L in MW-1 and MW-2, respectively. The 2L Standard

for chloroform is 70 ug/L. PCE was detected at 0.65 ug/L and 0.22 ug/L in MW-1 and MW-2, respectively. The 2L Standard for PCE is 0.7 ug/L. Chloroform and PCE were detected at concentrations below the 2L Standards. The attached Table 1 summarizes the historical data collected by others and the data from the October 7, 2011 sampling event. Laboratory data for the groundwater samples is attached.

Recommendations

As stated in the August 5, 2011 letter, Land Use Restriction (LUR) 2 states that if there are three consecutive sampling events below the applicable legal standard, then no further sampling shall be required. Based on the concentrations of chloroform and PCE being below 2L Standards during the October 7, 2011 sampling event, Shield recommends semi-annual sampling of monitoring wells MW-1 and MW-2 if approved by NCDENR. If the next two sampling events indicate concentrations below the 2L Standards, Shield will recommend requesting a no further action status from the NCDENR.

If you have any questions regarding the contents of this proposal, please do not hesitate to contact our office at (704)394-6913.

Sincerely,

SHIELD ENGINEERING, INC.

Flora J. D'Souza, CHMM
Project Manager

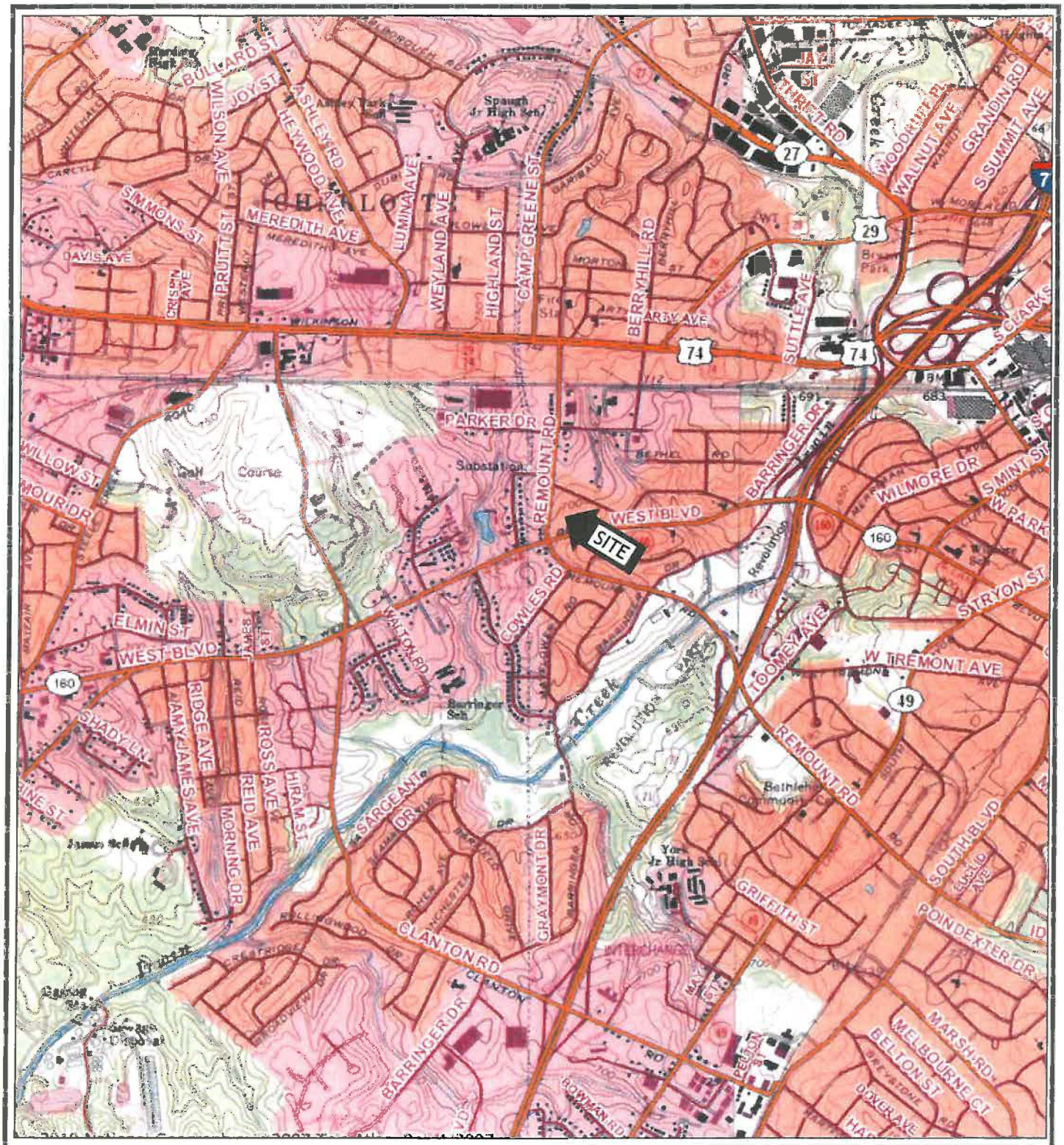
Greg D. Icenhour, P.G., MBA
Principal

10-18-11

cc: Mr. James McGee, NAI Southern Real Estate

Attachments: Figure 1: Site Location Map
Figure 2: Site Plan Map
Table 1: Summary of Analytical Results – Groundwater Samples
Laboratory Data

FIGURE(S)



N

GRAPHIC SCALE

0 1,000 2,000

SCALE: 1 in. = 2,000 ft.

SOURCE: NATIONAL GEOGRAPHIC USGS TOPO, 7.5 MINUTE MAP SERIES, MECKLENBURG COUNTY, NORTH CAROLINA

SHIELD ENGINEERING, INC.

4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
704-394-6913
704-394-6966 fax
www.shieldengineering.com

SITE LOCATION MAP

CITY WEST COMMONS SHOPPING CENTER

WEST BOULEVARD AT REMOUNT ROAD
CHARLOTTE, NORTH CAROLINA
SHIELD #1110155-01

DATE :	10/18/11	DRAWN BY :	RBS
SCALE :	AS SHOWN	FIGURE :	1

H:\PROJECTS\2011\1110155-01 CITY WEST COMMONS\FIGURES\SITE LOCATION MAP.DWG

LEGEND

MONITORING WELL

N

SOURCE: MECKLENBURG COUNTY POLARIS GIS AND ENVIROASSESSMENTS SITE PLAN FIGURE 2.

SHIELD ENGINEERING, INC.
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
704-394-6913
704-394-6968 fax
www.shieldengineering.com

SITE PLAN

CITY WEST COMMONS SHOPPING CENTER
WEST BOULEVARD AT REMOUNT ROAD
CHARLOTTE, NORTH CAROLINA
SHIELD #1110155-01

DATE : 10/18/11	DRAWN BY : RBS
SCALE : N.T.S.	FIGURE : 2

H:\PROJECTS\2011\1110155-01 CITY WEST COMMONS\FIGURES\SITE PLAN.DWG

TABLE(S)

Table 1: Summary of Analytical Results-Groundwater Samples
City West Commons
1520-1560 West Boulevard, Charlotte, North Carolina
Brownfields Project # 02008-98-60
Shield Project # 1110155

Analytical Method---->		EPA Method 8260					
		n-Propylbenzene	1,3,5 Trimethylbenzene	1,2,4 Trimethylbenzene	Chloroform	Tetrachloroethene (PCE)	Trichloroethene
15A NCAC 2L.0202 Standard---->		**70**	**400**	**400**	**70**	**0.7**	**3**
15A NCAC 2L.0115 Gross Contamination level--->		**30,000**	**25,000**	**28,500**	**70,000**	**700**	**3,000**
Location	**Date**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
MW-1	1/10/2005*	ND	ND	ND	1.7	4	UN
	1/30/2007*	14.3	18.8	76	ND	ND	UN
	6/10/2009*	ND	ND	ND	ND	1.3	ND
	10/07/11	ND	ND	ND	0.16	0.65	ND
MW-2	1/10/2005*	ND	ND	ND	4.5	7.3	UN
	1/30/2007*	ND	ND	ND	2.72	1.65	UN
	6/10/2009*	ND	ND	ND	1.11	ND	ND
	10/07/11	ND	ND	ND	1.01	0.22	ND

Notes:

* = Sampling results as reported in the June 23, 2009 Groundwater Monitoring Report by enviroassessments

ug/l = Micrograms per liter.

ND = Not detected at or above the method detection limit specified in the laboratory report.

UN = Laboratory analytical results not known by Shield

15A. NCAC 2L.0202 = North Carolina Administrative Code 2L Groundwater Standards.

Gross Contaminant Levels = NCDENR Standard Statute for risked based maximum gross contamination levels for groundwater as presented in the NCDENR "Guidelines for Assessment and Corrective Action," dated July 15, 2008, effective December 1, 2008, amended January 1, 2010.

Bold numbers indicate concentrations exceeding NCAC 2L .0202 Standards

All other data can be seen in the attached laboratory report.

APPENDIX A

SGS

Laboratory Report of Analysis

To: Flora D'Souza
Shield Engineering
4301 Taggart Creek Rd
Charlotte, NC 28208

Report Number: **31102796**

Client Project: **City West Commons 1110155**

Dear Flora D'Souza,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Michael D. Page at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Digitally signed by: Michael Page
Date: 2011.10.13 14:40:54 -05'00'

Michael D. Page
Project Manager
michael.page@sgs.com

Date

SGS

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < LOD)
V	Recovery is below quality control limit. The data has been validated based on a favorable signal-to-noise and detection limit
A	Amount detected is less than the Lower Method Calibration Limit
J	Amount detected is between the Method Detection Limit and the Lower Calibration Limit
O	The recovery of this analyte in the OPR is above the Method QC Limits and the reported concentration in the sample may be biased high
E	Amount detected is greater than the Upper Calibration Limit
S	The amount of analyte present has saturated the detector. This situation results in an underestimation of the affected analyte(s)
Q	Indicates the presence of a quantitative interference. This situation may result in an underestimation of the affected analyte(s)
I	Indicates the presence of a qualitative interference that could cause a false positive or an overestimation of the affected analyte(s)
DPE	Indicates the presence of a peak in the polychlorinated diphenylether channel that could cause a false positive or an overestimation of the affected analyte(s)
TIC	Tentatively Identified Compound
EMPC	Estimated Maximum possible Concentration due to ion ratio failure
ND	Not Detected
K	Result is estimated due to ion ratio failure in High Resolution PCB Analysis
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW-1	31102796001	10/07/2011 10:22	10/10/2011 10:11	Water
MW-2	31102796002	10/07/2011 10:28	10/10/2011 10:11	Water
Trip Blank	31102796003	10/07/2011 00:00	10/10/2011 10:11	Water

SGS

Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **City West Commons 1110155**
Lab Sample ID: 31102796001-A
Lab Project ID: 31102796

Collection Date: 10/07/2011 10:22
Received Date: 10/10/2011 10:11
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1	10/11/2011 13:44
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	10/11/2011 13:44
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	10/11/2011 13:44
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	10/11/2011 13:44
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	10/11/2011 13:44
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	10/11/2011 13:44
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	10/11/2011 13:44
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	10/11/2011 13:44
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	10/11/2011 13:44
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	10/11/2011 13:44
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	10/11/2011 13:44
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	10/11/2011 13:44
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	10/11/2011 13:44
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	10/11/2011 13:44
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	10/11/2011 13:44
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	10/11/2011 13:44
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	10/11/2011 13:44
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	10/11/2011 13:44
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	10/11/2011 13:44
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	10/11/2011 13:44
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	10/11/2011 13:44
2-Butanone	ND	U	0.723	25.0	ug/L	1	10/11/2011 13:44
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	10/11/2011 13:44
2-Hexanone	ND	U	0.728	5.00	ug/L	1	10/11/2011 13:44
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	10/11/2011 13:44
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	10/11/2011 13:44
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	10/11/2011 13:44
Acetone	ND	U	0.864	25.0	ug/L	1	10/11/2011 13:44
Benzene	ND	U	0.113	1.00	ug/L	1	10/11/2011 13:44
Bromobenzene	ND	U	0.110	1.00	ug/L	1	10/11/2011 13:44
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	10/11/2011 13:44
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	10/11/2011 13:44
Bromoform	ND	U	0.0974	1.00	ug/L	1	10/11/2011 13:44
Bromomethane	ND	U	0.237	1.00	ug/L	1	10/11/2011 13:44
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	10/11/2011 13:44
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	10/11/2011 13:44
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	10/11/2011 13:44
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	10/11/2011 13:44
Chloroethane	ND	U	0.311	1.00	ug/L	1	10/11/2011 13:44
Chloroform	**0.160**	J	0.139	1.00	ug/L	1	10/11/2011 13:44
Chloromethane	ND	U	0.448	1.00	ug/L	1	10/11/2011 13:44
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	10/11/2011 13:44
Dibromomethane	ND	U	0.168	1.00	ug/L	1	10/11/2011 13:44

SGS

Results of **MW-1**

Client Sample ID: **MW-1**
Client Project ID: **City West Commons 1110155**
Lab Sample ID: 31102796001-A
Lab Project ID: 31102796

Collection Date: 10/07/2011 10:22
Received Date: 10/10/2011 10:11
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	10/11/2011 13:44
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1	10/11/2011 13:44
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	10/11/2011 13:44
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1	10/11/2011 13:44
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	10/11/2011 13:44
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	10/11/2011 13:44
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	10/11/2011 13:44
Methyl iodide	ND	U	0.115	1.00	ug/L	1	10/11/2011 13:44
Methylene chloride	ND	U	0.152	5.00	ug/L	1	10/11/2011 13:44
Naphthalene	ND	U	0.0855	1.00	ug/L	1	10/11/2011 13:44
Styrene	ND	U	0.102	1.00	ug/L	1	10/11/2011 13:44
Tetrachloroethene	**0.650**	J	0.155	1.00	ug/L	1	10/11/2011 13:44
Toluene	ND	U	0.133	1.00	ug/L	1	10/11/2011 13:44
Trichloroethene	ND	U	0.125	1.00	ug/L	1	10/11/2011 13:44
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	10/11/2011 13:44
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	10/11/2011 13:44
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	10/11/2011 13:44
m,p-Xylene	ND	U	0.182	2.00	ug/L	1	10/11/2011 13:44
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	10/11/2011 13:44
o-Xylene	ND	U	0.0874	1.00	ug/L	1	10/11/2011 13:44
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	10/11/2011 13:44
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	10/11/2011 13:44
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	10/11/2011 13:44
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	10/11/2011 13:44
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	10/11/2011 13:44
Surrogates							
1,2-Dichloroethane-d4	100			64.0-140	%	1	10/11/2011 13:44
4-Bromofluorobenzene	99.0			85.0-115	%	1	10/11/2011 13:44
Toluene d8	99.0			82.0-117	%	1	10/11/2011 13:44

Batch Information

Analytical Batch: VMS1610
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO
Analytical Date/Time: 10/11/2011 13:44

Prep Batch: VXX2205
Prep Method: SW-846 5030B
Prep DateTime: 10/11/2011 10:41
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol.: 40 mL

SGS

Results of **MW-2**

Client Sample ID: **MW-2**
Client Project ID: **City West Commons 1110155**
Lab Sample ID: 31102796002-A
Lab Project ID: 31102796

Collection Date: 10/07/2011 10:28
Received Date: 10/10/2011 10:11
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1	10/11/2011 14:09
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	10/11/2011 14:09
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	10/11/2011 14:09
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	10/11/2011 14:09
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	10/11/2011 14:09
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	10/11/2011 14:09
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	10/11/2011 14:09
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	10/11/2011 14:09
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	10/11/2011 14:09
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	10/11/2011 14:09
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	10/11/2011 14:09
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	10/11/2011 14:09
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	10/11/2011 14:09
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	10/11/2011 14:09
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	10/11/2011 14:09
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	10/11/2011 14:09
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	10/11/2011 14:09
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	10/11/2011 14:09
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	10/11/2011 14:09
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	10/11/2011 14:09
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	10/11/2011 14:09
2-Butanone	ND	U	0.723	25.0	ug/L	1	10/11/2011 14:09
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	10/11/2011 14:09
2-Hexanone	ND	U	0.728	5.00	ug/L	1	10/11/2011 14:09
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	10/11/2011 14:09
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	10/11/2011 14:09
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	10/11/2011 14:09
Acetone	ND	U	0.864	25.0	ug/L	1	10/11/2011 14:09
Benzene	ND	U	0.113	1.00	ug/L	1	10/11/2011 14:09
Bromobenzene	ND	U	0.110	1.00	ug/L	1	10/11/2011 14:09
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	10/11/2011 14:09
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	10/11/2011 14:09
Bromoform	ND	U	0.0974	1.00	ug/L	1	10/11/2011 14:09
Bromomethane	ND	U	0.237	1.00	ug/L	1	10/11/2011 14:09
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	10/11/2011 14:09
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	10/11/2011 14:09
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	10/11/2011 14:09
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	10/11/2011 14:09
Chloroethane	ND	U	0.311	1.00	ug/L	1	10/11/2011 14:09
Chloroform	**1.01**		0.139	1.00	ug/L	1	10/11/2011 14:09
Chloromethane	ND	U	0.448	1.00	ug/L	1	10/11/2011 14:09
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	10/11/2011 14:09
Dibromomethane	ND	U	0.168	1.00	ug/L	1	10/11/2011 14:09

SGS

Results of **MW-2**

Client Sample ID: **MW-2**
Client Project ID: **City West Commons 1110155**
Lab Sample ID: 31102796002-A
Lab Project ID: 31102796

Collection Date: 10/07/2011 10:28
Received Date: 10/10/2011 10:11
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	10/11/2011 14:09
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1	10/11/2011 14:09
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	10/11/2011 14:09
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1	10/11/2011 14:09
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	10/11/2011 14:09
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	10/11/2011 14:09
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	10/11/2011 14:09
Methyl iodide	ND	U	0.115	1.00	ug/L	1	10/11/2011 14:09
Methylene chloride	ND	U	0.152	5.00	ug/L	1	10/11/2011 14:09
Naphthalene	ND	U	0.0855	1.00	ug/L	1	10/11/2011 14:09
Styrene	ND	U	0.102	1.00	ug/L	1	10/11/2011 14:09
Tetrachloroethene	**0.220**	J	0.155	1.00	ug/L	1	10/11/2011 14:09
Toluene	ND	U	0.133	1.00	ug/L	1	10/11/2011 14:09
Trichloroethene	ND	U	0.125	1.00	ug/L	1	10/11/2011 14:09
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	10/11/2011 14:09
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	10/11/2011 14:09
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	10/11/2011 14:09
m,p-Xylene	ND	U	0.182	2.00	ug/L	1	10/11/2011 14:09
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	10/11/2011 14:09
o-Xylene	ND	U	0.0874	1.00	ug/L	1	10/11/2011 14:09
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	10/11/2011 14:09
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	10/11/2011 14:09
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	10/11/2011 14:09
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	10/11/2011 14:09
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	10/11/2011 14:09
Surrogates							
1,2-Dichloroethane-d4	100			64.0-140	%	1	10/11/2011 14:09
4-Bromofluorobenzene	98.0			85.0-115	%	1	10/11/2011 14:09
Toluene d8	99.0			82.0-117	%	1	10/11/2011 14:09

Batch Information

Analytical Batch: VMS1610
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO
Analytical Date/Time: 10/11/2011 14:09

Prep Batch: VXX2305
Prep Method: SW-846 5030B
Prep Date/Time: 10/11/2011 10:41
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 10/13/2011

N.C. Certification # 411

5500 Business Drive, Wilmington, NC 28405
t 910 350 1903 f 910 350 1557 www.us.sgs.com

Member of SGS Group

SGS

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **City West Commons 1110155**
Lab Sample ID: 31102796003-A
Lab Project ID: 31102796

Collection Date: 10/07/2011 00:00
Received Date: 10/10/2011 10:11
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1	10/10/2011 17:27
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	10/10/2011 17:27
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	10/10/2011 17:27
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	10/10/2011 17:27
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	10/10/2011 17:27
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	10/10/2011 17:27
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	10/10/2011 17:27
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	10/10/2011 17:27
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	10/10/2011 17:27
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	10/10/2011 17:27
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	10/10/2011 17:27
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	10/10/2011 17:27
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	10/10/2011 17:27
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	10/10/2011 17:27
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	10/10/2011 17:27
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	10/10/2011 17:27
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	10/10/2011 17:27
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	10/10/2011 17:27
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	10/10/2011 17:27
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	10/10/2011 17:27
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	10/10/2011 17:27
2-Butanone	ND	U	0.723	25.0	ug/L	1	10/10/2011 17:27
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	10/10/2011 17:27
2-Hexanone	ND	U	0.728	5.00	ug/L	1	10/10/2011 17:27
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	10/10/2011 17:27
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	10/10/2011 17:27
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	10/10/2011 17:27
Acetone	**1.44**	J	0.864	25.0	ug/L	1	10/10/2011 17:27
Benzene	ND	U	0.113	1.00	ug/L	1	10/10/2011 17:27
Bromobenzene	ND	U	0.110	1.00	ug/L	1	10/10/2011 17:27
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	10/10/2011 17:27
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	10/10/2011 17:27
Bromoform	ND	U	0.0974	1.00	ug/L	1	10/10/2011 17:27
Bromomethane	ND	U	0.237	1.00	ug/L	1	10/10/2011 17:27
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	10/10/2011 17:27
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	10/10/2011 17:27
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	10/10/2011 17:27
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	10/10/2011 17:27
Chloroethane	ND	U	0.311	1.00	ug/L	1	10/10/2011 17:27
Chloroform	ND	U	0.139	1.00	ug/L	1	10/10/2011 17:27
Chloromethane	ND	U	0.448	1.00	ug/L	1	10/10/2011 17:27
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	10/10/2011 17:27
Dibromomethane	ND	U	0.168	1.00	ug/L	1	10/10/2011 17:27

SGS

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **City West Commons 1110155**
Lab Sample ID: 31102796003-A
Lab Project ID: 31102796

Collection Date: 10/07/2011 00:00
Received Date: 10/10/2011 10:11
Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	10/10/2011 17:27
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1	10/10/2011 17:27
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	10/10/2011 17:27
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1	10/10/2011 17:27
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	10/10/2011 17:27
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	10/10/2011 17:27
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	10/10/2011 17:27
Methyl iodide	ND	U	0.115	1.00	ug/L	1	10/10/2011 17:27
Methylene chloride	**0.760**	J	0.152	5.00	ug/L	1	10/10/2011 17:27
Naphthalene	ND	U	0.0855	1.00	ug/L	1	10/10/2011 17:27
Styrene	ND	U	0.102	1.00	ug/L	1	10/10/2011 17:27
Tetrachloroethene	ND	U	0.155	1.00	ug/L	1	10/10/2011 17:27
Toluene	ND	U	0.133	1.00	ug/L	1	10/10/2011 17:27
Trichloroethene	ND	U	0.125	1.00	ug/L	1	10/10/2011 17:27
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	10/10/2011 17:27
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	10/10/2011 17:27
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	10/10/2011 17:27
m,p-Xylene	ND	U	0.182	2.00	ug/L	1	10/10/2011 17:27
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	10/10/2011 17:27
o-Xylene	ND	U	0.0874	1.00	ug/L	1	10/10/2011 17:27
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	10/10/2011 17:27
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	10/10/2011 17:27
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	10/10/2011 17:27
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	10/10/2011 17:27
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	10/10/2011 17:27
Surrogates							
1,2-Dichloroethane-d4	116			64.0-140	%	1	10/10/2011 17:27
4-Bromofluorobenzene	100			85.0-115	%	1	10/10/2011 17:27
Toluene d8	104			82.0-117	%	1	10/10/2011 17:27

Batch Information

Analytical Batch: VMS1608
Analytical Method: SW-846 8260B
Instrument: MSD8
Analyst: BWS
Analytical Date/Time: 10/10/2011 17:27

Prep Batch: VXX2202
Prep Method: SW-846 5030B
Prep Date/Time: 10/10/2011 10:13
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 10/13/2011

N.C. Certification #431

SGS

CHAIN OF CUSTODY RECORD
SGS North America Inc.

Locations Nationwide
- Alaska
- New Jersey
- North Carolina
- Maryland
- New York
- Ohio

www.us.sgs.com

102738

(1)

CLIENT: Shield Engineering, Inc.

CONTACT: Flora D'Souza PHONE NO: (704) 394-6913

PROJECT: City West Commons SITE/PWSID#: 1110155

REPORTS TO: Flora D'Souza FAX NO.: (704) 394-6968

INVOICE TO: QUOTE #: P.O. NUMBER:

SGS Reference: 31102796

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Preservatives Used: HCl	Analysis Required (3): 8260									REMARKS
	MW-1	10-7-11	1022	Water	3	G	X										
	MW-2	10-7-11	1028	Water	3	G	X										
	Trip Blank	10-7-11	—	Water	2	G	X										

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
[signature]	10-7-11	1100	[signature]
Relinquished By: (2) [signature]	10/7/11	1200	Received By: FedEx 8742 1116 5717
Relinquished By: (3)	10/8/11	9:30	Received By: [signature]
Relinquished By: (4)	Date	Time	Received By:

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature°C: 5.8

Special Deliverable Requirements:

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions:

Requested Turnaround Time: ☐ RUSH _____ Date Needed ☒ STD

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

White - Retained by Lab
Pink - Retained by Client