Sampling and Analysis of Water Streams Associated with the Development of Marcellus Shale Gas

Final Report

Prepared for

Marcellus Shale Coalition

(Formerly the Marcellus Shale Committee)

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List of Acronyms and Abbreviations

Acronym	Definition		Acronym	Definition
ASWCMC	Appalachian Shale Water Conservation and Management Coalition		MSC	Marcellus Shale Coalition
BBL/bbl	Barrel (42 gallons)		PADEP	Pennsylvania Department of Environmental Protection
BCF	Billion Cubic Feet		ug/L	Micrograms per liter (ppb)
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes		QAPP	Quality Assurance Project Plan
Flowback Water	The water stream that flows from a well in the weeks following hydraulic fracturing completion		TCF	Trillion Cubic Feet
Frac	Hydraulic Fracture		TDS	Total Dissolved Solids
Frac Job	Well completion event involving hydraulic fracturing		TPH	Total Petroleum Hydrocarbons
FSAP	Field Sampling and Analysis Plan		PCB	Polychlorinated Biphenyl Compound
mg/l	Milligrams per liter (ppm)		POTW	Publicly Owned Treatment Works (a Sewage Treatment Facility)
			WVDEP	West Virginia Department of Environmental Protection

Table of Contents

List of Figures

List of Tables

Executive Summary

At current estimates of recoverable natural gas of more than 489 tcf, the Marcellus Shale is considered to be among the largest natural gas reserves in the world. The development of this resource is technology driven, involving the use of hydraulic fracturing technology as one of the necessary initial steps to releasing natural gas from shale rock. Sustainable development of shale gas in the Marcellus Play requires the management of volumes of water in a manner that is protective of human health and the environment. Typically, 1 - 4 million gallons of an aqueous influent stream bearing very low concentrations of additives are introduced downhole during each well completion. These additives may include friction reducers, corrosion inhibitors, oxygen scavengers, scale inhibitors and biocides that can be blended into the water and sand mixture, but make up less than 0.5 percent of the total frac fluid that is injected into a drilled well at high pressures to achieve and maintain the fracture of the shale rock. Following fracturing, flowback water is collected from the well and placed into frac tanks and/or flowback impoundments.

Effective management of flowback water requires some level of knowledge of the characteristics of the water. Flowback water contains salts, metals and organic compounds from the formation and the compounds that were introduced as additives to the influent stream. Discussions between the industry and regulatory agencies of Pennsylvania and West Virginia have pointed to the need for an information base on the composition and properties of flowback water and on the influent water streams that are used to perform frac jobs. The objective of this effort was to conduct the initial sampling and analysis of water streams associated with shale gas development in the Marcellus Shale.

In recognition of the importance of this effort, 17 member companies of the Marcellus Shale Coalition (MSC) volunteered 19 locations where shale gas wells were scheduled to be hydraulically fractured. The Field Sampling and Analysis Plan and the Quality Assurance Project Plan were developed, reviewed, and finalized for the effort by the

companies of the Appalachian Shale Water Conservation and Management Committee (ASWCMC), Pennsylvania Department of Environmental Protection (PADEP) and West Virginia Department of Environmental Protection (WVDEP). At each of the host sites, samples of influent water streams at Day 0 and the flowback water streams at 1, 5, 14, and 90 days following the frac job event were collected by a single engineering subcontractor, URS. All samples were sent to Test America (a PADEP and WVDEP certified environmental testing laboratory) for analyses. The list of constituents recommended for the characterization study was developed from comments received from the PADEP, the WVDEP and members of the ASWCMC. Categories of determinations that were conducted included: 1) General Chemistry, 2) Organic Compounds, and 3) Metals. Once reviewed and qualified, data from these analyses were organized and tabulated in a source blind manner into an Excel spreadsheet that currently represents the information base.

Results from this effort indicates that values for pH, alkalinity, total dissolved solids (TDS), total organic carbon (TOC), oils and greases and other parameters from general water characterization are within the normal ranges reported for conventional produced waters by the USGS. Flowback water concentrations of TDS ranged from 680 to 345,000 mg/l; typical profiles show an increase in TDS in flowback water with time following a frac job event. As with conventional produced water, shale gas flowback water cations are dominated by sodium and calcium; the main anion is chloride. Metals normally seen in conventional produced waters, such as iron, calcium, magnesium, and boron, are at levels in flowback waters that are well within known ranges for normal produced waters. Heavy metals that are of concern in urban industrial wastewaters and POTW sludges --- such as chromium, copper, nickel, zinc, cadmium, lead, arsenic and mercury --- are at very low levels. Among volatile organic constituents (VOCs), approximately 96% of the constituent determinations were at non-detectable levels and less than 0.5% were detected above 1 ppm. VOCs that are measurable are those that are normally found in conventional produced waters. Regarding semi-volatile organic constituents (SVOCs), more than 98% of the determinations were at non-detectable levels and less than 0.03% of all the constituents were above 1 ppm; and several constituents were at low trace levels –

usually below 10 ppb. Pesticide concentrations measured in the samples were extremely low (all results were less than 1 ug/L) and extremely random with results occurring in some supply water, Day 0, Day 14 and Day 90 samples. It is possible that these low level concentrations are not representative of actual conditions and may be attributed to laboratory contamination or instrument noise.

In conclusion, the results of this shale gas water characterization effort indicate that all pesticides, PCBs, and a large fraction of the VOC and SVOC should be considered to be unnecessary for the sampling and analysis of flowback waters in the future.

1.0 Introduction

The Marcellus Shale formation is the largest known shale deposit in the world. It overlies much of the Appalachian Basin from West Virginia in the south, to Upstate New York in the north, and Ohio to the west. The recoverable reserves of natural gas in the Marcellus shale have been estimated at more than 489 trillion cubic feet (Engelder, 2008).

Recent advances in horizontal drilling and multi-stage hydraulic fracturing technologies have made sustainable natural gas production viable from otherwise uneconomical, unconventional shale reservoirs such as the Barnett, Haynesville, Fayetteville, Woodford, et al. These tools and technologies have been successfully applied and currently enable the ongoing development of the Marcellus Shale. This development is currently underway in both West Virginia and Pennsylvania with the majority of the wells drilled and completed in southwest and northeast Pennsylvania.

Many of the logistical challenges associated with the development of shale gas stem from the amounts of water associated with the completion and operation of shale gas wells that must be transported, stored and disposed of in a manner that is protective of human health and the environment. In the course of developing shale gas in the Appalachian Basin, thousands of wells will be drilled and completed. Hydraulic fracturing ("fracing") is a necessary step for the completion of each of these wells in order to achieve economic well performance in terms of natural gas production. This step requires between 1 and 4 million gallons (23,800 and 95,200 bbl) of water for successful completion of each well; vertical wells require approximately 1 million gallons (23,800 bbl) and horizontal wells require 3-4 million gallons (71,400 to 95,200 bbl) (Gaudlip, et al., 2008).

During a typical "frac job," water is pumped downhole while additives such as friction reducers and various grades of sand are introduced to ensure a successful fracture and completion of the shale. Following hydraulic fracturing, a fraction of the water

(approximately 25%) that was injected is collected over several days resulting in the collection of a “flowback” water stream that contains salts, oils and greases, and soluble organics (volatile and semi-volatile) that accumulated in the water downhole. Flowback water also contains low concentrations of additives that are introduced during the frac job which normally include friction reducing polymers, corrosion inhibitors, scale inhibitors, and biocides. These additives facilitate the hydraulic fracturing process and prevent problems with well operation.

The first steps in identifying effective water management alternatives include an effective analysis of the characteristics of the water streams involved in shale gas development. The overall objective of this project is to develop an information base on the nature and composition of influent water and flowback waters associated with completions of shale gas wells in the Marcellus Shale.

2.0 Methods and Procedures

17 member companies of the MSC volunteered 19 locations for the sampling of influent and effluent water streams. At each location, a well completion was conducted using hydraulic fracturing procedures that involved the injection of an influent stream of water and the subsequent collection of flowback water. Standard procedures were used to conduct sampling and analysis needed for the development of water characterization data. All sampling was performed by the GTI subcontractor, URS, following the same standard procedures. All sample analyses were performed by a single laboratory, Test America of Pittsburgh, PA. Test America, an independent analytical laboratory, provided the appropriate sample containers, preservatives and completed the analytical analyses. Test America is certified in West Virginia and Pennsylvania. Data tabulation, analysis and information base development was provided by the Gas Technology Institute for this effort.

Details of the methods and procedures used for the collection and analysis of samples obtained from each of the 19 locations are found in the Field Sampling and Analysis Plan (FSAP) which is located in Appendix A. The Field Sampling and Analysis Plan

(FSAP) was developed to ensure that the data and information gathered for the flowback characterization study was properly collected and documented.

A major aim of the characterization study was to generate technically sound data. To meet this objective a Quality Assurance Project Plan (QAPP) was used to generate accurate, precise, representative and complete data; this document is provided in Appendix B. The QAPP provided the specific quality assurance/quality control (QA/QC) procedures executed during the flowback Characterization Study.

Together the FSAP and QAPP comprise the Sampling and Analysis Plan (SAP). The SAP was designed to meet the following informational goals:

- Identify the specific constituents of interest (COI) associated with flow back water;
- Determine whether hydraulic fracturing additives are a source of COI in the management of water associated with shale gas development; and,
- Provide sufficient information for the selection of proper water management and disposal techniques.

Prior to initiating the characterization study, the SAP was reviewed by regulatory officials from the Pennsylvania Department of Environmental Protection (PADEP) and the West Virginia Department of Environmental Protection (WVDEP).

The original SAP proposed that four (4) grab samples be taken from six (6) vertical or horizontal well locations throughout West Virginia and Pennsylvania. The following grab samples were proposed:

- One baseline fracturing water sample that includes the fracturing additives, excluding the sand;
- Flowback water samples collected on days 1, 5 and 14 following the fracturing process; and

- Water from an existing producing well at 90 days following hydraulic fracturing.

The list of constituents recommended for the characterization study was developed from comments received from the PADEP, the WVDEP and members of the Appalachian Shale Water Conservation and Management Committee (ASWCMC). Because the recommended list of constituents was extremely extensive, it was decided that one sample from each site would be completed for the full list of recommended constituents. All other samples were collected and analyzed for a subset of these constituents, which was designed based on generator knowledge.

Following the first few rounds of sampling, industry identified a data gap with respect to characterizing the supply water used for fracturing. Supply water is identified as the water used for fracturing prior to introducing the fracing additives.

The updated protocol characterization study called for the collection of five (5) grab samples from the each of the volunteered locations and expanded the sampling effort to encompass 19 well locations volunteered by 17 member companies of the Marcellus Shale Coalition. Table1 presents the list of all of the constituents of interest (by category) that formed the basis for sample analysis. Analytical methods used to perform the various determinations are listed in Table 2.

Under the updated sampling plan, the following grab samples were collected at each of the volunteered locations:

- A supply water sample (before the blending of additives);
- One influent water sample following blending with fracturing additives, excluding sand;
- Flowback water samples collected on 1, 5 and 14 days after hydraulic fracturing; and
- Water from the producing well at 90 days after completion.

To address this data gap, it was decided to update the sampling/analysis protocol.

Following the collection of the samples and the performance of all of the determinations, the data was organized, qualified and tabulated by GTI using an Excel spreadsheet.

Table 1. Measurements and Determinations

General Chemistry

pH	Total Kjeldahl Nitrogen	Oil & Grease (HEM)
Acidity	Ammonia Nitrogen	Cyanide, Total
Total Alkalinity	Nitrate-Nitrite	Amenable Cyanide
Hardness as CaCO3	Nitrite as N	Bromide
Total Suspended Solids	Biochemical Oxygen Demand	Fluoride
Turbidity	Chemical Oxygen Demand	Total Sulfide
Chloride	Total Organic Carbon (TOC)	Sulfate
Total Dissolved Solids	Dissolved Organic Carbon	Total Phosphorus
Specific Conductance		Total Recoverable Phenolics

Volatile Organic Compounds

1, 4 - Dichlorobenzene	Acetone	1, 4 – Dioxane
1, 3 – Dichloropropane	Acrolein	Ethylbenzene
2, 2 – Dichloropropane	Acrylonitrile	Ethylene Glycol
1, 1 – Dichloropropene	Benzene	2 – Hexanone
p – Isopropyltoluene	Bromodichloromethane	Methylene chloride
Naphthalene	Bromoform	4 - Methyl - 2 - pentanone (MIBK)
n – Propylbenzene	Bromomethane	Styrene
1, 2, 3 - Trichlorobenzene	Carbon disulfide	1, 1, 1, 2 – Tetrachloroethane
1, 2, 4 - Trichlorobenzene	Carbon tetrachloride	1, 1, 2, 2 – Tetrachloroethane
1, 2, 4 - Trimethylbenzene	Chlorobenzene	Tetrachloroethene
1, 3, 5 - Trimethylbenzene	Chloroethane	Toluene
Benzyl chloride	Chloroform	1, 1, 1 – Trichloroethane
Isopropylbenzene	Chloromethane	1, 1, 2 – Trichloroethane
2 – Butanone	Dibromochloromethane	Trichloroethene
Methyl tert - butyl ether (MTBE)	1, 2 - Dibromo - 3 – chloropropane	Trichlorofluoromethane
Xylenes (total)	1, 2 - Dibromoethane (EDB)	1, 2, 3 – Trichloropropane
2 - Chloroethyl vinyl ether	Dibromomethane	Vinyl acetate
Cis - 1, 2 - Dichloroethene	Dichlorodifluoromethane	

Bromobenzene	1, 1 – Dichloroethane	Vinyl chloride
n – Butylbenzene	1, 2 – Dichloroethane	Tert - butyl acetate
sec – Butylbenzene	1, 1 – Dichloroethene	Tetrahydrofuran
tert – Butylbenzene	trans - 1, 2 - Dichloroethene	1 - chloro - 4 – trifluoromethylbenz
4 – Chlorotoluene	1, 2 - Dichloropropane	
1, 2 - Dichlorobenzene	cis - 1, 3 - Dichloropropene	
1, 3 – Dichlorobenzene	trans-1, 3 - Dichloropropene	

Semivolatile Organic Compounds

Diphenylamine	Diethyl phthalate	Nitrobenzene
Benzidine	Dimethoate	2 – Nitrophenol
bis (2 - Chloroisopropyl) ether	p - Dimethylaminoazobenzene	4 – Nitrophenol
1, 4 – Dioxane	7, 12 - Dimethylbenz (a) – anthracene	N - Nitrosodi - n – butylamine
1, 2 – Diphenylhydrazine	2, 4 – Dimethylphenol	N – Nitrosodiethylamine
Acenaphthene	Dimethyl phthalate	N – Nitrosodimethylamine
Acenaphthylene	Di - n - octyl phthalate	N - Nitrosodi - n – propylamine
Acetophenone	1, 3 – Dinitrobenzene	N – Nitrosodiphenylamine
2 – Acetylaminofluorene	4, 6 - Dinitro - 2 – methylphenol	N – Nitrosomethylethylamine
4 – Aminobiphenyl	2, 4 – Dinitrophenol	N – Nitrosomorpholine
Aniline	2, 4 – Dinitrotoluene	N – Nitrosopiperidine
Benzo (a) anthracene	2, 6 – Dinitrotoluene	N – Nitrosopyrrolidine
Benzo (a) pyrene	Dinoseb	5 - Nitro - o – Toluidine
Benzo (b) fluoranthene	Disulfoton	Parathion
Benzo (ghi) perylene	Ethyl methanesulfonate	Pentachlorobenzene
Benzo (k) fluoranthene	Fluoranthene	Pentachloroethane
Benzyl alcohol	Fluorene	Pentachloronitrobenzene
bis (2 - Chloroethoxy) methane	Hexachlorobenzene	Pentachlorophenol
bis (2 - Chloroethyl) – ether	Hexachlorobutadiene	Phenanthrene
bis (2 - Ethylhexyl) phthalate	Hexachlorocyclopentadiene	Phenol
4 - Bromophenyl phenyl ether	Hexachloroethane	Phorate
Butyl benzyl phthalate	Hexachloropropene	2 – Picoline
4 – Chloroaniline	Indeno (1, 2, 3 - cd) pyrene	Pronamide
4 - Chloro - 3 – methylphenol	Isodrin	Pyrene
2 – Chloronaphthalene	Isophorone	Pyridine
2 – Chlorophenol	Isosafrole	Safrole
4 - Chlorophenyl phenyl ether	3 - Methylcholanthrene	1, 2, 4, 5 – Tetrachlorobenzene
Chrysene	Methyl methanesulfonate	2, 3, 4, 6 Tetrachlorophenol
Diallate	2 - Methylnaphthalene	Thionazin
	2 – Methylphenol	o – Toluidine
	3 - Methylphenol & 4 – Methylphenol	1, 2, 4 – Trichlorobenzene

Dibenz (a, h) anthracene	Naphthalene	2, 4, 5 – Trichlorophenol
Dibenzofuran	1, 4 - Naphthoquinone	2, 4, 6 – Trichlorophenol
Di - n butyl phthalate	1 – Naphthylamine	O, O, O – Triethylphosphorothioate
1, 2 – Dichlorobenzene	2 – Naphthylamine	Chlorobenzilate
1, 3 – Dichlorobenzene	2 – Nitroaniline	Aramite
1, 4 – Dichlorobenzene	3 – Nitroaniline	
3, 3' – Dichlorobenzidine	4 – Nitroaniline	
2, 4 – Dichlorophenol		
2, 6 – Dichlorophenol		

Metals

Aluminum	Chromium	Nickel
Antimony	Trivalent Chromium	Potassium
Arsenic	Copper	Sodium
Barium	Iron	Selenium
Beryllium	Lead	Tin
Boron	Lithium	Strontium
Calcium	Magnesiium	Titanium
Cadmium	Manganese	Thallium
Cobalt	Molybdenum	Zinc

Pesticides

Chlordane (Technical)	Endosulfan I	4, 4' – DDD
alpha – BHC	Dieldrin	Endosulfan sulfate
beta – BHC	4, 4' – DDE	4, 4' – DDT
delta – BHC	Endrin	Methoxychlor
gamma - BHC (Lindane)	Endrin ketone	Toxaphene
Heptachlor	Endrin aldehyde	
Aldrin	Endosulfan II	
Heptachlor epoxide		

Organophosphorus Pesticides

Thionazin	Ethyl parathion	Tetraethyldithiopyro-phosphate

Polychlorinated Biphenyls (PCBs)

Aroclor 1016 Aroclor 1221 Aroclor 1232	Aroclor 1242 Aroclor 1248	Aroclor 1254 Aroclor 1260

Table 2. Summary of Methods

Parameter	Analytical Method	Preparation Method
pH	SW846 9040	SW846 9040
Acidity (Titrimetric)	SM20 2310 B (4a)	
Alkalinity, Total	SM18 2320 B	SM18 2320 B
Amenable Cyanide	SM18 4500-CN E	SM18 4500-CN E
Biochemical Oxygen Demand	SM18 5210 B	SM18 5210 B
Bromide	MCAWW 300.1A	MCAWW 300.1A
Chemical Oxygen Demand	MCAWW 410.4	MCAWW 410.4
Chloride	MCAWW 300.1A	MCAWW 300.1A
Cyanide, Total	SW846 9012A	SW846 9012A
Dissolved Organic Carbon	SW846 7196A	SW846 7196A
Fluoride	MCAWW 300.1A	MCAWW 300.1A
Hexavalent Chromium	EPA 901.1 MOD	
Hardness, Total	SM20 2340C	
Mercury in Liquid Waste	SW846 7470A	SW846 7470A
N-Hexane Extractable Material	CFR136A 1664A H	EPA 1664A
Nitrate as N	MCAWW 300.1A	MCAWW 300.1A
Nitrite-Nitrate	MCAWW 353.2	MCAWW 353.2
Nitrite as N	MCAWW 300.1A	MCAWW 300.1A
Nitrogen, Ammonia	MCAWW 350.1	MCAWW 350.1
Organochlorine Pesticide	SW846 8081A	SW846 3510C
Organophosphorus Compounds	SW846 8141A	SW846 3510
Phenolics	SW846 9066	SW846 9066
Polychlorinated Biphenyls	SW846 8082	SW846 3510C
Semivolatile Organic Compounds	SW846 8270C	SW846 3520C
Specific Conductance	MCAWW 120.1	MCAWW 120.1
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Sulfides, Total	SW846 9030B/903	SW846 9030B/903

Table 2. Summary of Methods		
Parameter	**Analytical Method**	**Preparation Method**
Total Phosphorus	MCAWW 365.2	MCAWW 365.2
Total Dissolved Solids	SM18 2540 C	
Total Kjeldahl Nitrogen	MCAWW 351.3	MCAWW 351.3
Total Organic Carbon	SM20 5310B	
Total Suspended Solids	SM20 2540D	
Trace Inductively Coupled Plasma Metals	SW846 6010B SW846 6010B	SW846 3005A SW846 3010A
Trivalent Chromium	SW846 6010B	Wet None
Turbidity (Nephelometric)	MCAWW 180.1	MCAWW 180.1
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B
Ethylene Glycol	SW846 8015	SW846 8015
Methylene Blue Activated Substances (MBAS)	SM5540C	SM5540C

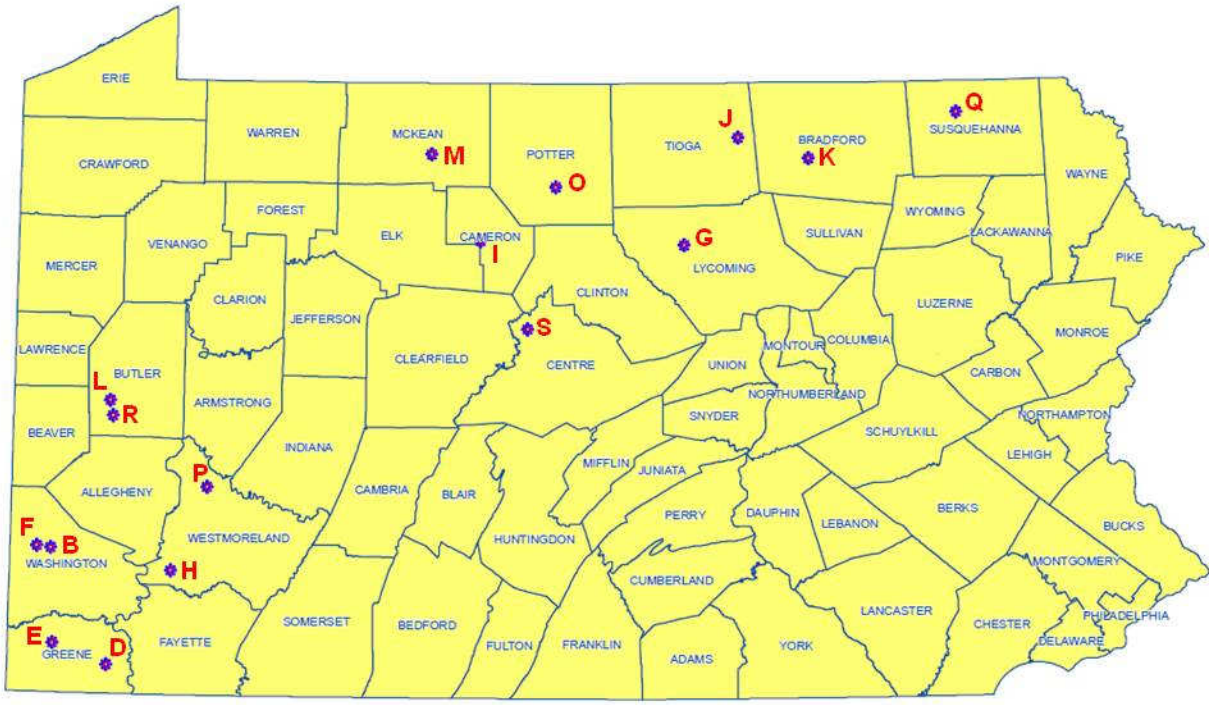
3.0 Results and Discussion

Throughout the performance of the flowback water sampling program, natural gas development companies of the Marcellus Shale provided third party access to each of the sampled well sites. This access was necessary to obtain the critical flowback water samples at the standardized times of 0, 1, 5, and 14 days following the hydraulic fracturing event. About a third of the companies assisted with the collection of a 90 day sampling of the flowback water, as well.

In total, 17 shale gas companies enabled the sampling of 19 locations within the Marcellus Shale Region, including 3 locations in West Virginia and 16 locations in Pennsylvania, as shown in the maps of Figures 1 and 2. The approximate positions of all of the sampling locations (Locations A through S) are indicated on the maps. Locations in West Virginia included 2 well completion sites in Lewis County and 1 completion site in Taylor County; both counties are in the northern half of the state, as seen in Figure 2.

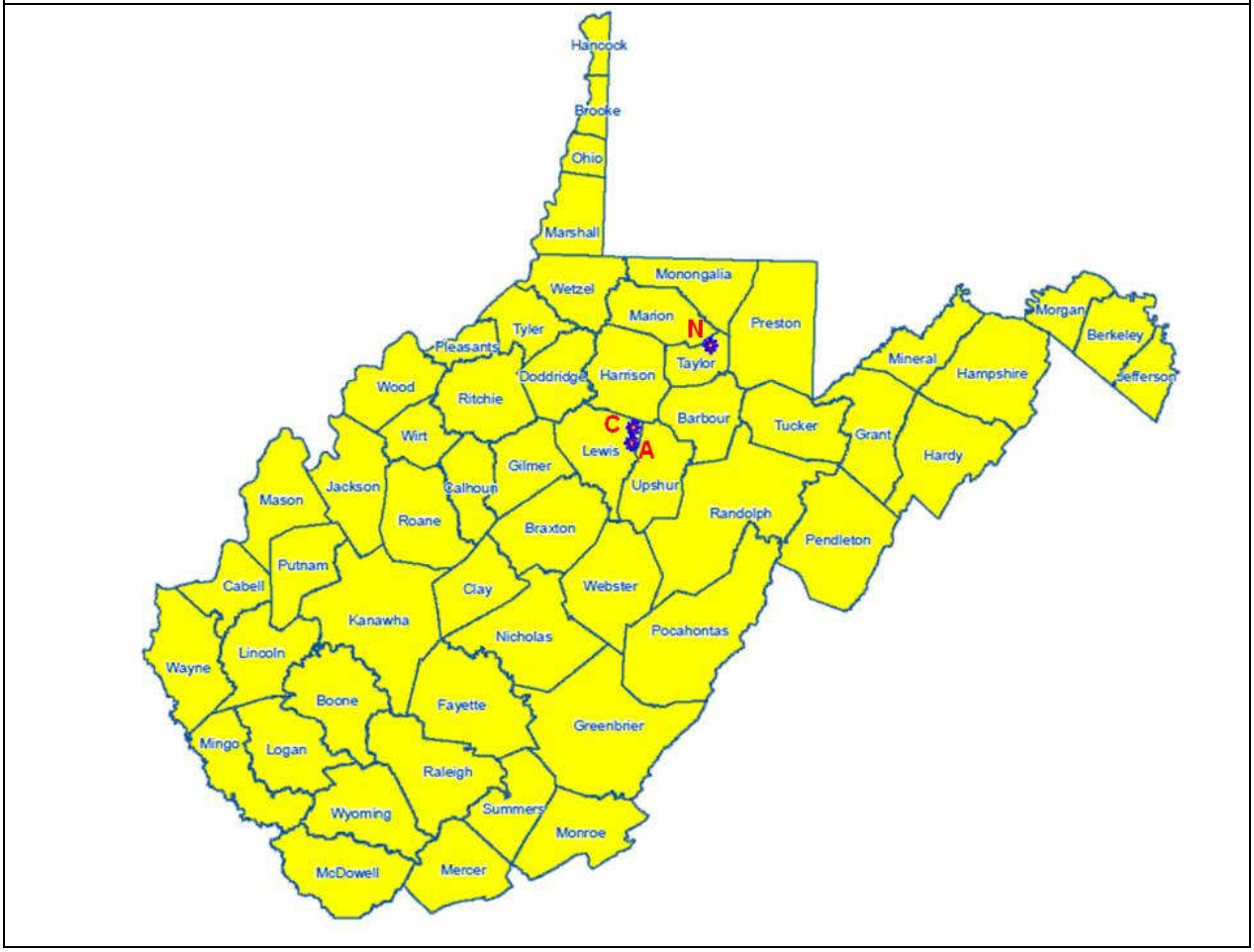
Host sites in Pennsylvania were well-distributed across the Commonwealth, involving sampling in the Southwestern, Central, Northern and Northeastern regions of the state representing the locations where most of the shale gas development is occurring. Half of the sites sampled (a total of 8) were located in the Southwestern area of the state as indicated on the map of Figure 1. Two sites were located in the Central portion and two sites were located on the Northeastern side of the state. The remaining four locations are positioned in the northern tier of Pennsylvania as shown in Figure 1.

Figure 1. Sampling Locations in Pennsylvania.



Host sites in West Virginia, on the other hand, were located in three counties of the northern section of the state.

Figure 2. Sampling Locations in West Virginia.



Results from the analysis of all samples taken from Locations A through S have been tabulated. Measurements and determinations included the following: 1) General Chemistry; 2) Organic Compounds; and, 3) Metals. Tables of these results are presented in Appendix C.

3.1 Flowback Water Collection Characteristics

As previously mentioned, the completion of each shale gas well examined in this project required the introduction of a substantial volume of influent water (bearing additives and sand) over a period of hours to achieve hydraulic fracturing. Following successful fracturing, a water stream emerges from the well under pressure; this stream is collected in frac tanks or in impoundments. The initial volume of water that is collected shortly after well completion is called flowback water. Beyond the completion period, water from the formation is co-produced with natural gas over time.

Water volumes associated with 14 of the 19 wells sampled in this project are shown in Table 3. Of the 14 wells reporting water volume information, six wells were vertical wells and eight wells were of horizontal configuration. Of the vertical wells, an average of approximately 40,000 bbls of influent water were used to achieve fracturing, and about 16,000 bbls on average were collected within a 90 day period. Of the horizontal wells, an average of approximately 90,000 bbls of influent water were used to achieve fracturing, followed by a collection of about 18,000 bbls of effluent water (flowback). Cumulative volumes of water collected over time for these 14 completed wells are tabulated in Table 3.

Salt concentrations in influent water and in flowback water generated over time from the 19 sampling locations are tabulated in Table 4. As shown in Table 4, influent water usually contains moderate to low concentrations of salts. Following the use of this water for hydraulic fracturing, a flowback water stream that is collected from the well exhibits increasing concentrations of salts with time. Evidently, the water introduced down-hole picks up soluble inorganic constituents from the formation (consisting mostly of sodium and calcium chloride); as this water resides down hole, it picks up increasing concentrations of total dissolved solids.

Table 3. Water Use and Flowback Water Collection Associated with Hydraulic Fracturing Completion of Shale Gas Wells

Location	Well Type	Total Vol. Frac Fluid Used, bbls	Cumulative Volume of Flowback Water, bbls				Percent Collected
			1 Day*	5 Days	14 Days	90 Days	
A	Vertical	40,046	3,950	10,456	15,023		37.5
B	Vertical	94,216	1,095	10,782	13,718	17,890	19.0
C	Horizontal	146,226	3,308	9,652	15,991		10.9
D	Horizontal	21,144	2,854	8,077	9,938	11,185	52.9
E	Horizontal	53,500	8,560	20,330	24,610	25,680	48.0
F	Horizontal	77,995	3,272	10,830	12,331	17,413	22.3
G	Horizontal	123,921	1,219	7,493	12,471	18,677	15.1
H	Vertical	36,035	3,988	16,369	21,282	31,735	88.0
K	Horizontal	70,774	5,751	8,016	9,473		13.4
M	Horizontal	99,195	16,419	17,935	19,723		19.9
N	Vertical	11,435	2,432	2,759	3,043	3,535	30.9
O	Horizontal	96,706	5,131	19,202			19.8
Q	Vertical	23,593	1,315	3,577	5,090		21.6
S	Vertical	16,460	2,094	7,832	9,345	10,723	65.1
			Weighted Average % Collected ➔				24.3

* Days from the hydraulic fracturing event.

A typical profile of salt concentrations measured in flowback water with time is shown in Figure 3. In this figure, data from Location B is plotted. As seen in this diagram, early flowback water emerging soon after the frac job is relatively low in TDS content; following the initial day, the concentration of total dissolved solids increases with time from low salt concentrations to a plateau of elevated salt levels as measured at 14 and 90 days. Also shown in this diagram is the marked concomitant decrease in flowback brine flow with time, exhibiting a high initial flow rate of over 2,400 bbls/day, then decreasing to a minimal flow rate of less than 55 bbls/day after the initial few weeks following completion, a 98% reduction of daily flow. It should be mentioned that the lowest flow rate bar shown on the chart in Figure 3 was calculated from cumulative water data between 14 and 90 days; actual flows in the 60 to 90 day period are

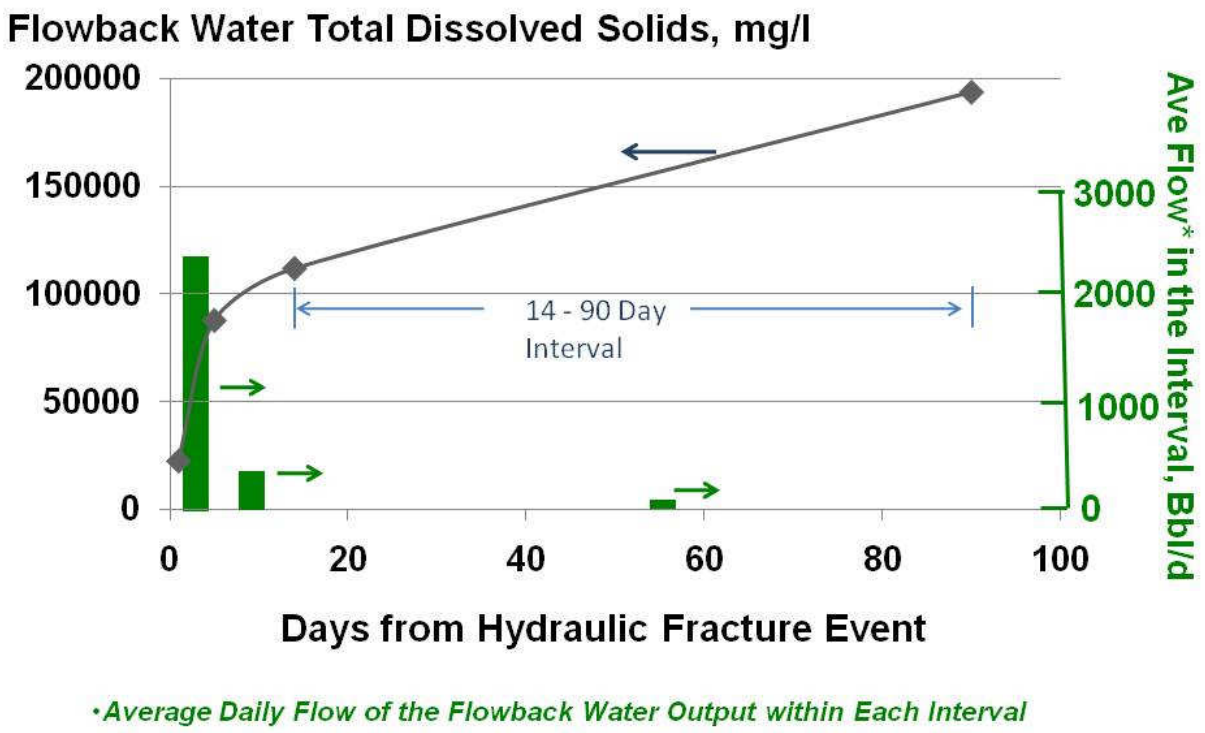
significantly less than 55 bbls/day. The diagram, however, demonstrates that although the TDS levels in the flowback water emerging between 14 and 90 days almost doubles to nearly reach 200,000 mg/l, the daily brine volumes produced by the well decrease to a deminimus level that can be easily managed as a normal produced water stream.

Table 4. Concentration of Total Dissolved Solids in Flowback Water at 19 Locations, mg/L

Location	Day 0*	Day 1	Day 5	Day 14	Day 90
A	990	15,400	54,800	105,000	216,000
B	27,800	22,400	87,800	112,000	194,000
C	719	24,700	61,900	110,000	267,000
D	1,410	9,020	40,700		155,000
E	5,910	28,900	55,100	124,000	
F	462	61,200	116,000	157,000	
G	1,920	74,600	125,000	169,000	
H	7,080	19,200	150,000	206,000	345,000
I	265	122,000	238,000	261,000	
J	4,840	5,090	48,700	19,100	
K	804	18,600	39,400	3,010	
L	221	20,400	72,700	109,000	
M	371			228,000	
N	735	31,800	116,000		
O	2,670	17,400	125,000	186,000	
P	401	11,600	78,600	63,900	
Q	311	16,600	38,500	120,000	
R	481	15,100	46,900	20,900	
S	280	680	58,300	124,000	

* Day 0 sample was taken of the influent water plus additives without sand.

Figure 3. Salt Concentration and Flowback Water Flow Versus Time from Location B



3.1.1 General Chemistry

A summary of the general chemical characteristics of the water influent streams and the flowback water effluents associated with the completion and operation of wells of the 19 sampling locations are presented in Tables 5-8. Characteristics of influent water, identified as Day 0 samples, after the blending of additives (not including sand) at each of the locations are shown in Table 5. The pH of these streams ranging from 5.2 to 8.9 is generally representative of surface waters; however, the wide range of total dissolved solids (221 to 27,800 mg/l) reflects the implementation of water reuse

Table 5. Summary of Chemical Characteristics of Influent Water(1) Used for Hydraulic Fracturing after Additives(2) Were Blended

Parameter	Range	Median	Units
pH	5.2 - 8.9	7.2	No Units
Acidity	< 5 – 1,230	NC	mg/L
Total Alkalinity	5 – 308	NC	mg/L
Hardness as CaCO3	26 - 9,500	130	mg/L
Total Suspended Solids	4 - 5,290	NC	mg/L
Turbidity	2.7 – 715	249	NTU
Chloride	18 - 10,700	90.2	mg/L
Total Dissolved Solids	221 - 27,800(3)	735	mg/L
Specific Conductance	177 – 34,600	726	Umhos/cm
Total Kjeldahl Nitrogen	2.3 – 400	33.5	mg/L
Ammonia Nitrogen	0.28 – 441	5.9	mg/L
Nitrate-Nitrite	0.1 – 3.1	NC	
Nitrite as N	< 0.05 - 5	NC	mg/L
Biochemical Oxygen Demand	< 2.0 – 2,220	NC	g/L
Chemical Oxygen Demand	35.3 – 47,400	1,730	mg/L
Total Organic Carbon (TOC)	5.6 - 1,260	226	mg/L
Dissolved Organic Carbon	5 - 1,270	301	mg/L
Oil & Grease (HEM)	4.6 – 255	NC	mg/L
Cyanide, Total	3.5 – 954	NC	ug/L
Amenable Cyanide	< 0.01- 0.87	NC	mg/L
Bromide	< 0.2 – 107	NC	mg/L
Fluoride	< 0.05 - 58.3	NC	mg/L
Total Sulfide	< 3 – 8.8	NC	mg/L
Sulfate	2.9 – 2,920	NC	mg/L
Total Phosphorus	< 0.1 – 16	NC	mg/L
Total Recoverable Phenolics	< 0.01 - 0.77	NC	mg/L
Sulfite	< 5 – 61.6	NC	mg/L
Methylene Blue Active Substances (MBAS)	< 0.03 – 0.506	NC	mg/L

(1) Influent water samples are identified as Day 0; samples at 19 locations, Locations A –S.

(2) Additives included corrosion inhibitors, scale inhibitors, friction reducers, biocides, and oxygen scavengers. Blended water samples were taken before the addition of sand.

(3) Upper end concentrations in the TDS range may be due to implementation of flowback water reuse and blending into the influent stream.

NC - indicates the median concentration was not calculated due to undetected results.

Table 6. Summary of Chemical Characteristics of Water Supplies[(1)] used for Hydraulic Fracturing before Additives were Blended

Parameter	Range	Median	Units
pH	6.7 - 7.4	7.2	No Units
Acidity	< 5 – 5.5	NC	mg/L
Total Alkalinity	6.2 – 88.8	52.5	mg/L
Hardness as CaCO3	18 - 1,080	132	mg/L
Total Suspended Solids	<2 – 24	NC	mg/L
Turbidity	1.3 – 33.7	3.7	NTU
Chloride	4.1 – 3,000	35.2	mg/L
Total Dissolved Solids	35 – 5,510[(2)]	334	mg/L
Specific Conductance	55 – 10,100	423	umhos/cm
Total Kjeldahl Nitrogen	< 3 – 56.4	NC	mg/L
Ammonia Nitrogen	0.017 – 20.8	0.41	mg/L
Nitrate-Nitrite	< 0.1 – 3.0	NC	mg/L
Nitrite as N	< 0.05 – 4.9	NC	mg/L
Biochemical Oxygen Demand	< 2.0 – 110	NC	mg/L
Chemical Oxygen Demand	< 10 – 924	NC	mg/L
Total Organic Carbon (TOC)	1.8 – 202	3.4	mg/L
Dissolved Organic Carbon	1.4 – 222	3.2	mg/L
Oil & Grease (HEM)	Not Detected	NC	mg/L
Cyanide, Total	< 10 – 625	NC	ug/L
Amenable Cyanide	< 0.01 - 0.27	NC	mg/L
Bromide	< 0.2– 31.9	NC	mg/L
Fluoride	< 0.05 - 1.2	NC	mg/L
Total Sulfide	1.6 - 5.6	NC	mg/L
Sulfate	3.8 – 139	26	mg/L
Total Phosphorus	< 0.1 – 0.14	NC	mg/L
Total Recoverable Phenolics	0.01 - 0.031	NC	mg/L
Sulfite	6 – 21.6	10.8	mg/L
Methylene Blue Active Substances (MBAS)	< 0.05 - 0.962	NC	mg/L

(1) Water Supplies at 8 Locations: F, H, I, J, L, M, N, S.

(2) Upper end concentrations in the TDS range may be due to implementation of flowback water reuse and blending into the influent stream.

Table 7. Summary of Chemical Characteristics of Flowback Water Sampled 5 Days Following the Hydraulic Fracturing Event[(1)]

Parameter	Range	Median	Units
pH	5.8 - 7.2	6.6	No Units
Acidity	< 5 – 447	NC	mg/L
Total Alkalinity	48.8 – 327	138	mg/L
Hardness as CaCO3	5,100 - 55,000	17,700	mg/L
Total Suspended Solids	10.8 - 3,220	99	mg/L
Turbidity	2.3 – 1540	80	NTU
Chloride	26,400 - 148,000	41,850	mg/L
Total Dissolved Solids	38,500 – 238,000	67,300	mg/L
Specific Conductance	79,500 – 470,000	167,500	umhos/cm
Total Kjeldahl Nitrogen	38 – 204	86.1	mg/L
Ammonia Nitrogen	29.4 –199	71.2	mg/L
Nitrate-Nitrite	< 0.1 – 1.2	NC	mg/L
Nitrite as N	1.2 – 29.3	NC	mg/L
Biochemical Oxygen Demand	37.1 - 1,950	144	mg/L
Chemical Oxygen Demand	195 - 17,700	4,870	mg/L
Total Organic Carbon (TOC)	3.7 – 388	62.8	mg/L
Dissolved Organic Carbon	30.7 – 501	114	mg/L
Oil & Grease (HEM)	4.6 – 655	6.3	mg/L
Cyanide, Total	< 10 - 72.1	NC	ug/L
Amenable Cyanide	< 0.01 - 0.032	NC	mg/L
Bromide	185 - 1,190	445	mg/L
Fluoride	< 0.05 – 17.3	NC	mg/L
Total Sulfide	< 3 – 5.6	NC	mg/L
Sulfate	2.4– 106	NC	mg/L
Total Phosphorus	< 0.01 – 2.5	NC	mg/L
Total Recoverable Phenolics	< 0.01 – 0.31	NC	mg/L
Sulfite	2.5 – 38	NC	mg/L
Methylene Blue Active Substances (MBAS)	<0.012 –1.52	0.133	mg/L

(1) Median values at 19 locations: Locations A – S.

NC – indicates the median concentration was not calculated due to undetected results.

Table 8. Summary of Chemical Characteristics of Flowback Water Sampled at 14 Days Following the Hydraulic Fracturing Event [(1)]

Parameter	Range	Median	Units
pH	4.9 – 6.8	6.2	No Units
Acidity	< 5 – 473	NC	mg/L
Total Alkalinity	26.1 – 121	85.2	mg/L
Hardness as CaCO3	630 – 95,000	34,000	mg/L
Total Suspended Solids	17 – 1,150	209	mg/L
Turbidity	10.5 – 1,090	233	NTU
Chloride	1,670 – 181,000	78,100	mg/L
Total Dissolved Solids	3,010 – 261,000	120,000	mg/L
Specific Conductance	6,800 710,000	256,000	Umhos/cm
Total Kjeldahl Nitrogen	5.6 – 261	116	mg/L
Ammonia Nitrogen	3.7 – 359	124.5	mg/L
Nitrate-Nitrite	< 0.1 – 0.92	NC	mg/L
Nitrite as N	< 2.5 – 77.4	NC	mg/L
Nitrate as N	< 0.5 - < 5	NC	mg/L
Biochemical Oxygen Demand	2.8 – 2070	39.8	mg/L
Chemical Oxygen Demand	228 – 21,900	8530	mg/L
Total Organic Carbon (TOC)	1.2 – 509	38.7	mg/L
Dissolved Organic Carbon	5 – 695	43	mg/L
Oil & Grease (HEM)	< 4.6 – 103	NC	mg/L
Cyanide, Total	< 10	NC	ug/L
Amenable Cyanide	<0.01	NC	mg/L
Bromide	15.8- 1,600	704	mg/L
Fluoride	< 0.05 – < 50	NC	mg/L
Total Sulfide	< 3.0 - 3.2	NC	mg/L
Sulfite [(2)]	7.2 – 73.6	13.8	Mg/l
Sulfate	<10 - 89.3	NC	mg/L
Total Phosphorus	< 0.1 – 2.2	NC	mg/L
Total Recoverable Phenolics	< 0.01 – 0.31	NC	mg/L
Sulfite	7.2 – 73.6	13.8	mg/L
Methylene Blue Active Substances (MBAS) [(2)]	<0.05 - 4.6	NC	mg/L

(1) Samples were collected from 17 locations. Day 14 samples were not collected at locations D and N.

(2) Sulfite and MBAS were not sampled at locations B and C.

NC – indicates the median concentration was not calculated due to undetected results.

(i.e. the use of a portion of the flowback water from the completion of one well to blend with the freshwater influent stream for the next well completion) at a minority of the locations. Dissolved solids measurements for the influent waters used for hydraulic fracturing (with additives) had a median value of 735 mg/l, which is considered in the range of fresh surface water supplies. Interestingly, oil and grease measurements had a range of 4.6 to 255 mg/l while total organic carbon concentrations ranged from 5.6 to 1,260 mg/l. Elevated values in these measurements may be due to various degrees of blending of reused waters into frac job influent water supplies.

A summary of the same characteristics is tabulated for water supplies from 8 locations (F, H, I, J, L, M, N, S) in Table 6; information in this table provides an indication of the quality of influent water before the blending of additives. The data in this table indicates that the water supply samples varied widely in quality. Total dissolved solids ranged from 35 to 5510 mg/l, with a median value of 334. Total organic carbon content ranged from 1.8 to 202 mg/l while biochemical oxygen demand ranged between undetected to 110 mg/l. These widely varying results reflect the fact that, in some cases, water used for hydraulic fracturing a prior well was re-used for a subsequent well, with the addition of previously unused water. Oils and greases were not detected in any of these samples, and many characteristic parameters are representative of typical surface water quality

Characteristics of flowback water sampled at 5 and 14 days following the hydraulic fracturing event are presented in Tables 7 and 8, respectively. Consistent with the profile of Figure 3, the median value of total dissolved solids for 14-day samples (120,000 mg/l) was almost twice the median concentration value measured in the 5-day samples (67,300 mg/l). However, the bulk of the water collected within the first 5 days had the lowest concentrations of TDS, also consistent with Figure 3. The water is of relatively modest alkalinity, ranging between about 50 and 327 mg/l with a median value of 138 mg/l, reflecting low carbonate concentrations which allow for very high levels of soluble calcium which confers a very high hardness on the water as evidenced by median hardness values of 17,700 and 34,000 mg/l for the 5-day and

14-day sample sets, respectively. Cations are dominated by sodium and calcium in this water; anions are dominated by chloride. Levels of total organic carbon (TOC) in the flowback water samples at 5 and 14 days (with median values of 63 and 39 mg/l, respectively) are substantially lower (by about 75%) than the TOC of the blended influent water with additives; a possible reason for this is that the polyacrylamide friction reducers exert a TOC in the influent stream and are removed as water resides in the down-hole environment. The same observation is made, though less consistently, in comparing biochemical oxygen demand (BOD) values in flowback water with the BOD of the influent water streams; in general, the BOD levels of the 14-day flowback waters are less than half the influent and Day 5 BOD concentrations. The widely varying BOD levels in the water supply and influent samples is, as stated previously, probably reflective of flowback water re-use. The moderate levels of BOD in the influent waters may have resulted from carbonaceous algae growth in the source water or resulted from the biodegradable nature of the additives (e.g. polyacrylamide friction reducing compounds). The loss of friction reducing compounds due to adherence to surfaces downhole may be responsible for the lower BOD concentrations in flowback waters.

General characteristics of the samples tested in this project appear very consistent with the ranges of values reported in the literature for normal produced waters (USGS, 2004). The large database collected by the USGS indicates that salinities for produced waters generated among all basins can vary widely from approximately 5,000 to greater than 350,000 mg/l of total dissolved solids. Chloride is the dominant anion in nearly all formation waters associated with petroleum and with most conventional natural gas (Kharaka and Rice, 2004). Sodium is the most dominant cation in most producing fields and constitutes 70 to more than 90% of total cations (USGS, 2004). General characterization data from the waters tested at the 19 locations of this project appear consistent with much of the available compositional information available from the USGS database. The USGS database containing produced water characterization data from more than 60,000 wells is accessible from the Internet at: http://energy.cr.usgs.gov/prov/prodwat/intro.htm .

3.1.2 Organic Compounds

The organic compounds included in the characterization of water samples included the categories of VOC, SVOC, chlorinated pesticides, organophosphorus pesticides, and polychlorinated biphenyls. Most of the compounds in the first two categories and all compounds in the last three categories were included on the list of analyses in response to recommendations from PADEP and WVDEP. The following sections summarize the results among all five of the categories of analysis.

Volatile Organic Compounds

As presented in Table 1, samples collected from Locations A through S were analyzed for 70 volatile compounds of highly varied chemical characteristics, including the volatile hydrocarbon constituents that are normally found in produced water (such as benzene, toluene, ethylbenzene, and xylenes – or BTEX, and naphthalene) as well as constituents not known to be associated with conventional produced water such as chlorinated solvents and halogenated aromatics. A summary of the detected results for volatile compound determinations performed is shown in Appendix D. Many of the constituent determinations, on average, were at non-detectable levels. Appendix C provides a summary of all of the VOC results.

Constituents that exceeded 100 ppb included components that are commonly present in conventional produced water, such as naphthalene, BTEX, several methylated benzene compounds and an alkylated toluene (p-isopropyltoluene). Few determinations of these compounds exceeded 2 ppm. In the locations where BTEX was measured at levels above 100 ppb, BTEX levels in the 5-day and 14-day flowback waters that were in contact with the natural gas producing formation were generally higher than BTEX concentrations in the influent water streams, indicating that these compounds are naturally occurring and not the result of additives. Levels of BTEX and methylated aromatics vary from location to location. Determination of factors that control levels of these compounds could potentially be determined through a correlation of the composition of volatiles and other flowback water characteristics with the key shale gas development parameters of geographic area, depth of wells, completion methods, etc.

Very few volatile organic compounds exceeded 2 ppm among the total of the locations. Several locations exhibited one or more of the volatile compounds that exceeded 1 ppm. Two ketones were measured in a very limited number of samples; acetone and 2-butanone (also known as methyl ethyl ketone or MEK), were found at measurable concentrations. These compounds are well known solvents in industry that are used for cleaning purposes. In a few samples, carbon disulfide was measured. In the manufacture of some types of polymers, carbon disulfide is useful in the promotion of nucleophilic attack in polymer synthesis; this compound may be a residual reactant from the manufacture of polymers used as friction reducers. However, carbon disulfide was only measured in a few samples examined at a limited number of locations.

Semivolatile Organic Compounds

A total of 112 semi-volatile organic compounds (as listed in Table 1) were included in the analysis of influent water and in flowback water samples. A summary of the detected results of semivolatile determinations in these samples is presented in Appendix D. More than 98% of the constituent determinations, on average, were at non-detectable levels and less than 0.03 percent of all the constituents were above 1 ppm. Several constituents were measured in any of the samples at levels exceeding 10 ppb. Acetophenone and aniline are commonly associated with fossil fuels, as are the methylated phenols. Only two compounds, bis (2-chloroethyl) ether and pyridine, were measured at levels greater than 1 ppm. The only compound that was measured at a level above 1 ppm more than once was pyridine. Pyridine is a nucleophile that is used widely in the manufacture of certain types of chemicals and pharmaceuticals and its presence may be due to its use as a precursor in the manufacture of one of the hydraulic fracturing additives.

In general, nearly all of the SVOC determinations were either non-detect or at low trace levels. Detected SVOC constituents are summarized in Appendix D. Appendix C provides all the SVOC reported results.

Pesticides

Determinations of the 20 chlorinated and three organophosphorus pesticides listed in Table 1 were conducted on the influent, 14-day and 90-day flowback water samples. Results from the measurements of pesticides in all samples are summarized in Appendix C. Pesticide concentrations measured in samples were extremely low (all samples were less than 1 ug/l.) and random with results occurring in some of the water supply, Day 0, Day 14 or Day 90 samples collected. It is possible that these low level concentrations are not representative of actual conditions and are attributed to laboratory contamination or instrument noise. Appendix C summarizes the pesticides results. Appendix D provides a summary of the detected pesticide results.

Polychlorinated Biphenyls (PCBs)

Determinations of the 7 polychlorinated biphenyl compounds (Aroclors) listed in Table 1 were conducted on the influent, 14-day and 90-day flowback water streams. Aroclors were not detected in any sample, except for Aroclor 1248 that was detected at 8 ug/L in the Day 14 sample at Location R. The detected PCB result is summarized in Appendix D. Appendix C summarizes the all of the PCB results.

3.1.4 Metals

A summary of metal concentrations in the influent water stream (with additives) and the 5-Day Flowback water samples across all 19 locations is presented in Table 9; all concentrations in this table are reported in units of µg/l (ppb). As seen in this table, sodium is the major cation in all of the samples, followed by concentrations in some samples of calcium, magnesium and barium that will need to be monitored for purposes of scale control in some locations. Since strontium is present in flowback waters at concentrations between 345 to 4,830 mg/l in the 5-day flowback samples, it will be important for operators to implement procedures to prevent the formation of strontium-bearing scale. Iron levels in the range of 21 to 180 mg/l may also need to be watched and mitigated in order to prevent operational difficulties at a number of well completion locations.

Heavy metals of toxicological concern that are often associated with urban industrial activity (including chromium, copper, nickel, zinc, lead, cadmium, mercury and arsenic)

are at very low levels in all of the shale gas water samples compared to levels reported for municipal wastewaters. Table 10 presents range values from the 5-Day Flowback samples which are compared to median heavy metals concentrations measured in sewage sludges (biosolids) generated by Penn State for the State of Pennsylvania (Stehouwer, 2000); note that concentrations in this table are reported in mg/l. The comparison shows that the levels of heavy metals of concern are 100 to 10,000 times higher in municipal biosolids (sewage sludges that are routinely transported across communities to disposal sites) than the levels measured in shale gas waters.

Table 9. Total Metals Concentrations in the Influent Water and 5-day Flowback Water Obtained from 19 Locations

	-- Influent Water --		-- 5-Day Flowback --		
Parameter	**Range**	**Median**	**Range**	**Median**	**Units**
Aluminum	ND – 1,030 B	NC	ND - 47,200 J	NC	ug/L
Antimony	ND - 21.6 BJ	NC	ND - 47.2 B	NC	ug/L
Arsenic	ND - 9.1 B	NC	ND – 124	NC	ug/L
Barium	63.1 BJ - 87,100	410	21,400 J - 13,900,000	686,000	ug/L
Beryllium	ND – 3 B	NC	ND	NC	ug/L
Boron	ND - 40,700 J	NC	3,140 J - 97,900	12,200	ug/L
Cadmium	ND - 10.5	NC	ND - 9.6 B	NC	ug/L
Calcium	6,690 BJ - 2,990,000	32,900	1,440,000 J - 23,500,000 J	4,950,000	ug/L
Chromium	ND - 704	NC	ND - 152	NC	ug/L
Chromium $^{+3}$	ND – 4.8 B	NC	ND – 67.4	NC	ug/L
Chromium $^{+6}$	ND	ND	ND	NC	ug/L
Cobalt	ND - 11.9 B	NC	ND	NC	ug/L
Copper	ND – 120 B	NC	ND - 4,150	NC	ug/L
Iron	137 B - 14,300	1,180	21,400 - 180,000	39,000	ug/L
Lead	ND - 111	NC	ND - 606	NC	ug/L
Lithium	ND - 14,900 JE	NC	10,600 - 153,000	43,700	ug/L
Magnesium	1,250 B - 235,000	6,740	135,000 - 1,550,000	559,000	ug/L
Manganese	ND - 3,640	NC	881 - 7,040	2,630	ug/L
Mercury	ND - 0.66 BJ	NC	ND - 0.24 J	NC	ug/L
Molybdenum	ND - 91.8 B	NC	ND – 147 B	33.1	ug/L
Nickel	ND - 457	NC	ND – 187 B	NC	ug/L
Potassium	2250 B - 229,000 E	42,600	48,900 B - 2,430,000	301,000	ug/L
Selenium	ND - 35.3 B	NC	ND	NC	ug/L
Sodium	25,700 B - 6,190,000	67,800	10,700,000 - 65,100,000	18,000,000	ug/L
Strontium	58.5 BJE - 439,000 E	768	345,000 – 4,830,000	1,080,000	ug/L
Thallium	ND -19.8 B	NC	ND – 24.6 B	NC	ug/L
Tin	ND - 6.9 B	NC	ND - 25.7 B	NC	ug/L
Titanium	ND - 39.1 B	NC	ND – 313 B	NC	ug/L
Zinc	ND - 1,610 E	NC	67.6 BJ – 2,930 J	172	ug/L

* Influent Water is the supply water containing hydraulic fracturing additives, but without sand. Influent samples are identified as Day 0 samples.
ND Not detected
NC – Indicates the median concentration was not calculated due to undetected results.
B Analyte was also detected in the method blank for that sample
J Estimated concentration for analyte detected between the method detection level and the reporting limit
G Analyzed at a diluted concentration due to matrix effects
E The concentration exceeds the linear range of the instrument. The result is considered estimated.

Table 10. Comparisons of Metals Levels in Shale Gas Waters with Municipal Biosolids (Sewage Sludge)

Metal	5-day Flowback Range	Sewage Sludge*	Units
Chromium	ND – 0.152	35	mg/L
Copper	ND – 4.150	511	mg/L
Nickel	ND – 0.187 B	22.6	mg/L
Zinc	0.068 – 2.93 J	705	mg/L
Lead	ND – 0.606	65	mg/L
Cadmium	ND – 0.096 B	2.3	mg/L
Mercury	ND – 0.00024 J	1.5	mg/L
Arsenic	ND – 0.124	3.6	mg/L

* Penn State study reporting median heavy metal content values for Pennsylvania publicly owned treatment works (POTW) biosolids (Stehauwer, et al., 2000).

ND – Not detected

4.0 Implications for Fate and Transport

As seen in Table 1, the list of measurements and determinations that were pursued in this study were very exhaustive but highly useful in establishing an information base to define a chemical fingerprint associated with flowback waters from this geologic formation. Much of the expense and time required for water characterization has arisen from the extensive effort to analyze the samples for large numbers of volatile and semivolatile organic compounds suggested by PADEP and WVDEP (including chlorinated pesticides, organophosphorus pesticides and polychlorinated biphenyls); the information base developed in this project strongly suggests that this level of water characterization in the future is not necessary and that monitoring should be focused on measuring constituents that are likely to be present. A number of observations that are relevant to fingerprinting and to the fate and transport of constituents can be made from consideration of the information base assembled from the first 19 locations.

First, there is clear indication that halogenated hydrocarbon compounds (among volatile, semivolatile, pesticides and PCB categories) and nearly all of the polynuclear aromatic hydrocarbons (of 3 rings and above) are not a part of typical components in flowback waters. Volatile and semivolatile organic constituents that are normally found at low levels in conventional produced waters, such as BTEX, methylated benzenes, naphthalene, naphthenic acids, volatile acids, simple alkanes, etc., are also found in flowback waters and in influent waters for frac jobs that utilize flowback water reuse. However, in terms of fate and transport in the environment, many volatile and semivolatile organics present in shale gas waters are at modest concentrations (most compounds are below 1 ppm). The challenge, therefore, is to choose an alternate parameter that can be used to quickly detect any small release of flowback water that may occur in the course of storage or handling.

A more practical approach might be to use chloride analyses of samples to monitor fate and transport of flowback/produced waters. Chloride has been used as a conservative tracer in hydrogeochemical studies for decades and is well documented in the literature (Clement et al., 2000; Farrell et al., 1994; Lamontagne et al., 2005; Negrel and Lachassagne, 2000; Nelson et al., 2001; Paine, 2003; van Breukelen et al., 1998). A general overview of the processes controlling the movement of solutes in the subsurface is provided below.

Fate and transport of constituents in the soil/rock/water system is governed by four fundamental processes: advection, dispersion, retardation, and decay. Advection is simply the mass movement of a solute along with groundwater and is modeled by Darcy's Law. Dispersion is a mathematical description of diffusion and mechanical mixing of a solute in a system. Diffusion is modeled using Fick's first and second law. Dispersion is an empirical correction factor controlled by the physical properties of the soil/rock matrix (porosity, grain size, sorting, etc) and scale of the system. Retardation is the process by which non conservative solutes interact with the soil/rock and their movement downgradient is subsequently slowed. It is modeled by a linear equation that is a function of porosity, moisture content, bulk density, and the humic organic matter content. Examples of retardation reactions are adsorption-desorption, ion

exchange, precipitation-dissolution, and oxidation-reduction reactions. Decay is the process by which a solute is removed from the system due to chemical reactions, biological reactions, and/or radioactive decay and is modeled using the appropriate equation for the reaction occurring in the system.

Conservative solutes are ones that can be modeled using only advection and dispersion. Common examples are chloride and bromide, but bromide levels in the samples collected as part of this study were several orders of magnitude lower than chloride levels. Non-conservative solutes can only be modeled using advection, dispersion, retardation, and/or decay. Examples of non-conservative solutes are volatile/semivolatile organics (e.g. benzene, toluene, PAHs, PCBs, etc.), sulfate, iron, and many others. Non-conservative species subsequently migrate slower throughout the subsurface than do conservative tracers and therefore are inappropriate to use as indicators of Marcellus Shale flowback water impact to a system. Nearly all classes of volatile and semivolatile organics discussed in this report have been shown to be sequestered to various types of soils, thereby significantly retarding their mobility in the environment (Linz and Nakles, 1997).

Chloride, on the other hand, is more mobile and has considerable potential as an early sentinel indicator of flowback water impacts due to a number of advantages. In addition to being conservative (by virtue of its non-volatile, non-sequestering, non-reactive property), chloride is usually present in relatively high concentrations ranging from 10,000 to 200,000 mg/l, ten to a hundred times the concentration of most inorganics and more than a million times the levels of most volatile and semivolatile organic constituents. Chloride is also easily measured with field kits that can determine the presence of this anion with small samples, and verified in its presence with simple conductivity instruments. Due to its high concentration and its ubiquitous presence in flowback waters, chloride anion is an excellent monitoring tool for even the smallest leaks of flowback water into the environment.

5.0 Conclusions

With the completion of this sampling and analysis effort, the following conclusions can be drawn from the results:

1. General chemistry characterization of flowback water indicates that values for pH, alkalinity, total dissolved solids, total organic carbon, oils and greases and other parameters from general water characterization are well within the normal ranges reported for conventional produced waters. Flowback water appears similar in composition to conventional produced water, even in the presence of additives employed for performing hydraulic fracturing.

2. Shale gas flowback water cations are dominated by sodium and calcium; anions are dominated by chloride.

3. Metals in flowback water are well within the ranges for normal produced waters. Industrial heavy metals (e.g. chromium, copper, nickel, zinc, lead, cadmium, arsenic and mercury) are a small fraction (less than 1 percent) of the heavy metals content in municipal biosolids generated from POTW's.

4. Among volatile organic constituents, approximately 96% of these constituents were found at non-detectable levels and 0.5% were above 1 ppm for any of the 5 sampling events among 19 locations. The data indicate that the constituents above 1 ppm are those that are a normal part of produced waters associated with natural gas operations (such as xylenes, toluene and naphthalene).

5. Among SVOC, more than 98% of all determinations were at nondetectable levels and 0.03% of these constituents were above 1 ppm.

6. Low levels (less than 1 ug/l) and the random distribution of chlorinated and organophosphorus pesticides suggest that these compounds are laboratory artifacts and are not contained in flowback water.

7. Only one PCB (Aroclor 1248) was detected in all the samples analyzed. This result should be considered an anomaly.

8. Virtually, all halogenated organic compounds were at non-detect levels. This strongly suggests that additives that are blended with influent waters do not contain concentrations of organic chemicals of concern.

9. The results of this shale gas water characterization effort indicate that pesticides, PCBs, and a large fraction of the volatile and semivolatile constituents should be considered to be unnecessary for the sampling and analysis of flowback waters in the future.

10. Determination of factors that affect levels of organic and inorganic compounds could potentially be determined through a correlation of flowback water composition with the key shale gas development parameters of geographic area, depth of wells, completion methods, etc.

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Appendix

Appendix A – Field Sampling and Analysis Plan (FSAP)

Appendix B – Quality Assurance Project Plan (QAPP)

Appendix C – Tabulated Data Obtained from Locations A - S

Appendix D – Summary of Detected VOC, SVOC, Pesticides and PCBs

Appendix A

Field Sampling and Analysis Plan (FSAP)

Appendix B

Quality Assurance Project Plan (QAPP)

Appendix C

Tabulated Data Obtained from Locations A - S

Key to Abbreviations				
µg/l	Micrograms per liter.		ND	Non-detect. Result is less than the method detection limit.
B	Method blank contamination. The associated method blank contains the target analyte at a reportable level.		M	Result was measured against nearest internal standard assuming a response factor of 1.
E	Estimated result. Result concentration exceeds the calibration range.		MDL	Method detection limit.
J	Estimated result. Result concentration exceeds the calibration range.		RL	Reporting limit.

Appendix D

Summary of Detected VOCs, SVOC, Pesticides and PCBs

Appendix A

Field Sampling and Analysis Plan (FSAP)

FIELD SAMPLING AND ANALYSIS PLAN

DEVONIAN SHALE FLOW BACK WATER CHARACTERIZATION STUDY

Prepared by

Appalachian Shale Water Conservation and Management Committee

December 2008

TABLE OF CONTENTS

Tables

1.0 INTRODUCTION

This Field Sampling and Analysis Plan (SAP) details the procedures for sampling and field documentation to be utilized for the characterization study of the fracturing and flow back fluids associated with the Devonian shale. The FSAP has been prepared to ensure that all data and information gathered are properly sampled, documented, and technically sound. The FSAP and Quality Assurance Project Plan (QAPP) together comprise the Sampling and Analysis Plan (SAP).

1.1 PURPOSE

The FSAP includes a detailed description of field sampling procedures to be conducted. The procedures described are consistent with the RCRA Technical Enforcement Guidance Document (TEGD), U.S. EPA, 1989; RCRA Facility Investigation Guidance Document (U.S. EPA, May 1989); RCRA Ground Water Monitoring; Draft technical Guidance (U.S. EPA, 1992); Data Quality Objectives for Remedial Response Activities (U.S. EPA, 1987).

The SAP consists of 5 sections. Section 1.0 includes a brief description of the data objectives and a brief discussion of the project. 2.0 provides information regarding documentation, quality assurance/quality control (QA/QC) requirements, and reporting. Section 3.0 addresses the sampling procedures. Section 4.0 describes the proper handling requirements of any investigative derived waste generated. Reference documents are provided in Section 5.0

1.2 DATA OBJECTIVES

The data objectives will address characterization of the fracturing and flow back fluids associated with the development of the Devonian shale. This characterization study will:

- Identify the specific constituents of interest (COI) associated with flow back water;
- Reduce/eliminate the allegations that the chemicals used for fracturing will contaminate groundwater; and
- Provide sufficient information for the selection of proper disposal techniques.

Achieving these data objectives will require obtaining data of acceptable levels of certainty. Therefore, it is essential that the field and sampling procedures be completed under stringent and appropriate methods.

1.3 BACKGROUND

The process of developing Devonian Shale wells requires increasing the number of fractures and extending the existing fractures. Fracturing is necessary to obtain a greater volume of natural gas from the Devonian Shale at in a cost-efficient manner. Fracturing uses high volumes and high-pressure chemically treated water or a gel to induce fractures

in the shale surrounding the well bore. Most applications require between 500 and 10,000 psi.

Fracturing is done by isolating off a portion of the well and injecting chemically treated water or gel and sand with cement, perforating, under very high pressure into the isolated portion of the well bore. Generally, 1.5 to 5 million gallons of water is pumped into the formation of a vertical or horizontal well, respectively. The high pressure fractures the shale and sand keeps the fractures open. A drop in pressure indicates that the formation has accepted water.

To prevent the fractures from closing when the pressure is reduced several hundred tons of sand or other propant is pumped down the well and into the pressurized portion of the well. When the fracturing occurs the sand is forced into the fractures. If enough sand is trapped in the fractures it will prop the fractures open when the pressure is reduced. The propped fractures provide an increase in the permeability for gas flow.

Approximately 25 to 30 percent of the water used in fracturing is recovered. This flow back water is currently a concern because there is a limited amount data. The ASMCWC is conducting this study in an effort to characterize the flow back water associated with the Devonian Shale.

The flow back water will be collected in either an on-site off-stream temporary impoundment or a series of frac tanks.

2.0 CHARACTERIZATION STUDY OF FLOW BACK WATER

Fracturing is completed over several days depending on the geological formation. Because the flow back water is under pressure, initially the flowback water is recovered at a faster rate in the beginning of fracturing and significantly declines as facturing continues and the well is released to production. The initial concentrations at the start of fracturing (high yields of flow back water) should yield lower concentrations of constituents of interest (COI). It is assumed that the concentration of the fracturing chemicals remain constant throughout the flow back regardless of the rate of return. However, the increase concentration of in the COI is due to a longer residence time in the applicable formation and not associated to the additives of the fracing fluids. Therefore, to obtain representative samples of the flow back water samples will be collected on three separate days (i.e., days 1, 5 and 14). The data obtained from day 14 should represent the chemical characteristics of the natural formation fluid.

Additionally, a baseline sample of the fracturing fluid will be collected prior to injection. The baseline sample will contain the materials (e.g., water and chemicals) used in the fracturing process. A sample will also be collected from a well in Devonian shale that has been in production for a period of time (i.e., a well that has been in production for more than 3 months). The data obtained from this well should represent the chemical characteristics of the natural formation fluid. The analytical results associated with these samples will assist in the data interpretation.

2.1 Sampling and Analyses

In general, several frac tanks are connected in-line and filled simultaneously with the flow back water. This is completed to avoid back pressure when shutting one frac tank and opening another tank for additional capacity. This filling process will provide a composite sample of the flow back water over time. To minimize volatilization, a representative composite sample of the flow back water samples will be collected from the top of a frac tank or flow back impoundment.

The flow back water is either pumped into the frac tanks for storage until the water is disposed of properly. If a project does have an impoundment that stores flow back water on site in an impoundment, a grab sample will be collected from the impoundment following day 1, 5 and 14 of fracturing.

The base fracturing fluid will be collected prior to going down hole. The base fracturing fluid will be collected from either the sampling lines built into the blenders or as a grab sample from the blending containers. In either case a representative sample of the fluid will be collected.

Numerous flow back water samples will be collected from several unique locations. Phase one of this characterization study will include the sampling of six flow back water samples from six unique locations.

The list of constituents recommended for the characterization study was developed from comments received from the Pennsylvania Department of Environmental Protection (PADEP), the West Virginia Department of Environmental Protection (WVDEP) and members of the ASWCMC. Because the recommended list of constituents is extremely extensive, it was decided that one sample from each site will be completed for the full list of recommended constituents (Table 1). All other samples will be sampled for a subset of these constituents (Table 2), which are based on generator knowledge and Group 1 and Group 2. The analytical results of phase one of the characterization study will determine the list of constituents of subsequent sampling events.

3.0 SAMPLING PROTOCOLS

This section identifies the protocols to be implemented during field sampling. Specifically this section describes the preparation, documentation, and reporting procedures to be used that will assure quality assurance and quality control.

3.1 PROJECT INITIATION

Following acceptance of this plan by the ASWCMC and the state agencies, Gas Technology Institute (GTI) will authorize Test America an independent a credited analytical laboratory to provide the appropriate sample containers and preservatives; and URS, an independent environmental consulting company has been retained to collect the flow back water. Furthermore, Test America will complete the analytical analyses. Test America is certified by WVDEP and PADEP.

The regulatory agencies are invited to collect split samples. The samples will be collected at the discretion of the agency. All agency sampling must be approved and coordinated with the appropriate gas company.

3.2 DOCUMENTATION

A field logbook and chain-of-custody form will be utilized during the field activities.

3.2.1 Field Logbook

During field activities, a site-specific logbook will be used for documentation of all notes. It is recommended that each page of the logbook be numbered and dated. The entries should be legible and contain accurate and inclusive documentation of the project activities. Once completed, the logbook becomes an accountable document and is maintained as part of the project file. The logbook should include, at a minimum, the following information:

- Identification of logbook ownership and telephone number on the inside front cover;
- Well location and identifying number;
- Names of field personnel at the site;
- Weather information (general);
- Sample locations and activities;
- Sample collection equipment;
- Date and time of monitoring of sampling;
- Water quality measurements (field pH, specific conductance, water temperature);
- Field instrument calibration information;
- Visual observations;
- Collection of field quality assurance samples (i.e., blanks or duplicates);
- Regulatory agency personnel observing sampling;

- Enter agency, collector's name, samples splits, etc., if a regulatory agency splits samples; and
- Documentation of sample shipment dates, time, and carrier tracking (air bill) number, if necessary.

Copies of the field book pages will become part of the sample data package.

3.2.2 Chain-of-Custody Form

The chain-of-custody form is used to record the custody of all samples collected. This chain-of-custody form documents transfer of the custody from the sampling personnel to another person, to the laboratory, or to another party, such as a courier delivery service. The chain-of-custody form also serves as a sample logging mechanism for the laboratory sample custodian.

When the field personnel sends samples to the analytical laboratory, each cooler chest containing samples must be accompanied by a chain-of-custody form. These forms contain the following information pertaining to the samples:

- Project Name
- Name(s) and signature(s) of the individual(s) collection the samples;
- Sample location;
- Date and time of sample collection;
- Total number of sample containers per sample location;
- Type of sample preservation used (e.g., HNO_3, HCl, etc.)
- Analytical parameters of interest for each sample and number of containers per analytical parameter;
- Remarks or observations;
- Signature(s) of all individual(s) relinquishing and receiving custody of the samples;
- Name of the carrier shipping the samples; and
- Air bill number under which sample containers(s) was sent, if applicable;

The chain-of-custody forms are multi-colored carbon copy forms. The original copy (white) is submitted to the laboratory with the samples, the second copy (pink) is sent to GTI, and the third (yellow) is kept for the project files.

3.3 SAMPLE DESIGNATION AND IDENTIFICATION

Each sample collected for this characterization study will be assigned a unique sample tracking number. The identification of the well location and participating gas company will not be identified. All well locations will be blind. GTI will assign each well a project identifier. The project identifier will be a unique single alphanumeric letter that will identify the Devonian Shale well location and company. This unique alphanumeric letter will be provided to the third party environmental consultants to be used in the sample designation.

3.4 SAMPLE MANAGEMENT AND SHIPMENT

The possession of samples or other physical evidence shall be traceable from the time the samples are obtained until they have been submitted to the analytical laboratory. To simplify the documentation of possession that is maintained on the chain-of-custody form, the number of people who handle the sample during the investigation should be minimized. All samples will be documented in the field logbook, on the chain-of-custody form and on the sample container labels. Field documentation procedures are provided above in Section 2.3 and the in the QAPP.

Sample labels shall be completed for each sample using waterproof non-erasable ink. All samples are to be sealed immediately upon collection and are to be immediately place on ice in a cooler.

Samples are to be properly packaged for shipment and delivery to the laboratory. To ensure that the samples are kept cold for preservation requirements, the samples are to be shipped in iced coolers for overnight delivery. Samples collected during the characterization study are to be classified as environmental samples.

Shipping containers are to be secured with tape and use of security seal method to ensure that the cooler may not be opened without evidence of the seal being tampered.

Ice used to keep the samples cooled must be secured in plastic bags (e.g., Zip-Lock® plastic bags) to ensure that melted ice does not cross contaminate the samples pr leak from the coolers.

Samples will be either hand delivered to the laboratory or shipped via priority service to the laboratory or the air bill retained for the project file.

4.0 SAMPLING EQUIPMENT AND PROCEDURES

Grab samples will be conducted using a new PVC bailer from the top of the frac tank. The order, in which the grab samples are collected, as prioritized to the sensitivity to volatilization, is as follows:

- Volatile Organics
- Purgeable Organics
- Purgeable Organic Halogens
- Total Organic Halogens
- Total Organic Carbon
- Extractable Organics
- Total Metals
- Dissolved Metals
- Phenols
- Cyanide
- Sulfate and Chloride
- Turbidity
- Nitrate and Ammonia

There is not an order of preference for the collection of the remaining conventional parameters.

Temperature, pH, dissolve oxygen, and specific conductance measurements will be completed in the field

5.0 INVESTIGATION DERIVED WASTE

Materials which may be investigation derived waste (IDW) are:

- Personnel protective equipment (PPE), including disposable gloves, coveralls, booties, etc.;
- Disposable equipment, including plastic ground and equipment covers, aluminum foil, Composite liquid waste samplers (COLIWASAs), used sample containers, tape, etc.;

5.1 MANAGEMENT OF HAZARDOUS IDW

If wastes are suspected to be hazardous, appropriate analysis must be performed to make that determination. The analytical testing should meet the requirements of the potential disposal characterization requirements. If the IDW is determined to be hazardous wastes either through testing of characteristics or as a listed waste, they must be properly container and labeled. They may be stored on site for a maximum of 90 days before they must be manifested and shipped to a permitted treatment of disposal facility.

Care should be taken to keep non-hazardous materials segregated from hazardous waste-contaminated materials.

6.0 REFERENCES

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Appendix B

Quality Assurance Project Plan (QAPP)

QUALITY ASSURANCE PROJECT PLAN

DEVONIAN SHALE FLOWBACK WATER CHARACTERIZATION STUDY

Prepared by

Appalachian Shale Water Conservation and Management Committee

November 2008

TABLE CONTENTS

FIGURE

TABLES

1.0 PURPOSE

This document is the Quality Assurance Project Plan (QAPP), which provides specific quality assurance/quality control (QA/QC) procedures to be executed and supported for the Characterization Study of the flow back water associated with the well fracturing of the Devonian Shale.

Data generated for environmental purposes must be technically sound and legally defensible, and supported by defined and verified limits of confidence. Therefore, the objective of this QAPP is to ensure the generation of accurate, precise, representative and complete data. The QAPP sets forth the data collection procedures and data evaluation processes, which will ensure that appropriate levels of data quality are obtained.

Analyses must meet the QA/QC requirements associated with this QAPP and the following documents:

SW-846, Third Edition (September 1986), as amended by updates 1 (July 1992), II (September 1994), IIA (August 1993), and IIB (January 1995), or the most current SW-846 update;

EPA's "Handbook for Analytical Quality Control in Water and Wastewater Laboratories" (EPA 600/1-79-019);

Standard Methods for the Examination of Water and Wastewater.

Only U.S. EPA-approved methods will be used for chemical analyses. Any omission in this QAPP of relevant requirements, tasks and other items found in the referenced methods does not constitute a waiver of the omitted requirement, task, or item. It is the responsibility of all personnel involved in the various site investigation activities to perform and document the required procedures designated herein.

2.0 PROJECT DESCRIPTION

The Appalachian Shale Water Conservation and Management Committee (ASWCMC) is conducting a study to characterize the fracturing and flow back water generated from development of Devonian Shale wells.

2.1 SCOPE OF WORK

Samples will be collected from both vertical and horizontal Devonian Shall gas wells. Numerous samples will be collected from several locations. Phase one of the characterization study will include 4 grab samples from 6 well sites. A sample will also be collected from a well that has been in production for at least three months. The following grab samples will be collected from each site:

- One baseline fracturing water sample that includes the fracturing chemicals, excluding the sand;
- Flowback water samples will be collected on days 1, 5 and 14 of the following the fracturing process; and
- Water from an existing producing well.

The list of constituents recommended for the characterization study was developed from comments received from the Pennsylvania Department of Environmental Protection (PADEP), the West Virginia Department of Environmental Protection (WVDEP) and members of the ASWCMC. Because the recommended list of constituents is extremely extensive, it was decided that one sample from each site will be completed for the full list of recommended constituents (Table 2). All other samples will be sampled for a subset of these constituents (Table 3), which are based on generator knowledge. The analytical results of phase one of the characterization study will determine the list of constituents of subsequent sampling events.

In addition, field measurements of pH, specific conductance, temperature, dissolved oxygen, and turbidity will be taken of flow back aqueous samples.

3.0 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA

Data Quality Objectives (DQOs) are qualitative and quantitative statements to ensure that data of known and appropriate quality are obtained during the characterization study (sampling and analysis).

The data objectives will address characterization of the flow back fluids associated with well fracturing generated from Devonian shale. This characterization study will:

- Identify the specific constituents of interest (COI) associated with flow back water;
- Reduce/eliminate the allegations that the chemicals used for fracturing will contaminate groundwater; and
- Provide sufficient information for the selection of proper disposal techniques.

- Achieving these data objectives will require obtaining data of acceptable levels of certainty. Therefore, it is essential that the field and sampling procedures be completed under stringent and appropriate methods

3.1 DATA QUALITY LEVELS

There are typically five analytical levels of data quality available to accomplish the objectives of investigations of this type. These levels are typically designated as follows:

Level I: field screening or analysis using portable instruments, calibrated to non-compound specific standards;

Level II: field analysis using portable instruments, calibrated to specific compounds;

Level III: non-Contract Laboratory Program (non-CLP) laboratory methods;

Level IV: CLP Routine Analytical Services (RAS) methods; and

Level V: non-standard analytical methods.

DQO Levels I and III will be used to characterize the Devonian Shale Fracturing Flowback sampling activities. The following sections describe the use of the analytical procedural levels that will be used during the project.

Field Screening Methods - Level I

Field determinations of pH, specific conductance, temperature, dissolved oxygen, and turbidity

will be made during characteristic sampling as part of a field screening procedure. These analytical methods are used to determine stability of the well and they are typically designated as Level I data quality.

In addition, as part of the health and safety program, worker safety may be monitored via one or more of a variety of field screening tests such as a photoionization detector (PID) or flame ionization detector (FID) to test for volatile organic vapors, or a combustible gas indicator to test for explosivity potential. These tests, which are semi-quantitative, are classified as field screening evaluations, even though they typically are not used for site characterization purposes.

Non-CLP Laboratory Methods - Level III

Level III analytical procedures provide precise, accurate and defensible data for the intended data uses, with a less formal documentation and reporting nomenclature at reduced analytical costs over Level IV data quality procedures. Data Quality Level III will be used during this characterization study. Table 1, summarizes analyses that will be conducted to characterize and quantify constituent concentrations.

3.2 QUALITY CONTROL PARAMETERS

The exact quantitative criteria used to evaluate data quality from the laboratory's precision and accuracy perspective for the aqueous and solid sampling media will be presented in the selected laboratory Quality Assurance Manual(s) (Appendix QAPP-1 and following). The following is a description of terms that appear in the QAM.

Reference: The reference of the U.S. EPA standard analytical methodology used for each procedure.

Precision: A measure of the mutual agreement among individual measurements of the same property under prescribed similar conditions. Precision is evaluated based on the relative percent difference (RPD) between duplicate matrix spike results or duplicate sample results, as appropriate. The matrix spike duplicate RPD limits are parameter and method-specific, MS/MSD RPD QC limits will be presented in the laboratory QAMs. Laboratory duplicate sample RPD limits are typically 20 percent for aqueous media and 35 percent for solid media (exceptions may apply for solid media whose samples may be nonhomogeneous). Field duplicates are also evaluated by calculating the RPDs between field duplicate sample results. However, evaluations of field duplicate RPDs are used as advisory determinations since numerous factors in sampling and analysis may cause variances between field duplicate results.

Accuracy: The degree of agreement of a measurement with an accepted reference or true value. Accuracy is evaluated based on the percent recovery of spiked samples. The matrix spike recoveries for organic analyses are method and parameter specific and are typically used as an advisory QA/QC measure due to the difficulty associated with recovering spiked organic

parameters. Organic parameter percent recovery QC limits will be presented in the laboratory's QAM. The matrix spike recoveries for inorganic and most conventional parameters are typically a range of ±25 percent.

Completeness: A measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under normal conditions. The method of calculation for percent completeness is defined in Section 12.3. Completeness can be evaluated in two ways: 1) by comparing the number of samples actually collected to the expected number of samples to be collected; and 2) by comparing the number of valid analyses received from the laboratory to the number of actual samples collected. The results of any Level III analyses to be performed is typically used for characterization studies and as such will have a minimum completeness of 95 percent for both evaluations of completeness.

Exact QA/QC criteria the laboratory will use to evaluate its data's precision and accuracy will be provided following selection of the analytical laboratory, if the criteria are not method-specific.

Table 1 summarizes the individual parameters and associated reporting limits.

There are also qualitative criteria that are adhered to ensure that data of known and appropriate quality are obtained during investigation activities. These criteria include representativeness and comparability.

The sampling and analysis programs are designed to ensure that analytical data obtained during the characterization study represent current conditions found at the site and produce data of comparable quality. The sampling frequency was selected to ensure data are suitable for their intended use and adequately characterize the flow back water. Additionally, standard recognized analytical methodologies will be utilized to ensure comparability. These designs are instituted to ensure appropriate sample representativeness and data comparability.

4.0 SAMPLING PROCEDURES

This section outlines the procedures to be used for the preparation of sampling equipment and containers and for sample preservation. It also provides some of the quality control and operating procedures to be followed for sampling. Detailed field sampling details including the number of samples to be collected, the rationale for sampling, and QC requirements are described in the Field Sampling and Analysis Plan.

4.1 SAMPLE IDENTIFICATION

Each sample collected for this characterization study will be assigned a unique sample tracking number. The identification of the well location and participating gas company will not be identified. All well locations will be blind. GTI will assign each well a project identifier. The project identifier will be a unique single alphanumeric letter that will identify the Devonian Shale well location and company. This unique alphanumeric letter will be provided to the third party environmental consultants to be used in the sample designation.

Flow back Sampling

Fracturing is completed over several days depending on the geological formation. The flow back water is initially removed at a faster rate at the start of production and significantly declines as production continues. It is believed that the volume of water is relative to the concentration. It is assumed that the concentration of the fracturing chemicals remain constant throughout the flow back regardless of the rate of return. However, the increase of in the COI is due to a longer residence time in the applicable formation and not associated to the additives of the fracturing fluids. Therefore, to obtain representative samples of the flow back water samples will be collected on three separate days (i.e., days 1, 5 and 14).

Additionally, a baseline sample of the fracturing fluid will be collected prior to injection. The baseline sample will contain the materials (e.g., water and chemicals) used in the fracturing process. A sample will also be collected from a well in Devonian shale that has been in production for a period of time (i.e., I production fro more than 3 months). The analytical results associated with these samples will assist in the data interpretation.

Quality Assurance

The quality assurance field will only be used to indicate a sample collected for quality assurance purposes.

Quality Assurance/Quality Control Samples will be identified as follows:

EB - Equipment Blank
TB - Trip Blank

The following are sample identification samples.

A05V	Sample collected from company X on day 5 from a vertical well.
CEH	Sample collected from company Y from an existing horizontal well.
TB	Trip Blank.

Each sample container will be marked with a label identifying the specific parameters of interest. The label will record the date of sample collection, alphanumeric identification, parameters to be analyzed, and preservatives, if applicable. Sample bottles should be prelabeled by the laboratory to avoid unnecessary delays.

The specific information for each sample will be documented in the field logbook and on a chain-of-custody form. The sample identification will be correlated in the logbook and chain-of-custody by sample designation, sampling date, time, and location. The analytical parameters for which the sample is to be analyzed and the respective number of sample bottles will be provided on the chain-of-custody sheet.

4.2 SAMPLE CONTAINERS

All new pre-cleaned sample bottles with screw-type Teflon-lined lids will be used for holding and shipping samples. These sample bottles will be supplied by the analytical laboratory, and pre-preserved by the laboratory as necessary.

4.3 FIELD QA/QC SAMPLES

Two types of field QA/QC samples will be collected (i.e., trip blanks and equipment blanks). The following provides a description of the essential field QA/QC samples.

4.3.1 Trip Blanks

Trip blanks are collected only for volatile organic samples. The trip blank is prepared by the laboratory by filling a batch of pre-cleaned 40-ml vials with laboratory-grade water. The vials are transported to the site and returned to the laboratory in the same manner as the environmental sample containers. Any constituents found in the trip blank could be attributed to: a) interaction between the sample and the container, b) contaminated laboratory-grade water, or c) a storage or handling procedure which alters the sample. One trip blank should accompany VOC samples for each sampling event. The trip blank is placed in the cooler that contains samples for volatile organics. At no time after the preparation are trip blanks to be opened before they are returned to the laboratory.

4.3.2 Equipment Blanks

To verify that no constituents are introduced from sampling equipment, equipment blanks are collected by pouring distilled water through the representative sampling device and analyzing for all constituents of interest. One equipment blank will be collected during the characterization study.

4.4 DOCUMENTATION

A number of documents will be used during the characterization study. These documents include: chain-of-custody forms and field data sheets.

Chain-of-custody Forms

The field chain-of-custody form is used to record the custody of all samples collected. This chain-of-custody form documents the transfer of the custody from the sampling personnel to another person, to the laboratory, or another party, such as a courier delivery service.

When the field team sends samples to an analytical laboratory, each shipping cooler containing samples, which are sent under one shipping document, must be accompanied by a chain-of-custody form (Figure 1). These forms document information regarding the origination of samples and those parties having subsequent possession of samples. They also contain information pertaining to these samples, such as project name, name of the individuals collecting the samples, sample identification number, the date and time of collection, the number of sample containers for each parameter of interest for each sample, remarks or observations of samples, if appropriate, the signature of the person relinquishing control of the samples and the person receiving the samples, and the name of the overnight carrier shipping the samples to the laboratory. The original chain-of-custody sheet is sent with the samples. One copy will be submitted to Gas Technology Institute (GTI), and the other copy is stored in the field team files.

5.0 SAMPLE CUSTODY

The primary objective of sample custody is to create an accurate written verified record, which can be used to trace the possession and handling of the samples from the moment of collection through data analysis and reporting.

The field sampler will be personally responsible for the care and custody of the samples collected until they are properly transferred. Samples will be accompanied by a Chain-of-Custody Record.

Upon arrival at the laboratory, samples will be checked in using laboratory custody procedures outlined in the laboratory QAM. The laboratory is required to verify that all samples were received and in good condition. The laboratory should assign a laboratory-specific sample identification. This unique identification guarantees sample anonymity to the analyst of the sample's site.

Once samples have been logged-in and transferred to the proper storage areas, the laboratory department manager is responsible for their proper storage and condition. Copies of the completed Chain-of-Custody Records and an analysis narrative presenting laboratory sample identifications and their correlating field assigned sample identifications should be included in the data package for delivery to the data user.

6.0 ANALYTICAL PROCEDURES

All analyses will be performed using U.S. EPA analytical methods procedures from the following:

> Third Edition (September 1986), as amended by updates 1 (July 1992), II (September 1994), IIA (August 1993), and IIB (January 1995), or the most current SW-846 update;
>
> EPA's "Handbook for Analytical Quality Control in Water and Wastewater Laboratories" (EPA 600/1-79-019);
>
> Standard Methods for the Examination of Water and Wastewater.

Table 1 and Table 2, summarize the list the constituents of interest (COIs) associated with the characterization study for the flow back water from the wells of the Devonian shale and the required reporting limits to be reported by the laboratory. Method selection was based on the following factors: reliability in identification and quantifications, and comparability of sample results and best achievability of the lower of federal Maximum Contaminant Levels (MCLs).

All procedures for environmental sample handling, storage, and documentation while in the laboratory's custody and deliverable requirements upon delivery of the data to the user are stated in the laboratory QAMs.

7.0 CALIBRATION PROCEDURES AND FREQUENCY

All field and laboratory equipment are calibrated before use to ensure proper operating conditions. Laboratory instrument calibration procedures are presented in the laboratory QAMs. Field calibration procedures and frequencies should be followed in accordance with the manufactures specifications. Field calibrations must be completed each day at a minimum. pH meters are required to be calibrated or verified every two hours at a minimum.

7.1 PREPARATION OF STANDARDS

All analytical methods must be validated at some point by the use of calibration standards. A calibration standard is made by the appropriate dilution of a pure substance, the purity of which is traceable to an NBS or U.S. EPA standard. Because of the high sensitivity of many analytical instruments, the calibration standard is an extremely dilute version of the pure compound. Because of the high dilution required to be within the linear range of the instrument, the preparation of the calibration standard is frequently made by serial dilution rather than in a single step. In order to provide standard solutions at sufficiently low concentrations, a minuscule amount of the pure substance will be required, the measurement of which is subject to extreme error. Thus, it is preferable to deal with potential dilution errors, rather than with the large error associated with the measurement of a very small amount of the pure substance.

The initial standard is usually obtained either as a pure material or as a prepared certified solution of a given concentration of the pure compound or compounds. In preparing the stock solution of the calibration standard, great care must be exercised in measuring weights and volumes as accurately as possible, since all of the analyses following the calibration will be based on the accuracy of the calibration, and the accuracy of the analytical data is dependent on the calibration curve. It is the analyst's responsibility to assure that all standards used are within the standard solution holding time, and to prepare fresh standard solutions whenever necessary. In preparing working solutions, or using working solutions, the analyst must check for signs of deterioration of the standard, such as cloudiness, precipitation, or discoloration. The standard must also be periodically compared with previous runs of standards, and with independently prepared standards to assure that response factors fall within a historically accepted range.

7.2 CORRECTIVE ACTION

There are many laboratory functions that may require corrective action. The decision to undertake corrective action, and the ensuing action must be documented so that traceability can be maintained. The point of originating the corrective action varies, depending upon the mode of detection that such action is necessary. It is generally the role of either the Laboratory QA Officer or the Laboratory Department Manager to initiate such action. Those actions that affect the quality of the data will be recorded and the record maintained by the Laboratory QA Officer.

The general procedures for appropriate laboratory corrective actions and identification of potential problems are presented in the analytical laboratory QAM.

8.0 DATA EVALUATION/VALIDATION

Data are typically validated by the laboratory and field personnel. First, during the field operations, field measures will be validated at the time of collection by the field sampler by verifying the use of standard operating procedures for the sampling effort and using field QC checks. Second, laboratory analytical results will be validated by the Laboratory Department Manager or the analyst who is the specific analytical task leader.

8.1 FIELD DATA VALIDATION

Validation of field obtained data, as well as ongoing QA/QC checks of environmental samples being taken, is performed on field data. All field data are reviewed during the time of collection and second, all data are reviewed by secondary field personnel if multiple personnel are present. Corrections in the field logbooks will be removed by placing a single line through the entry, initialing and dating the correction. If information is added without a correction being necessary that entry will be initialed and dated to indicate that it was not entered at the original time of data entry. Entries should never be "whited out" or made in pencil.

8.2 LABORATORY DATA VALIDATION

The individual Laboratory Department Managers should validate all laboratory data, prior to reporting. Some of the following QA/QC measures are reviewed or procedures are typically used:

- A standard curve is prepared prior to sample analysis;
- The standard regression coefficient is within the acceptable range;
- Standard reference materials are analyzed at the proper frequencies and acceptable results are obtained;
- The reagent blanks are analyzed at the proper frequency;
- Precision requirements of this plan are met;
- Accuracy requirements of this plan are met;
- Completeness requirements of this plan are met;
- Samples are analyzed within the proper sample holding times;
- All calculations are verified as correct;
- Proper units are reported; and
- The proper methodologies were used.

Besides this review of analytical results and project specific precision, accuracy, and completeness requirements, the Laboratory Department Manager should perform unannounced audits of report forms and other data sheets as well as regular reviews of instrument logs, performance test results, and analysts' performance. Any review of analytical results or internal QA/QC checks that indicate problems, immediate corrective actions should be taken and all data collected since the previous approved QC audits should be reviewed for validity. Specific

laboratory procedures for validation of the analytical data generated are described in the laboratory QAMs.

8.3 INDEPENDENT DATA VALIDATION

The laboratory will provide DQO Level 3 (i.e., CLP Like) data packages. However, the data packages will not be validated at this time. Data validation procedures following the applicable guidance from the current U. S. EPA's *Contract Laboratory Program, National Functional Guidelines for Organic Data Review* and the U. S. EPA's *Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review* will be performed, if required.

8.4 DATA REPORTING

Analytical Laboratory

Once the data have been validated internally by the laboratory, all of the results are electronically or automatically entered into the laboratory's data management system where they are stored prior to reporting. When all analyses are completed for data storage, the Laboratory Director (or his/her designee) will issue a final data report including a descriptive case narrative. He or she will then issue the report to the data user. All applicable QC data should be included with the final report.

The data reports generated for this project should contain all pertinent information for the data user to determine the applicability and usability of the data for its intended purposes. For this reason, a specified and uniform data reporting format should be implemented. For this project, DQO levels III data packages will be reported as a Level IV (CLP-like) deliverable to facilitate data validation, if needed. The following criteria and information should be supplied, at a minimum, for data reports generated for this project:

1. A descriptive case narrative identifying any problems encountered during internal data validation (as described above);

2. Completed and legible chain-of-custodies for all analyses contained within each submitted data package;

3. A lab sample chronicle indicating which analyses were requested and performed for the samples contained in the data package;

4. A summary of the laboratory sample identifications and the correlating field sample identifications;

5. A summary of all applicable analytical results reported in the correct number of significant figures, reporting units; and

6. Included in the individual sample reporting results should be the complete sample identifications, the sample dilutions (if necessary), and the individual sample analysis dates.

8.4.1 LEVEL I REPORTING

Summary reporting only will be provided. Bulleted items above are required under this DQL.

8.4.2 LEVEL II REPORTING

Summary reporting only will be provided. The data package reporting requirements are the same as Level I except legible and calculated QA/QC summaries for laboratory blanks, surrogate recoveries (if applicable), laboratory control sample recoveries, and matrix spike/matrix spike duplicate recoveries (or matrix spike recovery and laboratory duplicate results) must also be supplied under this DQL.

8.4.3 LEVEL III REPORTING

The following summary forms and raw data deliverable requirements will apply for Data Quality Level III.

The following forms are required for all analyses using Gas Chromatography/Mass Spectroscopy methods.

- Narrative and sample identification cross reference;
- Copies of Chain-of-Custody documentation;
- Laboratory chronicle;
- Method summaries and references;
- Organic analysis data sheet for samples and blanks (with TICs as required);
- System monitoring compound/surrogate recoveries summary;
- Matrix spike/Matrix spike duplicate summary or any lab duplicate;
- QC Check Sample summary;
- Method blank summary and results;
- Instrument performance check summary;
- Initial calibration summary for all constituents of interest;
- Continuing calibration check summary for all constituents of interest;
- Internal standard area and RT summary;
- Extraction/preparation logs;
- The handwritten calculation for at least one positive result in one sample at a rate of one calculation per twenty samples or per data package (whichever is greater) per fraction (e.g., VOC or SVOC); and
- Raw data including run logs, mass spectra, quantitation reports and chromatograms for

samples, as well as any raw data used to complete the hand written calculation.

The following forms are required for all total metal analyses.

- Narrative and sample identification cross reference;
- Copies of Chain-of-Custody documentation;
- Laboratory chronicle;
- Method summaries and references;
- Inorganic analysis data sheets;
- Initial and continuing calibration verification;
- Initial and continuing calibration blanks and preparation blank summary;
- ICP interference check sample summary;
- Spike sample recovery;
- Duplicate results summary;
- Laboratory Control Sample summary;
- Standard addition results summary, when applicable;
- ICP serial dilutions;
- Instrument detection limits;
- ICP inter-element correction factors summary;
- Preparation log;
- Analysis run log;
- The hand-written calculation for at least one positive result in one sample at a rate of one calculation per twenty samples or per data package (whichever is greater) per method (e.g., GFAA/ICP/CU); and
- Raw data.

The following data and summary forms will be submitted by the laboratory for inorganic non-metals analyses or other analyses not discussed above:

- Narrative and sample identification cross reference;
- Copies of Chain-of-Custody documentation;
- Laboratory chronicle;
- Method summaries and references;
- Analysis data sheets;
- Calibration summaries; and
- Calibration equation and curve plot;
- Blank results summary;
- Sample spike recovery, where applicable;
- Duplicate sample results, where applicable; and
- Laboratory control sample summary where applicable.

9.0 QUALITY CONTROL PROCEDURES

Quality control (QC) procedures and checks are used to verify the accuracy of investigation data. Field QC checks are used to identify potential problems with sampling procedures such as the inconsistent use of sampling standard operating procedures or field introduced sample or water supply contamination and/or problems with sample homogeneity or representativeness. Laboratory QC checks are used to identify potential problems with analytical procedures such as the misapplication of required analytical methodologies or other laboratory related problems which could result in inaccurate or imprecise data reported. The laboratory QC checks and procedures presented in this section are required for most of the applicable methods, but the frequency of the QC checks should follow procedures outlined in the laboratory QAMs.

9.1 FIELD QC CHECKS

To check the quality of data from field sampling efforts, field blanks and field duplicate samples will be collected for analysis. These samples will be treated as separate samples for identification, logging, and shipping. Analytical results on blanks and duplicates will be reported with the appropriate field sample data. The number of these samples, when required, and their use was described in Section 5.0.

9.1.1 EQUIPMENT BLANKS

The equipment blank provides a check on possible sources of sample contamination. The equipment blanks should be collected in the worst-case scenario. The reason for performing equipment blanks in the most impacted area is to attempt to simulate a worst-case scenario regarding contributions from site condition or from improperly cleaned sampling equipment to sample contamination. One equipment blank will be for this project. Equipment blanks should be handled, transported, and analyzed in the same manner as the samples with which they are associated.

The equipment blank water must be maintained at 4 (±2)°C following collection and during shipment. Holding times for individual parameters are dictated by the specific analytical method being used. The holding-time clock begins at the time of sample collection of the equipment blank.

9.1.2 TRIP BLANKS

Trip blanks are used to check for sample contamination introduced by the sample containers, by the sampling equipment, or by the sampling environment. Trip blanks travel to the site with the empty sample bottles and return from the site with the collected samples in an effort to simulate sample handling conditions. Trip blanks are collected in association with samples that are to be analyzed for volatile organic compounds. Potential sources of sample contamination are from

the laboratory-grade reagent water, sample containers, field or laboratory ambient air, laboratory reagents, or cross contamination during shipping, handling, preparation or analysis. A trip blank should accompany VOC samples for each sampling event.

The trip blank water must be maintained at 4 (±2)°C through sample collection activities and during shipment. Holding times for individual parameters are dictated by the specific analytical method being used. The holding-time clock begins at the time of sample collection of the oldest sample in the sampling container.

9.2 INTERNAL LABORATORY QC CHECKS

The QC check frequencies and requirements specified in the following sections is a general description only. The laboratory will follow the internal QC checks specified in its QAM for each analysis type employed. However, these QC checks must meet, at a minimum, the requirements specified in the respective U.S. EPA analytical methods.

The following internal laboratory QC checks are performed for most analyses, whenever applicable, to ensure the measurement systems are under control:

- Initial and continuing calibrations;
- Preparation/method blanks;
- Matrix spike and matrix spike duplicate or matrix spike and laboratory duplicate analysis, as appropriate;
- Surrogate spike standard performance evaluation (for organic analyses only); and
- Calibration check compounds and reagent blanks (for organic analyses only).

Additional internal laboratory QC checks are typically performed for most analyses, as required by the associated analytical method. Only the most common QC checks are generally described below.

9.2.1 INITIAL AND CONTINUING CALIBRATION

Each measurement system must be calibrated immediately prior to use and be shown to maintain the calibration throughout the course of the analysis. For the organic parameter methods, all target compounds will be checked during initial and continuing calibrations. Calibration procedures and frequencies is discussed for the various analysis types in the laboratory QAMs. An initial calibration will be performed prior to WSC sample analyses. Continuing calibrations will be typically analyzed at a minimum frequency of one every ten samples. For CLP GC/MS analysis, calibration checks are only required once every 12 hours of analysis.

9.2.2 Preparation/Method Blanks

A preparation or method blank is run with each batch of samples received for analysis. Compound or analyte responses observed in the blank at levels above the reportable detection

limit are reviewed for possible laboratory contamination. If high blank values are observed, laboratory glassware and reagents may need to be checked for contamination and the analysis of future samples halted until the system can be brought under control. A high blank value is typically defined as a value greater than the method detection limit. A preparation and/or method blank will be prepared at a frequency of one per 20 samples or one per day, whichever is greater.

9.2.3 Matrix Spike And Duplicate (Or Matrix Spike Duplicate) Analysis

For all analyses where matrix spiking is possible, 1 in 20 samples is analyzed as matrix spikes and matrix spike duplicates or 1 in 20 samples is analyzed as matrix spikes and duplicates. Field personnel must provide additional volume for the laboratory to complete a MS/MSD. The percent recovery for spiked samples is calculated using the equations given in Section 12.0 and compared to the accuracy criteria specified in the QAM for the associated analytical method. The relative percent difference of replicate spikes or replicate analytical results are calculated using the equations given in Section 12.0 and compared to the precision criteria specified in the laboratory QAMs (Appendix QAPP-1 and following) for the associated analytical method.

9.2.4 Surrogate Spike Standard Performance Evaluation

Surrogate standards are defined as nonpriority pollutant compounds used to monitor the percent recovery efficiencies of the analytical procedures on a sample-by-sample basis. Surrogate standard determinations are performed on all samples and blanks for organic analyses. All samples are fortified with surrogate spiking compounds before purging or extraction to monitor the preparation and analysis of samples.

Surrogate compounds and recovery levels for the associated analyses are presented in the laboratory QAM (surrogate recovery limits are method- and media-specific and are either specified in the method or are calculated annually by the analytical laboratory as described in the analytical method). When the surrogate recovery level is outside of the control limits on the initial analysis, the laboratory must take the following actions for all organic analyses for samples:

- Check calculations to assure there are no errors, check internal standard and surrogate spiking solutions for degradation or contamination and check instrument performance; and

- Recalculate or reinject/repurge the sample or re-extract and reanalyze the sample.

9.2.5 Calibration Check Compounds And Reagent Blanks

These calibration check compounds and reagent blanks are analyzed periodically throughout the course of the analysis, depending on the required analysis. The exact frequencies and methods of use are presented in the laboratory QAM.

10.0 PERFORMANCE AND SYSTEM AUDITS

Two types of audit procedures may be conducted during any environmental investigation: performance audits and system audits. These audits may be performed on the laboratory as well as field activities. A description of the laboratory's specific guidance for Performance and System Audits will be presented in laboratory QAMs. General procedures for laboratory performance and system audits are presented below.

10.1 PERFORMANCE AUDITS

10.1.1 Laboratory Performance Audits

Laboratory performance audits are typically conducted by the Laboratory QA Officer on a regular basis. Each laboratory analyst is given a performance evaluation sample containing analytes for the parameters which he/she usually performs. These audit samples are used to identify problems in sample preparation or analysis techniques or methodologies which could lead to future analytical problems.

Additionally, the laboratory performance audits include verification of each analyst's record keeping, proper use and understanding of procedures, and performance documentation. Corrective action will be taken for any deficiencies noted during the audit.

10.2 SYSTEM AUDITS

10.2.1 Laboratory System Audits

Laboratory system audits are typically conducted by the Laboratory QA Officer. These audits are used to ensure that all aspects of the Laboratory's QAM are operative. This involves a thorough review of all laboratory methods performed and documentation to confirm that work is performed according to project specifications.

In some cases, outside certification agencies conduct performance and system audits to verify contract compliance or the laboratories' ability to meet certification requirements on methods of analysis and documentation. Results of these outside certification audits may be reviewed at any time as a check on the laboratory’s internal auditing procedures.

11.0 ASSESSMENT PROCEDURES FOR DATA ACCEPTABILITY

The following discussion describes the procedures that will be employed to evaluate the precision, accuracy, and completeness of the generated data.

11.1 PRECISION

Precision is a measure of agreement among individual measurements of the same property under prescribed similar conditions. Precision is assessed by calculating the relative percent difference (RPD) of replicate spike samples or replicate sample analyses according to, the following equation:

$$RPD = \frac{R1 - R2}{(R1 + R2)/2} \times 100$$

where R1 = result 1
R2 = result 2

11.2 ACCURACY

Accuracy is a measure of the closeness of an individual measurement to the true value. Accuracy is measured by calculating the percent recovery (%R) of known levels of spike compounds as follows:

$$\%R = \frac{\text{concentration of spike sample - concentration of unspiked sample}}{\text{concentration of spike added}} \times 100$$

11.3 COMPLETENESS

Completeness is a measure of the amount of valid data obtained from a measurement system, expressed as a percentage of the number of valid measurements that should have been collected. As is specified in Section 4.2, more than one completeness check can be evaluated. It is calculated as follows:

$$\text{Completeness (\%)} = \frac{\text{number of valid samples reported}}{\text{total number of samples analyzed}} \times 100$$

11.4 QUALITY CONTROL CHARTS

Quality control charts can be prepared after every 20 analytical determinations to graphically evaluate precision and accuracy criteria. The charts are prepared by calculating the mean value of the determinations and setting control limits at $\pm$ 3 standard deviations from that mean. The following equations are used:

$$mean = \bar{x} = \sum_{i=1}^{n} \chi_i/\eta$$

$$standard\ \ deviation = \sqrt{\frac{1}{n-1} \sum_{i=1}^{n} \left(x_i - \bar{x}\right)^2}$$

The control limits should be within acceptance limits or ranges presented in the as yet unselected laboratory's QAM. If the values are found to be outside these limits or ranges, the measurement system is examined to determine if possible problems exist.

12.0 PREVENTIVE MAINTENANCE

Periodic preventive maintenance is required for equipment whose performance can affect results. Instrument manuals are kept on file for reference if equipment needs repair. Troubleshooting sections of manuals are often useful in assisting personnel in performing maintenance tasks.

12.1 FIELD

Field sampling personnel will be responsible for preventive maintenance of all field instruments. The field sampling personnel will protect the instruments by placing them in portable boxes and/or protective cases.

All field equipment will be subject to a routine maintenance program, prior to and after each use. The routine maintenance program for each piece of equipment will be in accordance with the manufacturer's operations and maintenance manual. All equipment will be cleaned and checked for integrity before and after each use. Necessary repairs will be performed immediately after any defects are observed, and before the item of equipment is used again.

Equipment parts with a limited life (such as batteries, membranes and some electronic components) will be periodically checked and replaced or recharged as necessary according to the manufacturer's specifications.

Preventive maintenance is important since it provides for a longer useful life of the equipment and helps to ensure a successful field sampling and testing program. Each piece of field equipment will have its own log sheet which contains the equipment identification and the type of maintenance performed. Since most equipment is used on an irregular basis, all equipment will be properly stored when not in use.

12.2 LABORATORY

All major laboratory instruments should normally be under service contract so that trained professionals are available on call to minimize instrument downtime. Other preventive maintenance schedules and/or procedures for laboratory equipment is presented in the laboratory QAMs (Appendix QAPP-1 and following).

13.0 CORRECTIVE ACTION

Corrective action procedures are divided into two subgroups: methods corrective action and systems corrective action. These corrective actions are implemented whenever system or performance audits note deficiencies or when QC procedures indicate a potential analytical problem. The laboratory guidance on Corrective Action procedures is presented in the laboratory QAMs.

14.0 QA REPORTS TO MANAGEMENT

This QAPP provides a documentable mechanism for the assurance of quality work performed at for the characterization study. Audit reports will be provided by the Laboratory Director (or his/her designee) as a means of tracking program performance, as applicable, or if needed. Additionally, periodic assessments of measurement data accuracy, precision, and completeness and significant QA/QC problems will be performed and reported to laboratory and/or project management, if needed.

Field QA reports will not be necessary considering the expected size and length of any individual sample collection activities. Any problems noted during sampling will be immediately communicated to GTI, so GTI can take whatever corrective actions necessary.

Upon completion of the project-specific Work Plans, a final QA/QC report will be issued, assessing the overall degree of project conformance to specifications and the impact of any non-conformances that may affect management decisions.

The final storage location of the files will be maintained at GTI's office in Chicago. The files will be maintained for a period of at least three years.

				Location A				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/7/2009**	**2/8/2009**	**2/11/2009**	**2/20/2009**	**5/8/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	5 U	925
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	3.6 J	19.6 J	67.1 J	121 J	293
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	794	353	374	2.8	12.5
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	82.9	274	604	1260
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	3120	1670	9090	3280	28300
Chloride	mg/L	1	MCAWW 300.0A	74.6 J	9510 J	29800 J	67100	125000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	247 J	253 J	114 J	65	5960
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.5 G U	2.5 G U	5 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	80	3600	12000	26000	59000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.45	0.5 G U	2.5 G U	5 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	1 J	0.36 J	0.33 J	0.18 J	0.1 U
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.059	5 G U	29.3	17.6	2.5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	NA	4.8 U	4.8 U	5 U	62.6
Specific Conductance	umhos/cm	--	MCAWW 120.1	498 J	31900 J	137000 J	248000 J	385000 J
Sulfate	mg/L	1	MCAWW 300.0A	51.5 J	46.3 J	39.6 B J C	20.5 B J	50 G U
TOC	mg/L	1	SM20 5310B	350	260	110	38.7 J	5680
Total Alkalinity	mg/L	5	SM18 2320 B	76.7 J	308 J	149 J	93.3 J	26.2 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	990	15400	54800	105000	216000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	39.2	56	76.2	124	202
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.15	0.04 B	0.074 B	0.1 U	0.1 U
Total Suspended Solids	mg/L	4	SM20 2540D	190	82	71	197	201
Turbidity	NTU	--	MCAWW 180.1	321	13.1	2.3	20.1	175
Cyanide, Total	ug/L	10	SW846 9012A	10 U	10 U	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	2.4 B	1.6 B	3.2	3 U	2.4 B
pH	No Units	--	SW846 9040	7.2	7.2	NA	6.5	5.7
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.051	0.027	0.011 J	0.011	0.23
Sulfite	mg/L	1	SM4500-SO3 B	NA	NA	NA	NA	NA
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	NA	NA	NA	NA	NA
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	358 J	223	125 B J	174 B J	370 B
Aluminum-DISS	ug/L	200	SW846 6010B	154 B J	47.7 B	166 B J	133 B J	348 B
Antimony	ug/L	10	SW846 6010B	10 U	17.6	10 B	50 U	100 U
Antimony-DISS	ug/L	10	SW846 6010B	10 U	18.3	9.5 B	10.2 B	100 U
Arsenic	ug/L	10	SW846 6010B	10 U	13.3	17.4 B	24.8 B	46.2 B
Arsenic-DISS	ug/L	10	SW846 6010B	10 U	12.8	21.5 B	19.4 B	106
Barium	ug/L	200	SW846 6010B	276	70200 J	157000	569000	639000
Barium-DISS	ug/L	200	SW846 6010B	104 B	30200	163000	583000 J	787000 J
Beryllium	ug/L	4	SW846 6010B	4 U	4 U	20 U	20 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	4 U	4 U	20 U	0.9 B J	40 U
Boron	ug/L	2000	SW846 6010B	43.8 B	8720 J	33700	56900	67300 J
Boron-DISS	ug/L	2000	SW846 6010B	49.6 B	9000 J	34200 J	58000 J	85200 J
Cadmium	ug/L	5	SW846 6010B	5 U	0.21 B	25 U	1.9 B	2.5 B
Cadmium-DISS	ug/L	5	SW846 6010B	5 U	5 U	25 U	1.2 B	2.5 B
Calcium	ug/L	5000	SW846 6010B	21100	828000 J	3400000	7820000 J	11400000 J
Calcium-DISS	ug/L	5000	SW846 6010B	20200	827000 J	3460000	8070000 J	14400000 J
Chromium	ug/L	5	SW846 6010B	5 U	21.1	25 U	31	17.7 B
Chromium-DISS	ug/L	5	SW846 6010B	5 U	6.6	25 U	10.7 B	7.6 B
Cobalt	ug/L	500	SW846 6010B	50 U	50 U	250 U	1250 U	2500 U
Cobalt-DISS	ug/L	500	SW846 6010B	50 U	50 U	250 U	1250 U	2500 U
Copper	ug/L	25	SW846 6010B	39.1	9.6 B	125 U	23 B	51.5 B
Copper-DISS	ug/L	25	SW846 6010B	24.5 B	25 U	125 U	125 U	51.9 B
Iron	ug/L	100	SW846 6010B	926	2680	10800	41200 J	103000
Iron-DISS	ug/L	100	SW846 6010B	362	1830 J	10300	40600	102000
Lead	ug/L	3	SW846 6010B	12.1	1.7 B	15 U	15 U	970
Lead-DISS	ug/L	3	SW846 6010B	7.6	3 U	15 U	15 U	647
Lithium	ug/L	500	SW846 6010B	40.4 B	9530 J E	24000	51800	67100
Lithium-DISS	ug/L	500	SW846 6010B	44.5 B	9480 J E	23300 E	51600 J	84900
Magnesium	ug/L	5000	SW846 6010B	3690 B	72800 J	314000	725000	1090000
Magnesium-DISS	ug/L	5000	SW846 6010B	3500 B	75300	319000	738000	1330000
Manganese	ug/L	150	SW846 6010B	91	697	960	1760	2130
Manganese-DISS	ug/L	150	SW846 6010B	73.3	704	991	1760	2590
Molybdenum	ug/L	400	SW846 6010B	1.2 B J	35.6 B J	30.6 B	18.8 B J	17 B
Molybdenum-DISS	ug/L	400	SW846 6010B	4.8 B	34.8 B J	13.3 B	22.6 B	400 U
Nickel	ug/L	40	SW846 6010B	9.5 B	68.3	33.2 B	33.3 B	2000 U
Nickel-DISS	ug/L	40	SW846 6010B	2.6 B	61.5	29.5 B	21.2 B	2000 U
Potassium	ug/L	5000	SW846 6010B	2300 B	183000 E	921000	1880000	1770000
Potassium-DISS	ug/L	5000	SW846 6010B	2590 B	188000 E	934000 E	1940000	2190000
Selenium	ug/L	5	SW846 6010B	3.2 B	5 U	25 U	25 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	3 B	5 U	25 U	25 U	50 U
Silver	ug/L	5	SW846 6010B	5 U	5 U	25 U	25 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	5 U	5 U	25 U	25 U	50 U

				Location A				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/7/2009**	**2/8/2009**	**2/11/2009**	**2/20/2009**	**5/8/2009**
Sodium	ug/L	5000	SW846 6010B	88400	4490000 J E	15000000	31500000	39700000
Sodium-DISS	ug/L	5000	SW846 6010B	96100	4750000	15000000	32600000	49300000
Strontium	ug/L	50	SW846 6010B	726 E	137000 J E	872000 J	2080000	3480000
Strontium-DISS	ug/L	50	SW846 6010B	711 E	144000 J E	870000 J E	2080000 J	4370000 J
Thallium	ug/L	10	SW846 6010B	19.8 B	4.9 B J	50 U	50 U	500 U
Thallium-DISS	ug/L	10	SW846 6010B	23.6 B	6.2 B J	28.5 B J	17.4 B	500 U
Tin	ug/L	1000	SW846 6010B	6.3 B	3.8 B	500 U	500 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	5.2 B	100 U	500 U	16.8 B	1000 U
Titanium	ug/L	500	SW846 6010B	4 B	50 U	250 U	250 U	190 B J
Titanium-DISS	ug/L	500	SW846 6010B	50 U	50 U	250 U	250 U	196 B J
Trivalent Chrom	ug/L	50	SW846 6010B	5 U	6.6	25 U	25 U	50 U
Zinc	ug/L	20	SW846 6010B	36.6	107	119	179 J	372 J
Zinc-DISS	ug/L	20	SW846 6010B	35.5	89.9	115 J	160 J	382 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.05 U	0.1 G U	0.1 G U	0.5 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.02 U	0.05 U	0.1 G U	0.1 G U	0.5 G U
Mercury	ug/L	0.2	SW846 7470A	0.036 B J	0.042 B J	0.027 B	0.029 B J	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.037 B J	0.08 B J	0.032 B J	0.028 B J	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	16	4.7 J	1.1 J	1.9 J	0.82 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	6	3.1 J	5 U	10 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	2000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	2 J	10 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	20 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Acetone	ug/L	20	SW846 8260B	20 U	17 J	76	40 U	15 J B
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	200 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	200 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	7.7	8	8.5 J	1.5 J
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	28	2.2 J	10 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	2.3 J	0.98 J	5 U	10 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	1.6 J	1.4 J	10 U	5 U
Naphthalene	ug/L	5	SW846 8260B	2.2 J	2.1 J	0.51 J	10 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	2 J	5 U	10 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	2 J	5 U	5 U	10 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	2.1 J	5 U	10 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	3.2 J	5 U	5 U	10 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U

				Location A				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/7/2009**	**2/8/2009**	**2/11/2009**	**2/20/2009**	**5/8/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	3.1 J	5.1	2 J	3.4 J	1.6 J
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	18	10 J	15 U	30 U	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	48 U	480 U	940 U	480 U	480 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2	19 U	38 U	19 U	19 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
2-Methylphenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2-Nitroaniline	ug/L	50	SW846 8270C	48 U	480 U	940 U	480 U	480 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
2-Picoline	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
3-Nitroaniline	ug/L	50	SW846 8270C	48 U	480 U	940 U	480 U	480 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	48 U	480 U	940 U	480 U	480 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
4-Nitroaniline	ug/L	50	SW846 8270C	48 U	480 U	940 U	480 U	480 U
4-Nitrophenol	ug/L	50	SW846 8270C	48 U	480 U	940 U	480 U	480 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	97 U	970 U	1900 U	960 U	950 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Acetophenone	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Aniline	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Aramite	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Benzidine	ug/L	200	SW846 8270C	190 U	1900 U	3800 U	1900 U	1900 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Diallate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Dibenzofuran	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.7 U	97 U	35 J	96 U	95 U
Dimethoate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U

				Location A				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/7/2009**	**2/8/2009**	**2/11/2009**	**2/20/2009**	**5/8/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Dinoseb	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Disulfoton	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Hexachloroethane	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Hexachloropropene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Isodrin	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Isophorone	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Isosafrole	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
o-Toluidine	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Parathion	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	190 U	380 U	190 U	190 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Phenanthrene	ug/L	2	SW846 8270C	2.7	19 U	38 U	19 U	19 U
Phenol	ug/L	2	SW846 8270C	1.9 U	19 U	38 U	19 U	19 U
Phorate	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Pronamide	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Pyrene	ug/L	2	SW846 8270C	0.54 J B	19 U	38 U	19 U	19 U
Pyridine	ug/L	10	SW846 8270C	86	2600	1800	860	490
Safrole	ug/L	10	SW846 8270C	9.7 U	97 U	190 U	96 U	95 U
Thionazin	ug/L	10	SW846 8270C	0.97 U	97 U	190 U	96 U	95 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	NA	NA	0.48 U	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.048 U	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.096 U	NA	NA	0.095 U	0.095 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	NA	NA	1.9 U	1.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.41 U

				Location A				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/7/2009**	**2/8/2009**	**2/11/2009**	**2/20/2009**	**5/8/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.97 U	NA	NA	0.98 U	0.97 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Butyl alcohol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Ethanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Methanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
n-Propanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	NA	NA	NA	NA	NA
Propylene glycol	mg/L	50	SW846 8015	NA	NA	NA	NA	NA
Acids								
Acetic Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Butyric Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Propionic Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Volatile Acids	mg/L	10		NA	NA	NA	NA	NA

				Location B				
				Washington, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**1/26/2009**	**1/29/2009**	**2/2/2009**	**2/10/2009**	**4/29/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	107	106	185
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	9.3 J	32 J	82.4 J	107 J	259
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	132	1950	149	33.6
Bromide	mg/L	1	MCAWW 300.0A	107	120	544	849	1380 J
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	1730	1340	6120	4340	36600
Chloride	mg/L	1	MCAWW 300.0A	10700 J	10500 J	50000	78600 J	122000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	153 J	204 J	50 J	36.9 J	15.4 J
Fluoride	mg/L	1	MCAWW 300.0A	0.25 G U	0.65	1.2 G U	1.2 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	9500	4700	26400	43500	85000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.25 G U	0.25 G U	1.2 G U	1.2 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.15	0.27 J	0.15 J	0.089 B J	NA
Nitrite as N	mg/L	0.05	MCAWW 300.0A	5 G U	5 G U	12.5 G U	77.4	2.5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	19.4	5.7	4.8 U	30.8	14.7
Specific Conductance	umhos/cm	--	MCAWW 120.1	34600 J	48800 J	175000 J	284000 J	440000 J
Sulfate	mg/L	1	MCAWW 300.0A	198 J	222 J	106	60.1 J	83.8 J
TOC	mg/L	1	SM20 5310B	168	207	50.6	34.2	12.6
Total Alkalinity	mg/L	5	SM18 2320 B	121 J	226 J	97.6 J	53.2 J	43.1 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	27800	22400	87800	112000	194000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	23	51	71.7	112	136
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.36	0.19	0.45	0.088 B	0.1 U
Total Suspended Solids	mg/L	4	SM20 2540D	790	81	35.6	17	150
Turbidity	NTU	--	MCAWW 180.1	338	130	20.9	25.6	116
Cyanide, Total	ug/L	10	SW846 9012A	5.4 B	10 U	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	2.4 B	3 U	3 U	2.4 B	3.2
pH	No Units	--	SW846 9040	7.6	7.8	6.6	5.5	6.1
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.082	0.064	0.01 U	0.015	0.039 J
Sulfite	mg/L	1	SM4500-SO3 B	25.0 U	5.20	10.0	8.40	30.8
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.500 U	0.0691	0.131	0.0857	0.138
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	481	328	166 B	1000 U	811 B J
Aluminum-DISS	ug/L	200	SW846 6010B	200 U	39.9 B	1000 U	1000 U	536 B
Antimony	ug/L	10	SW846 6010B	2.4 B	37.8	18 B	9.2 B	100 U
Antimony-DISS	ug/L	10	SW846 6010B	3 B	37.4	12.2 B	12.6 B	100 U
Arsenic	ug/L	10	SW846 6010B	9.1 B	13.5	50 U	12.6 B	114
Arsenic-DISS	ug/L	10	SW846 6010B	10 U	11.3	50 U	10 B	151
Barium	ug/L	200	SW846 6010B	9810	3570	21400 J	74200 J	133000
Barium-DISS	ug/L	200	SW846 6010B	11700	4680 J	37300	58200 J E	179000 J
Beryllium	ug/L	4	SW846 6010B	4 U	4 U	20 U	2.2 B	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	4 U	4 U	20 U	20 U	40 U
Boron	ug/L	2000	SW846 6010B	2140 J	9260 J	14300 J	16200 J	13500 J
Boron-DISS	ug/L	2000	SW846 6010B	2400 J	9320 J	14800 J	16100 J	18600
Cadmium	ug/L	5	SW846 6010B	10.5	5 U	25 U	1.4 B	7.7 B
Cadmium-DISS	ug/L	5	SW846 6010B	3.9 B	5 U	25 U	25 U	8.6 B
Calcium	ug/L	5000	SW846 6010B	2990000	1370000 J	7630000 J	12500000 J	18300000 J
Calcium-DISS	ug/L	5000	SW846 6010B	3260000 J	1390000 J	8040000 J	12800000 J E	23000000
Chromium	ug/L	5	SW846 6010B	4.8 B	11.1	7.5 B	8.4 B	20.9 B
Chromium-DISS	ug/L	5	SW846 6010B	1.5 B	8.6	7.2 B	25 U	17.5 B
Cobalt	ug/L	500	SW846 6010B	50 U	50 U	250 U	250 U	2500 U
Cobalt-DISS	ug/L	500	SW846 6010B	50 U	50 U	250 U	250 U	2500 U
Copper	ug/L	25	SW846 6010B	21 B	25 U	125 U	125 U	27.2 B
Copper-DISS	ug/L	25	SW846 6010B	25 U	25 U	125 U	125 U	250 U
Iron	ug/L	100	SW846 6010B	11600	6030	20400 J	54200	69700
Iron-DISS	ug/L	100	SW846 6010B	441 E	4440	18900 J	39800	74300
Lead	ug/L	3	SW846 6010B	111	3.8	15 U	15 U	68 B
Lead-DISS	ug/L	3	SW846 6010B	6.9	3 U	15 U	15 U	150 U
Lithium	ug/L	500	SW846 6010B	14900 J E	13900 E	49100 J E	73700 J	88600
Lithium-DISS	ug/L	500	SW846 6010B	16400 J E	14400 J E	49300 J	71400 J E	115000
Magnesium	ug/L	5000	SW846 6010B	235000	153000	817000	1330000 J	1710000
Magnesium-DISS	ug/L	5000	SW846 6010B	266000	154000 J	843000	1310000	2160000
Manganese	ug/L	150	SW846 6010B	3640	1060	4220	7090	8830
Manganese-DISS	ug/L	150	SW846 6010B	3930	1050	4360	7000	11300
Molybdenum	ug/L	400	SW846 6010B	8.9 B J	28.8 B J	9.6 B J	6.8 B J	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	5.4 B	29.1 B	27.6 B J	10.6 B J	400 U
Nickel	ug/L	40	SW846 6010B	10.4 B	18.6 B J	11 B	7 B	2000 U
Nickel-DISS	ug/L	40	SW846 6010B	6.6 B	16.9 B	8.6 B	200 U	2000 U
Potassium	ug/L	5000	SW846 6010B	229000 E	109000 E	300000 E	415000	335000
Potassium-DISS	ug/L	5000	SW846 6010B	257000 E	110000 E	316000	451000 E	422000
Selenium	ug/L	5	SW846 6010B	5 U	5 U	25 U	25 U	44 B
Selenium-DISS	ug/L	5	SW846 6010B	5 U	5 U	25 U	25 U	64.7
Silver	ug/L	5	SW846 6010B	0.82 B	0.73 B	2.8 B	5.5 B	50 U
Silver-DISS	ug/L	5	SW846 6010B	1.6 B J	5 U	25 U	25 U	10.4 B

				Location B				
				Washington, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**1/26/2009**	**1/29/2009**	**2/2/2009**	**2/10/2009**	**4/29/2009**
Sodium	ug/L	5000	SW846 6010B	6190000	6370000	22000000 J	32500000 J	34200000
Sodium-DISS	ug/L	5000	SW846 6010B	6790000	6310000	22400000	31500000 J	44600000
Strontium	ug/L	50	SW846 6010B	439000 E	167000 E	1080000 J E	1850000 J	2520000
Strontium-DISS	ug/L	50	SW846 6010B	478000 J E	166000 J E	1190000 J	1990000 J E	3350000 J
Thallium	ug/L	10	SW846 6010B	6 B	5.4 B	50 U	50 U	500 U
Thallium-DISS	ug/L	10	SW846 6010B	7.1 B	5.5 B J	50 U	50 U	500 U
Tin	ug/L	1000	SW846 6010B	6.9 B	5.1 B	500 U	500 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	9.4 B	7.4 B	500 U	500 U	1000 U
Titanium	ug/L	500	SW846 6010B	50 U	50 U	250 U	250 U	156 B
Titanium-DISS	ug/L	500	SW846 6010B	50 U	50 U	250 U	250 U	195 B
Trivalent Chrom	ug/L	50	SW846 6010B	4.8 B	11.1	5 U	8.4	17.5 B
Zinc	ug/L	20	SW846 6010B	117 J	86.9 J	84.9 B J	66.8 B	73.8 B J
Zinc-DISS	ug/L	20	SW846 6010B	51.9 J	68.1 J	120	62.2 B	67.1 B
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.01 U	0.042	0.05 G U	0.5 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.05 G U	0.01 U	0.01 U	0.05 G U	0.25 G U
Mercury	ug/L	0.2	SW846 7470A	0.55 J	0.05 B	0.023 B	0.049 B J	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.054 B J	0.022 B	0.037 B	0.028 B J	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	16 J
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	140 J	82	110 J	74	23 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	100 J	33	120	65	19 J
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
1,4-Dioxane	ug/L	1000	SW846 8260B	30000 U	5000 U	25000 U	10000 U	10000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
2-Butanone	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	300 U	50 U	250 U	100 U	100 U
2-Hexanone	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
4-Chlorotoluene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Acetone	ug/L	20	SW846 8260B	600 U	100 U	500 U	200 U	75 J B
Acrolein	ug/L	100	SW846 8260B	3000 U	500 U	2500 U	1000 U	1000 U
Acrylonitrile	ug/L	100	SW846 8260B	3000 U	500 U	2500 U	1000 U	1000 U
Benzene	ug/L	5	SW846 8260B	150 U	240	1200	420	360
Benzyl chloride	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Bromobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Bromodichloromethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Bromoform	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Bromomethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Carbon disulfide	ug/L	5	SW846 8260B	1500	25 U	120 U	50 U	50 U
Carbon tetrachloride	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Chlorobenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Chloroethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Chloroform	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Chloromethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Dibromochloromethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Dibromomethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Ethylbenzene	ug/L	5	SW846 8260B	19 J	14 J	85 J	42 J	21 J
Isopropylbenzene	ug/L	5	SW846 8260B	150 U	3.2 J	120 U	50 U	50 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Methylene chloride	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Naphthalene	ug/L	5	SW846 8260B	24 J	18 J	120 U	50 U	50 U
n-Butylbenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
n-Propylbenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	150 U	25 U	54 J	22 J	50 U
sec-Butylbenzene	ug/L	5	SW846 8260B	84 J	25 U	68 J	50 U	50 U
Styrene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U

				Location B				
				Washington, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**1/26/2009**	**1/29/2009**	**2/2/2009**	**2/10/2009**	**4/29/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Tetrachloroethene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	81 J	340	2300	820	660
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Trichloroethene	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Vinyl acetate	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Vinyl chloride	ug/L	5	SW846 8260B	150 U	25 U	120 U	50 U	50 U
Xylenes (total)	ug/L	15	SW846 8260B	210 J B	180 B	1100	520 B	300
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
1-Naphthylamine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	190 U	7.7 J	9.4 U	9.5 U	8.3 J
2,4-Dinitrophenol	ug/L	40	SW846 8270C	940 U	480 U	47 U	48 U	48 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	120	94	1.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	190 U	7.7 J	9.8	9.5 U	11
2-Naphthylamine	ug/L	10	SW846 8270C	41 J	95 U	9.4 U	9.5 U	9.5 U
2-Nitroaniline	ug/L	50	SW846 8270C	940 U	480 U	47 U	48 U	48 U
2-Nitrophenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
2-Picoline	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	3.5 J	8.7 J	14	11	14
3-Nitroaniline	ug/L	50	SW846 8270C	940 U	480 U	47 U	48 U	48 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	940 U	480 U	47 U	48 U	48 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
4-Chloroaniline	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
4-Nitroaniline	ug/L	50	SW846 8270C	940 U	480 U	47 U	48 U	48 U
4-Nitrophenol	ug/L	50	SW846 8270C	940 U	480 U	47 U	48 U	48 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	1900 U	950 U	94 U	95 U	95 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Acenaphthene	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	38 U	19 U	0.75 J	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Aniline	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Aramite	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Benzidine	ug/L	200	SW846 8270C	3800 U	1900 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	38 U	19 U	1.4 J B	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	38 U	19 U	1 J	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	38 U	19 U	1.1 J B	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	38 U	19 U	1.1 J	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	38 U	19 U	1 J B	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	190 U	95 U	1.8 J	1.8 J	9.8
Butyl benzyl phthalate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Chlorobenzilate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Chrysene	ug/L	2	SW846 8270C	38 U	19 U	1.2 J B	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	38 U	19 U	3.2	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Diethyl phthalate	ug/L	10	SW846 8270C	190 U	95 U	1.5 J	1.6 J B	9.5 U
Dimethoate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Dimethyl phthalate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	190 U	95 U	1.8 J	9.5 U	9.5 U

				Location B				
				Washington, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**1/26/2009**	**1/29/2009**	**2/2/2009**	**2/10/2009**	**4/29/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	190 U	95 U	4.4 J	9.5 U	9.5 U
Dinoseb	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Diphenylamine	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Fluoranthene	ug/L	2	SW846 8270C	38 U	19 U	1.3 J B	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	11 J	8.4 J	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	38 U	19 U	0.99 J	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Hexachloroethane	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Hexachloropropene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	38 U	19 U	3.1	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Isophorone	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Isosafrole	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Nitrobenzene	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	38 U	19 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
o-Toluidine	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Parathion	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Pentachlorobenzene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Pentachloroethane	ug/L	20	SW846 8270C	380 U	190 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Pentachlorophenol	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Phenanthrene	ug/L	2	SW846 8270C	22 J	16 J	1.8 J	1.9 U	0.3 J
Phenol	ug/L	2	SW846 8270C	38 U	11 J	1.9 U	1.9 U	1.9 U
Phorate	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Pronamide	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Pyrene	ug/L	2	SW846 8270C	38 U	19 U	1.1 J B	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	310	350	250	77	260
Safrole	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	9.5 U	9.5 U
Thionazin	ug/L	10	SW846 8270C	190 U	95 U	9.4 U	0.98 U	0.98 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	NA	NA	0.5 U	0.49 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.05 U	0.049 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	NA	NA	0.099 U	0.098 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	NA	NA	2 U	2 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.39 U

				Location B				
				Washington, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**1/26/2009**	**1/29/2009**	**2/2/2009**	**2/10/2009**	**4/29/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.96 U	NA	NA	0.98 U	0.98 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	4 U	1 U	1 U	1 U	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	4 U	1 U	1 U	1 U	10 UJ
Ethanol	mg/L	10	SW846 8015	4 U	1 U	1 U	1 U	10 UJ
Methanol	mg/L	10	SW846 8015	88	8	3.2	4.7	10 UJ
n-Propanol	mg/L	10	SW846 8015	4 U	1 U	1 U	1 U	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	20.1	20.6	20.8	11	100 UJ
Propylene glycol	mg/L	50	SW846 8015	10 U	10 U	10 U	10 U	100 UJ
Acids								
Acetic Acid	mg/L	10	SW846 8015	NA	NA	NA	21.5	10 UJ
Butyric Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	10 UJ
Propionic Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	10 UJ
Volatile Acids	mg/L	10		NA	NA	NA	NA	6300

				Location C				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/11/2009**	**2/17/2009**	**2/20/2009**	**2/27/2009**	**5/15/09**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	5 U	220
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 NR U	0.01 U	0.01 U	0.01 NR U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	88.7 J	83.8 J	98.9 J	149 J	182
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	4.9	132	63.7	39.8	242
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	151	331	637	1080
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	578	2980	5500	4560	16200
Chloride	mg/L	1	MCAWW 300.0A	39.7 J	15100 J	39800	78100 J	107000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	121 J	109	46.9	22.8 J	117 J
Fluoride	mg/L	1	MCAWW 300.0A	0.036 B	0.5 G U	5 G U	1.2 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	36	4800	15000	33000	77000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.86	0.98	5 G U	1.2 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	1.1 J	0.88 J	0.8 J	0.5 J	0.029 B
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.05 U	3.1 B	7.1	20.3	2.5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	NA	13.9	5 U	4.7 U	5 U
Specific Conductance	umhos/cm	--	MCAWW 120.1	1190 J	64500 J	192000 J	239000 J	384000 J
Sulfate	mg/L	1	MCAWW 300.0A	269 J	71.5 J	36.4 B J	22.3 B J	50 G U
TOC	mg/L	1	SM20 5310B	167	82.5 J	32.9 J	14.4 J	117
Total Alkalinity	mg/L	5	SM18 2320 B	233 J	249 J	147 J	71.4 J	41.4 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	719	24700	61900	110000	267000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	146	132	120	136	134
Total phosphorus	mg/L	0.1	MCAWW 365.2	16	8.5	1.3	0.55	0.1 U
Total Suspended Solids	mg/L	4	SM20 2540D	110	522	102	475	446
Turbidity	NTU	--	MCAWW 180.1	9.1	164	14	72	277
Cyanide, Total	ug/L	10	SW846 9012A	10 U	38.5	8.8 B J	10 U	42.6
Total Sulfide	mg/L	3	SW846 9030B/9034	8	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	8.9	7.2	6.7	6.1	5.9
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.0079 B J	0.0083 B	0.012	0.01 U	0.01 U
Sulfite	mg/L	1	SM4500-SO3 B	NA	NA	NA	NA	NA
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	NA	NA	NA	NA	NA
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	217 J	705 B J	206 B J	235 B J	1040 B J
Aluminum-DISS	ug/L	200	SW846 6010B	68.7 B J	244 B J	176 B J	149 B J	910 B J
Antimony	ug/L	10	SW846 6010B	10 U	8.9 B	50 U	50 U	200 U
Antimony-DISS	ug/L	10	SW846 6010B	10 U	50 U	50 U	50 U	200 U
Arsenic	ug/L	10	SW846 6010B	10 U	15.8 B	13.8 B	12 B	91.2 B
Arsenic-DISS	ug/L	10	SW846 6010B	10 U	50 U	17.9 B	50 U	117 B
Barium	ug/L	200	SW846 6010B	63.1 B J	102000 J	787000	2160000 J	4220000
Barium-DISS	ug/L	200	SW846 6010B	57.2 B	15000	755000 J	2130000 J	4370000 J
Beryllium	ug/L	4	SW846 6010B	0.21 B J	20 U	20 U	20 U	80 U
Beryllium-DISS	ug/L	4	SW846 6010B	0.32 B J	20 U	20 U	20 U	80 U
Boron	ug/L	2000	SW846 6010B	2430 J	13100 J	18800	19900	25300 J
Boron-DISS	ug/L	2000	SW846 6010B	3460 J	14000 J	18500 J	19900	25600
Cadmium	ug/L	5	SW846 6010B	5 U	25 U	25 U	2.2 B	2.6 B
Cadmium-DISS	ug/L	5	SW846 6010B	5 U	25 U	25 U	25 U	100 U
Calcium	ug/L	5000	SW846 6010B	14300	1220000	4390000 J	9520000	18600000
Calcium-DISS	ug/L	5000	SW846 6010B	16400 J	1330000 J	4340000 J	9500000 J	19400000
Chromium	ug/L	5	SW846 6010B	1.2 B	49.1	20.8 B	21.8 B	100 U
Chromium-DISS	ug/L	5	SW846 6010B	1.1 B	9.4 B	14.6 B	25 U	100 U
Cobalt	ug/L	500	SW846 6010B	50 U	250 U	500 U	1250 U	2500 U
Cobalt-DISS	ug/L	500	SW846 6010B	50 U	250 U	500 U	1250 U	2500 U
Copper	ug/L	25	SW846 6010B	7.7 B	28.4 B	125 U	125 U	500 U
Copper-DISS	ug/L	25	SW846 6010B	10.5 B	125 U	125 U	125 U	500 U
Iron	ug/L	100	SW846 6010B	439 J	29000 J	21200 J	33200	93000
Iron-DISS	ug/L	100	SW846 6010B	250	10500	18400	13800	59100
Lead	ug/L	3	SW846 6010B	3.3	11.8 B	15 U	15 U	150 U
Lead-DISS	ug/L	3	SW846 6010B	205	15 U	15 U	15 U	150 U
Lithium	ug/L	500	SW846 6010B	7.7 B J	16400 J E	43700 E	71800 E	122000
Lithium-DISS	ug/L	500	SW846 6010B	9.2 B J	18000 J	41900 J	71200 J E	125000
Magnesium	ug/L	5000	SW846 6010B	2830 B	122000	432000	872000	1790000
Magnesium-DISS	ug/L	5000	SW846 6010B	3200 B	134000	426000	875000	1830000
Manganese	ug/L	150	SW846 6010B	58.7	1040	2440	4430	9770
Manganese-DISS	ug/L	150	SW846 6010B	64.8	1020	2390	4420	9900
Molybdenum	ug/L	400	SW846 6010B	6.6 B	37.2 B	31.7 B J	18.8 B	800 U
Molybdenum-DISS	ug/L	400	SW846 6010B	6.1 B	17.8 B	45.1 B	20.7 B	800 U
Nickel	ug/L	40	SW846 6010B	1.3 B	10.9 B	200 U	200 U	2000 U
Nickel-DISS	ug/L	40	SW846 6010B	1 B	200 U	200 U	200 U	2000 U
Potassium	ug/L	5000	SW846 6010B	42600	151000	349000 E	533000 E	548000
Potassium-DISS	ug/L	5000	SW846 6010B	45100	171000	343000	533000 E	564000
Selenium	ug/L	5	SW846 6010B	5 U	25 U	25 U	25 U	100 U
Selenium-DISS	ug/L	5	SW846 6010B	5 U	25 U	25 U	25 U	100 U
Silver	ug/L	5	SW846 6010B	5 U	25 U	25 U	25 U	100 U
Silver-DISS	ug/L	5	SW846 6010B	5 U	25 U	25 U	25 U	100 U

				Location C				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/11/2009	2/17/2009	2/20/2009	2/27/2009	5/15/09
Sodium	ug/L	5000	SW846 6010B	70700	7690000	18200000	29100000	52800000
Sodium-DISS	ug/L	5000	SW846 6010B	86100	8430000	18000000	29200000	54100000
Strontium	ug/L	50	SW846 6010B	103 J	244000 J E	893000 E	1820000 J E	3620000 J
Strontium-DISS	ug/L	50	SW846 6010B	168 J E	236000 J	891000 J	1800000 J E	3710000 J
Thallium	ug/L	10	SW846 6010B	10 U	50 U	19.4 B	15.9 B	500 U
Thallium-DISS	ug/L	10	SW846 6010B	4.2 B	50 U	20.7 B	18 B	162 B
Tin	ug/L	1000	SW846 6010B	3.9 B	500 U	500 U	17.8 B	2000 U
Tin-DISS	ug/L	1000	SW846 6010B	3.7 B	500 U	21.8 B	500 U	2000 U
Titanium	ug/L	500	SW846 6010B	50 U	250 U	250 U	250 U	242 B
Titanium-DISS	ug/L	500	SW846 6010B	50 U	250 U	250 U	250 U	264 B
Trivalent Chrom	ug/L	50	SW846 6010B	1.2 B	9.4 B	14.6 B	25 U	100 U
Zinc	ug/L	20	SW846 6010B	11.7 B J	504 J	83.6 B J	116	178 B
Zinc-DISS	ug/L	20	SW846 6010B	78.6 J	92.4 B J	67.1 B J	100	196 B
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.1 G U	0.1 G U	0.5 U	1 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.1 G U	0.1 G U	0.07 B	0.1 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.052 B J	0.04 B J	0.054 B J	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.025 B J	0.056 B J	0.038 B J	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	100000 U	20000 U	3000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA ND U	NA ND U
2,2-Dichloropropane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	1000 U	200 U	30 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	2000 U	400 U	60 U	8.1 J	11 J
Acrolein	ug/L	100	SW846 8260B	10000 U	2000 U	300 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	10000 U	2000 U	300 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	500 U	100 U	8 J	3 J	5 U
Benzyl chloride	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	23000	1400	260	19	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U

				Location C				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/11/2009	2/17/2009	2/20/2009	2/27/2009	5/15/09
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	500 U	100 U	15 U	1.6 J	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	500 U	100 U	15 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	1500 U	300 U	45 U	15 U	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	#N/A #N/A	NA ND U
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	48 U	48 U	49 U	47 U	48 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.3 J	2.1	0.34 J	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	49 U	47 U	48 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
2-Picoline	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.6 U	0.28 J	0.21 J	9.4 U	9.5 U
3-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	49 U	47 U	48 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	48 U	48 U	49 U	47 U	48 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
4-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	49 U	47 U	48 U
4-Nitrophenol	ug/L	50	SW846 8270C	48 U	48 U	49 U	47 U	48 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	96 U	97 U	98 U	94 U	95 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.6 U	2.9 J	9.8 U	9.4 U	9.5 U
Aniline	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Aramite	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Benzidine	ug/L	200	SW846 8270C	190 U	190 U	200 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.4 J	9.7 U	9.8 U	9.4 U	9.5 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.6 U	9.7 U	0.73 J	9.4 U	9.5 U
Dimethoate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.6 U	0.68 J	9.8 U	9.4 U	9.5 U

				Location C				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/11/2009	2/17/2009	2/20/2009	2/27/2009	5/15/09
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.6 U	9.7 U	4.1 J	9.4 U	9.5 U
Dinoseb	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Hexachloroethane	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Hexachloropropene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Isophorone	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Isosafrole	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
o-Toluidine	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Parathion	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	19 U	20 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Phenanthrene	ug/L	2	SW846 8270C	0.28 J	0.39 J	2 U	1.9 U	1.9 U
Phenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.6 J
Phorate	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Pronamide	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	0.91 J	6.4 J	4.1 J	3 J	9.5 U
Safrole	ug/L	10	SW846 8270C	9.6 U	9.7 U	9.8 U	9.4 U	9.5 U
Thionazin	ug/L	10	SW846 8270C	0.96 U	9.7 U	9.8 U	9.4 U	9.5 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Aldrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
beta-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.49 U	NA	NA	0.48 U	0.97 U
delta-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Dieldrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Endrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Heptachlor	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.24
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.097 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.098 U	NA	NA	0.096 U	0.19 U
Toxaphene	ug/L	2	SW846 8081A	2 U	NA	NA	0.096 U	3.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.39 U

				Location C				
				Lewis County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/11/2009**	**2/17/2009**	**2/20/2009**	**2/27/2009**	**5/15/09**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.96 U	NA	NA	0.95 U	0.97 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Butyl alcohol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Ethanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Methanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
n-Propanol	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	NA	NA	NA	NA	NA
Propylene glycol	mg/L	50	SW846 8015	NA	NA	NA	NA	NA
Acids								
Acetic Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Butyric Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Propionic Acid	mg/L	10	SW846 8015	NA	NA	NA	NA	NA
Volatile Acids	mg/L	10		NA	NA	NA	NA	NA

				Location D			
				Greene County, PA			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/12/2009**	**2/13/2009**	**2/17/2009**	**5/13/09**
Conventional Analyses							
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	162
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	1.8 J	5.4 J	34.1 J	96
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	438	656	721	1080
Bromide	mg/L	1	MCAWW 300.0A	1	35.5	242	766
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	3450	1290	6970	8590
Chloride	mg/L	1	MCAWW 300.0A	234	4900 J	26800 J	78300
Dissolved Organic Carbon	mg/L	--	SM20 5310B	857 J	435 J	161	305 J
Fluoride	mg/L	1	MCAWW 300.0A	0.15	0.75	0.5 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	230	1500	8400	40000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.46	0.5 G U	0.5 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.73 J	0.61 J	0.52 J	0.1 U
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.32	4.7	6	2.5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	NA	4.8 U	350	21.3
Specific Conductance	umhos/cm	--	MCAWW 120.1	1970 J	19200 J	122000 J	249000 J
Sulfate	mg/L	1	MCAWW 300.0A	374 J	348 J	25.9 J	50 G U
TOC	mg/L	1	SM20 5310B	741	342	161 J	302
Total Alkalinity	mg/L	5	SM18 2320 B	120 J	577 J	266 J	75.2 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	1410	9020	40700	155000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	25.8	21.8	46.5	92.8
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.054 B	0.42	0.91	0.1 U
Total Suspended Solids	mg/L	4	SM20 2540D	16	23.2	3220	153
Turbidity	NTU	--	MCAWW 180.1	385	31.4	786	174
Cyanide, Total	ug/L	10	SW846 9012A	10 U	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	8	1.6 B	2.4 B	3.2
pH	No Units	--	SW846 9040	7.1	7.7	6.6	6.2
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.065 J	0.01 U	0.028	0.0091 B
Sulfite	mg/L	1	SM4500-SO3 B	NA	10.8	9.60	9.60
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	NA	3.38	0.210	4.54
Total and Dissolved Metals							
Aluminum	ug/L	200	SW846 6010B	298 J	887 J	47200 J	358 B
Aluminum-DISS	ug/L	200	SW846 6010B	67.6 B J	681 J	670 B J	195 B
Antimony	ug/L	10	SW846 6010B	10 U	9.3 B	33.8 B	100 U
Antimony-DISS	ug/L	10	SW846 6010B	10 U	9.8 B	13.6 B	100 U
Arsenic	ug/L	10	SW846 6010B	10 U	17.5	92.9	54 B
Arsenic-DISS	ug/L	10	SW846 6010B	10 U	16	17 B	50.7 B
Barium	ug/L	200	SW846 6010B	111 B	7620	165000	1440000
Barium-DISS	ug/L	200	SW846 6010B	75.4 B	4170	226000 J	1500000 J
Beryllium	ug/L	4	SW846 6010B	4 U	4 U	20 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	4 U	4 U	20 U	40 U
Boron	ug/L	2000	SW846 6010B	109 B E	5420	12200	13000 J
Boron-DISS	ug/L	2000	SW846 6010B	103 B J	5750 J	13000 J	14000 J
Cadmium	ug/L	5	SW846 6010B	5 U	5 U	7.4 B	2.5 B
Cadmium-DISS	ug/L	5	SW846 6010B	5 U	5 U	25 U	1.4 B
Calcium	ug/L	5000	SW846 6010B	52700	297000	2260000 J	8500000 J
Calcium-DISS	ug/L	5000	SW846 6010B	56400	300000	2420000 J	8930000 J
Chromium	ug/L	5	SW846 6010B	4.3 B	32.6	130	50 U
Chromium-DISS	ug/L	5	SW846 6010B	2.6 B	20	15 B	6.8 B
Cobalt	ug/L	500	SW846 6010B	1.1 B	50 U	250 U	1000 U
Cobalt-DISS	ug/L	500	SW846 6010B	0.7 B	50 U	250 U	1000 U
Copper	ug/L	25	SW846 6010B	28.6	22.5 B	2280	250 U
Copper-DISS	ug/L	25	SW846 6010B	25 U	25 U	125 U	250 U
Iron	ug/L	100	SW846 6010B	1720	14700	140000 J	87800
Iron-DISS	ug/L	100	SW846 6010B	810	10700	28400	78700
Lead	ug/L	3	SW846 6010B	4.7	3	349	45.6 B
Lead-DISS	ug/L	3	SW846 6010B	2.6 B	3 U	15 U	60 U
Lithium	ug/L	500	SW846 6010B	17.5 B	4350	21400	44500
Lithium-DISS	ug/L	500	SW846 6010B	28.4 B	4620	22700 J E	48000
Magnesium	ug/L	5000	SW846 6010B	16700	40800	291000	933000
Magnesium-DISS	ug/L	5000	SW846 6010B	18000	42100	296000	1000000
Manganese	ug/L	150	SW846 6010B	146	1150	3290	4720
Manganese-DISS	ug/L	150	SW846 6010B	149	1120	2540	5040
Molybdenum	ug/L	400	SW846 6010B	40 U	10.5 B	50.5 B J	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	40 U	4.2 B	12 B	400 U
Nickel	ug/L	40	SW846 6010B	6.2 B	17.6 B	187 B	800 U
Nickel-DISS	ug/L	40	SW846 6010B	2.1 B	4.1 B	13.3 B	800 U
Potassium	ug/L	5000	SW846 6010B	3280 B	38000	144000	191000
Potassium-DISS	ug/L	5000	SW846 6010B	3540 B	38200	146000	202000
Selenium	ug/L	5	SW846 6010B	5 U	4.3 B	25 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	5 U	5 U	25 U	50 U
Silver	ug/L	5	SW846 6010B	5 U	5 U	25 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	5 U	5 U	25 U	50 U

				Location D			
				Greene County, PA			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/12/2009**	**2/13/2009**	**2/17/2009**	**5/13/09**
Sodium	ug/L	5000	SW846 6010B	321000	2860000	12900000	26900000
Sodium-DISS	ug/L	5000	SW846 6010B	345000	2950000	14100000	28700000
Strontium	ug/L	50	SW846 6010B	789 J E	24100 J	345000	1220000
Strontium-DISS	ug/L	50	SW846 6010B	911 J	24200 J	378000 J E	1300000 J
Thallium	ug/L	10	SW846 6010B	10 U	10 U	50 U	200 U
Thallium-DISS	ug/L	10	SW846 6010B	10 U	10 U	50 U	200 U
Tin	ug/L	1000	SW846 6010B	6.7 B	7 B	25.7 B	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	5.5 B	6.3 B	500 U	1000 U
Titanium	ug/L	500	SW846 6010B	3.2 B	15.1 B	195 B	130 B J
Titanium-DISS	ug/L	500	SW846 6010B	50 U	9.5 B	250 U	124 B J
Trivalent Chrom	ug/L	50	SW846 6010B	4.3 B	32.6	15 B	50 U
Zinc	ug/L	20	SW846 6010B	43.6	248	2930 J	29.3 B J
Zinc-DISS	ug/L	20	SW846 6010B	36 J	108 J	283 J	130 B J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.1 G U	0.1 G U	0.1 G U	0.5 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.1 G U	0.1 G U	0.1 G U	0.5 G U
Mercury	ug/L	0.2	SW846 7470A	0.025 B	0.05 B J	0.24 J	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.056 B J	0.053 B J	0.064 B J	0.068 B J
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	15 J	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	400000 U	50000 U	20000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
2-Butanone	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	4000 U	500 U	200 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Acetone	ug/L	20	SW846 8260B	8000 U	1000 U	140 J	20
Acrolein	ug/L	100	SW846 8260B	40000 U	5000 U	2000 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	40000 U	5000 U	2000 U	100 U
Benzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Bromoform	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Bromomethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	54000	7300	400	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Chloroethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Chloroform	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Chloromethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Naphthalene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Styrene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U

				Location D			
				Greene County, PA			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/12/2009	2/13/2009	2/17/2009	5/13/09
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	2000 U	250 U	100 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	6000 U	750 U	300 U	15 U
Semi-Volatile Organics							
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
1-Naphthylamine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	56 U	49 U	48 U	47 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	7.5	3.7	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2-Naphthylamine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2-Nitroaniline	ug/L	50	SW846 8270C	56 U	49 U	48 U	47 U
2-Nitrophenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
2-Picoline	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	11 U	0.35 J	9.7 U	1.1 J
3-Nitroaniline	ug/L	50	SW846 8270C	56 U	49 U	48 U	47 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	56 U	49 U	48 U	47 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
4-Chloroaniline	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
4-Nitroaniline	ug/L	50	SW846 8270C	56 U	49 U	48 U	47 U
4-Nitrophenol	ug/L	50	SW846 8270C	56 U	49 U	48 U	47 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	110 U	98 U	97 U	94 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.5
Acenaphthene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	0.97 J	5 J	9.7 U	2.1 J
Aniline	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Aramite	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Benzidine	ug/L	200	SW846 8270C	220 U	200 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	11 U	3.9 J	30	9.4 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	11 U	9.8 U	5.6 J	9.4 U
Chlorobenzilate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Chrysene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Diethyl phthalate	ug/L	10	SW846 8270C	11 U	0.84 J	9.7 U	9.4 U
Dimethoate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Dimethyl phthalate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	11 U	9.8 U	0.53 J	5.4 J

				Location D			
				Greene County, PA			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/12/2009	2/13/2009	2/17/2009	5/13/09
Di-n-octyl phthalate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Dinoseb	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Diphenylamine	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Fluoranthene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	2.2 U	0.31 J	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Hexachloroethane	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Hexachloropropene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Isophorone	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Isosafrole	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	3.2 J
Nitrobenzene	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
o-Toluidine	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Parathion	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Pentachlorobenzene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Pentachloroethane	ug/L	20	SW846 8270C	22 U	20 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Pentachlorophenol	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Phenanthrene	ug/L	2	SW846 8270C	1.1 J	2 U	0.64 J	1.9 U
Phenol	ug/L	2	SW846 8270C	2.2 U	2 U	1.9 U	2.4
Phorate	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Pronamide	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Pyrene	ug/L	2	SW846 8270C	0.19 J	2 U	0.19 J	1.9 U
Pyridine	ug/L	10	SW846 8270C	17	5.9 J	3.7 J	9.4 U
Safrole	ug/L	10	SW846 8270C	11 U	9.8 U	9.7 U	9.4 U
Thionazin	ug/L	10	SW846 8270C	0.96 U	9.8 U	9.7 U	0.97 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA
Organochlorine Pesticides							
4,4'-DDD	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.11	NA	NA	0.049 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Aldrin	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
beta-BHC	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.5 U	NA	NA	0.49 U
delta-BHC	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Dieldrin	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.0093 J PG	NA	NA	0.049 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.067 PG	NA	NA	0.049 U
Endrin	ug/L	0.05	SW846 8081A	0.018 J PG	NA	NA	0.049 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Heptachlor	ug/L	0.05	SW846 8081A	0.053 PG	NA	NA	0.049 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.049 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.1 U	NA	NA	0.098 U
Toxaphene	ug/L	2	SW846 8081A	2 U	NA	NA	2 U
PCBs							
Aroclor 1016	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.39 U

				Location D			
				Greene County, PA			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/12/2009**	**2/13/2009**	**2/17/2009**	**5/13/09**
Organophosphorus Pesticides							
Ethyl parathion	ug/L	0.4	SW846 8141A	0.96 U	NA	NA	0.97 U
Alcohols							
2-Propanol	mg/L	10	SW846 8015	420	200	170	63 J
Butyl alcohol	mg/L	10	SW846 8015	10 U	10 U	20 U	47 J
Ethanol	mg/L	10	SW846 8015	10 U	10 U	20 U	28 J
Methanol	mg/L	10	SW846 8015	26	39	110	410 J
n-Propanol	mg/L	10	SW846 8015	10 U	10 U	20 U	10 YJ
Glycols							
Ethylene Glycol	mg/L	50	SW846 8015	50 U	50 U	52	100 UJ
Propylene glycol	mg/L	50	SW846 8015	260	160	160	100 UJ
Acids							
Acetic Acid	mg/L	10	SW846 8015	NA	NA	NA	6.3 J
Butyric Acid	mg/L	10	SW846 8015	NA	NA	NA	1.6 UJ
Propionic Acid	mg/L	10	SW846 8015	NA	NA	NA	1.7 UJ
Volatile Acids	mg/L	10		NA	NA	NA	NA

				Location E				
				Greene County				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/1/2009**	**4/3/2009**	**4/7/2009**	**4/17/2009**	**4/17/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	40.8	345
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.027	0.01 NR U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	15.6 J	36.3 J	70.3 J	NA	214 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	788	158	106	32.4	26
Bromide	mg/L	1	MCAWW 300.0A	32.8	172	536	880	1430
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	996	1330	17700	4670	8570
Chloride	mg/L	1	MCAWW 300.0A	3560	16900	48900	76800	121000 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	663 J	167 J	59.4 J	7.5	57.6
Fluoride	mg/L	1	MCAWW 300.0A	3.9	1.2	0.045 B	2.5 U	5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	1060	4700	20000	39200	106000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.31 B	1.3	1.5 B J	2.9	15.9
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	1.1 J	0.38 J	0.38 J	0.91 J	0.085 B
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.14 B	1.2 G U	2.5 G U	2.5 G U	5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	6.6 U	5 U	5.1	4.9 U	6.1
Specific Conductance	umhos/cm	--	MCAWW 120.1	4980 J	68400 J	183000 J	256000 J	468000
Sulfate	mg/L	1	MCAWW 300.0A	50.3	10.7 B J	40.2 B J	39.8 B J	42.4 B J
TOC	mg/L	1	SM20 5310B	226	108	46.2	5.9	207
Total Alkalinity	mg/L	5	SM18 2320 B	308 J	278 J	135 J	87.9 J	40.3 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	5910	28900	55100	124000	199000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	7.8	42.5	86.1	95.5	146
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.14	0.11	0.097 B	2.5 G U	0.2 G U
Total Suspended Solids	mg/L	4	SM20 2540D	1040	7	47	1100	237
Turbidity	NTU	--	MCAWW 180.1	715	42.6	32.5	74.8	159
Cyanide, Total	ug/L	10	SW846 9012A	69	35.5	10 U	10 U	1.9 B J
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	7	6.9	6.5	6	5.9
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.14 J	0.057 J	0.0076 B	0.011	0.0089 B
Sulfite	mg/L	1	SM4500-SO3 B	10.4	36.8	18.8	18.8	18.8
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.05 U	0.0621	0.258	0.05 U	0.05 U
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	166 B	176 B	571 B	539 B J	1020 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	2000 U	230 B	467 B J	285 B J
Antimony	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	35.4 B	50.8 B	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	27.4 B	54.4 B	81.6 B	100 U
Barium	ug/L	200	SW846 6010B	2210	26700	434000	1010000 J	2110000
Barium-DISS	ug/L	200	SW846 6010B	2560	45700	489000	1000000	2640000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	414 B J	8360 J	14400 J	16800	18600
Boron-DISS	ug/L	2000	SW846 6010B	502 B J	10900 J	16000 J	17200	23700 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	4.4 B J	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	2.1 B	50 U
Calcium	ug/L	5000	SW846 6010B	227000	1030000	4950000	9600000 J	19400000
Calcium-DISS	ug/L	5000	SW846 6010B	265000	1270000	5430000	10500000 J	23700000
Chromium	ug/L	5	SW846 6010B	50 U	50 U	50 U	14 B J	50 U
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	1000 U	1000 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	1000 U	2500 U	5000 U
Copper	ug/L	25	SW846 6010B	250 U	250 U	250 U	250 U	250 U
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	250 U	250 U	250 U
Iron	ug/L	100	SW846 6010B	1180	12400	28200	74800	144000
Iron-DISS	ug/L	100	SW846 6010B	1230	13600	29700	49800 J	155000
Lead	ug/L	3	SW846 6010B	30 U	30 U	60 U	38.2 B J	30 U
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	34.4 B	150 U	30 U
Lithium	ug/L	500	SW846 6010B	808	11800	34600	56100	112000
Lithium-DISS	ug/L	500	SW846 6010B	1000	15300	39400	58500	5610 J
Magnesium	ug/L	5000	SW846 6010B	49400 B	131000	559000	1000000	1810000
Magnesium-DISS	ug/L	5000	SW846 6010B	56100	160000	602000	1120000 J	2260000
Manganese	ug/L	150	SW846 6010B	189	782	2630	5170 J	10400
Manganese-DISS	ug/L	150	SW846 6010B	227	967	2880	5590	12800
Molybdenum	ug/L	400	SW846 6010B	400 U	19.7 B	8.7 B	400 U	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	30 B	13.8 B	400 U	400 U
Nickel	ug/L	40	SW846 6010B	400 U	10.6 B	800 U	800 U	400 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	17.9 B	800 U	2000 U	400 U
Potassium	ug/L	5000	SW846 6010B	13200 B	63800	173000	299000	592000
Potassium-DISS	ug/L	5000	SW846 6010B	16600 B	80500	194000	281000	782000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	30.1 B	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	8.9 B	50 U

				Location E				
				Greene County				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/1/2009**	**4/3/2009**	**4/7/2009**	**4/17/2009**	**4/17/2009**
Sodium	ug/L	5000	SW846 6010B	1460000	7540000	21300000	32600000	47700000
Sodium-DISS	ug/L	5000	SW846 6010B	1770000	9760000	23400000	31600000	60100000 J
Strontium	ug/L	50	SW846 6010B	23200	139000	650000	1370000 J	2870000 J
Strontium-DISS	ug/L	50	SW846 6010B	28000	178000	721000	1380000 J	3640000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	200 U	200 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	200 U	500 U	27.1 B
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	90 B	121 B	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	39.5 B	102 B	134 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	200 U	406	264	200 U	147 B J
Zinc-DISS	ug/L	20	SW846 6010B	200 U	471	295	66.1 B	173 B J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.05 G U	0.0086 B	0.5 G U	0.5 G U	0.19 B
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.1 G U	0.01 U	0.5 G U	0.5 G U	0.55
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.044 B J	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	0.72 J	5 U	1.1 J	5 U	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	0.64 J	5 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	6.4 J	7.9 J	17 J	12 J	20 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	7.8	5.8	17	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	2 J	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	0.67 J	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	0.73 J	5 U	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U

				Location E				
				Greene County				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	4/1/2009	4/3/2009	4/7/2009	4/17/2009	4/17/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5.6	3.8 J	7.7	13	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	15 U	5.1 J	3.2 J	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
1-Naphthylamine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	50 U	100 U	47 U	48 U	48 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	10 U	0.32 J	9.4 U	9.6 U	9.5 U
2-Naphthylamine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2-Nitroaniline	ug/L	50	SW846 8270C	50 U	100 U	47 U	48 U	48 U
2-Nitrophenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
2-Picoline	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	10 U	21 U	0.87 J	0.38 J	9.5 U
3-Nitroaniline	ug/L	50	SW846 8270C	50 U	100 U	47 U	48 U	48 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	50 U	100 U	47 U	48 U	48 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
4-Chloroaniline	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
4-Nitroaniline	ug/L	50	SW846 8270C	50 U	100 U	47 U	48 U	48 U
4-Nitrophenol	ug/L	50	SW846 8270C	50 U	100 U	47 U	48 U	48 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	100 U	210 U	94 U	96 U	95 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Acenaphthene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	10 U	9 J	10	6.4 J	1.3 J
Aniline	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Aramite	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Benzidine	ug/L	200	SW846 8270C	200 U	420 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	4.1 J	21 U	1.6 J	9.6 U	9.5 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Chlorobenzilate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Chrysene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Diethyl phthalate	ug/L	10	SW846 8270C	10 U	21 U	0.43 J	9.6 U	9.5 U
Dimethoate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Dimethyl phthalate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	0.36 J	21 U	0.32 J	9.6 U	9.5 U

				Location E				
				Greene County				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/1/2009**	**4/3/2009**	**4/7/2009**	**4/17/2009**	**4/17/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Dinoseb	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Diphenylamine	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Fluoranthene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	2 U	4.2 U	0.27 J	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Hexachloroethane	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Hexachloropropene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Isophorone	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Isosafrole	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Nitrobenzene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
o-Toluidine	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Parathion	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Pentachlorobenzene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Pentachloroethane	ug/L	20	SW846 8270C	20 U	42 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Pentachlorophenol	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Phenanthrene	ug/L	2	SW846 8270C	1.3 J	4.2 U	1.9 U	1.9 U	1.9 U
Phenol	ug/L	2	SW846 8270C	2 U	2.6 J	3.2	1.9 U	1 J
Phorate	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Pronamide	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Pyrene	ug/L	2	SW846 8270C	2 U	4.2 U	1.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	35	430	310	200	57
Safrole	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Thionazin	ug/L	10	SW846 8270C	10 U	21 U	9.4 U	9.6 U	9.5 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Aldrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
beta-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.062 PG
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.49 U	NA	NA	0.48 U	0.5 U
delta-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Dieldrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Endrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Heptachlor	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.043 J
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U	0.05 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.098 U	NA	NA	0.096 U	0.1 U
Toxaphene	ug/L	2	SW846 8081A	2 U	NA	NA	1.9 U	2 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.38 U	0.4 U

				Location E				
				Greene County				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/1/2009**	**4/3/2009**	**4/7/2009**	**4/17/2009**	**4/17/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	NA	NA	0.96 U	0.99 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	10 UJ	5 UJ	5 UJ	10 UJ	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	20 J	10 J	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	10 UJ	5 UJ	5 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	10 UJ	5 UJ	5 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	10 UJ	5 UJ	5 UJ	10 UJ	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	1000 UJ	100 UJ	100 UJ	50 UJ	50 UJ
Propylene glycol	mg/L	50	SW846 8015	1000 UJ	100 UJ	100 UJ	50 UJ	50 UJ
Acids								
Acetic Acid	mg/L	10	SW846 8015	100 UJ	10 UJ	50 UJ	500 UJ	500 UJ
Butyric Acid	mg/L	10	SW846 8015	100 UJ	10 UJ	50 UJ	500 UJ	500 UJ
Propionic Acid	mg/L	10	SW846 8015	100 UJ	10 UJ	50 UJ	500 UJ	500 UJ
Volatile Acids	mg/L	10		230	290	260	380	380

				Location F					
				Washington, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	3/24/2009	3/24/2009	3/27/2009	4/1/2009	4/9/2009	6/29/2009
Conventional Analyses									
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	5 U	122	388
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	20.8 J	12.9 J	60.3 J	115 J	135 J	168 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2.7	154	75.4	64.8	120	12400
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	0.2 U	376	826	1040	1600
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	13.2 J	851 J	2470 J	5170	8370	18400
Chloride	mg/L	1	MCAWW 300.0A	18.5	30.7	31500	72000	100000	138000 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	3.6 J	288 J	40.2 J	47.3 J	10.8 J	1480
Fluoride	mg/L	1	MCAWW 300.0A	NA	0.1	1.2 G U	5 G U	2 B	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	182	190	12300	34000	53000	77000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.39	0.41	1.4	5 G U	2.5 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.51	0.47	0.45 J	0.34 J	0.25 J	0.1 U
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.05 U	0.05 U	1.2 G U	5 G U	2.5 G U	2.5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.7 U	7.3	4.9 U	20.4	9.9	802
Specific Conductance	umhos/cm	--	MCAWW 120.1	575 J	476 J	124000 J	233000 J	288000 J	480000 J
Sulfate	mg/L	1	MCAWW 300.0A	139	59.2	102	60.7 B	89.3 J	32.8 B J
TOC	mg/L	1	SM20 5310B	3.8 J	205	43.5	62.8	44 J	1530
Total Alkalinity	mg/L	5	SM18 2320 B	80.9 J	126 J	157 J	54 J	60.2 J	11.5 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	215	462	61200	116000	157000	200000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	56.4	33.5	77.7	55.9	127	87.7
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.043 B	0.44	0.22	0.16	0.09 B	0.1 U
Total Suspended Solids	mg/L	4	SM20 2540D	16.8	90 B	6.8	204	209	83
Turbidity	NTU	--	MCAWW 180.1	15.7	145	14.8	45.6	254	134
Cyanide, Total	ug/L	10	SW846 9012A	10 U	10 U	10 U	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	5.6	8.8	2.4 B	3 U	3 U	4.8
pH	No Units	--	SW846 9040	6.7	7	6.4	6.4	6.2	5.9
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.01 U	0.085	0.058	0.016 J	0.01 U	0.23
Sulfite	mg/L	1	SM4500-SO3 B	9.20	61.6	5 U	13.6	18.8	8.80
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.0613	0.112	0.0641	0.05 U	0.465	0.699
Total and Dissolved Metals									
Aluminum	ug/L	200	SW846 6010B	2000 U	2000 U	510 B	950 B	1450 B	2570
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	189 B	282 B	363 B	395 B	2000 U
Antimony	ug/L	10	SW846 6010B	19 B	100 U	100 U	100 U	100 U	38.3 B
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	36.9 B	78.4 B	82.8 B	109
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	23 B	91.2 B	63.2 B	99 B
Barium	ug/L	200	SW846 6010B	74.7 B	91.4 B	19200	77100	83100	87200
Barium-DISS	ug/L	200	SW846 6010B	91.6 B J	95.2 B J	16600 J	55200	75700	104000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	65.9 B J	122 B J	12600 J	12200 J	14700 J	12700
Boron-DISS	ug/L	2000	SW846 6010B	22.2 B	39.6 B	12400	16900 J	15400 J	15900
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	2.2 B	4.7 B	3.2 B
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	3 B	3.8 B	2.8 B
Calcium	ug/L	5000	SW846 6010B	49800 B	59500	3980000	8880000	14000000	19800000 J
Calcium-DISS	ug/L	5000	SW846 6010B	63400 J	61800 J	3850000 J	12000000	14300000	24600000 J
Chromium	ug/L	5	SW846 6010B	50 U	50 U	11.4 B	39.3 B	32.8 B	15.8 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	12.1 B	11.6 B	16 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	10.5 B	1000 U	2500 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	9.5 B	1000 U	2500 U	46 B
Copper	ug/L	25	SW846 6010B	250 U	49.3 B	62.1 B	116 B	73.3 B	250 U
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	50.3 B	250 U	250 U	32.4 B
Iron	ug/L	100	SW846 6010B	882 B	2440	12200	49600	75200	68700 J
Iron-DISS	ug/L	100	SW846 6010B	1000 U	2310	10600	45700	47300	74200
Lead	ug/L	3	SW846 6010B	30 U	30 U	25.2 B	61	106 B	300 U
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	19 B	63.8	150 U	300 U
Lithium	ug/L	500	SW846 6010B	500 U	30.1 B	33900	55900	86000	105000
Lithium-DISS	ug/L	500	SW846 6010B	500 U	29.4 B	33000	78800	94500	127000
Magnesium	ug/L	5000	SW846 6010B	6700 B	7910 B	394000	881000	1380000	1830000
Magnesium-DISS	ug/L	5000	SW846 6010B	8690 B	8410 B	386000	1180000	1370000	2320000
Manganese	ug/L	150	SW846 6010B	116 B	140 B	2390	4680	7320	8990 J
Manganese-DISS	ug/L	150	SW846 6010B	136 B	128 B	2300	6120	7740	11000
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	11.5 B	30.8 B	400 U	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	11.2 B	20.2 B	400 U	400 U
Nickel	ug/L	40	SW846 6010B	400 U	25.1 B	15.3 B	26.4 B	2000 U	4000 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	9.3 B	800 U	2000 U	4000 U
Potassium	ug/L	5000	SW846 6010B	50000 U	50000 U	157000	246000	368000	366000
Potassium-DISS	ug/L	5000	SW846 6010B	50000 U	50000 U	160000	336000	394000	461000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U	49.9 B
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	5.6 B	50 U

				Location F					
				Washington, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**3/24/2009**	**3/24/2009**	**3/27/2009**	**4/1/2009**	**4/9/2009**	**6/29/2009**
Sodium	ug/L	5000	SW846 6010B	7980 B	25700 B	14700000	23700000	34000000	39000000
Sodium-DISS	ug/L	5000	SW846 6010B	9540 B	27400 B	14700000	31600000	36400000	47800000
Strontium	ug/L	50	SW846 6010B	220 B	303 B	539000	1350000	2100000	3410000 J
Strontium-DISS	ug/L	50	SW846 6010B	274 B	312 B	531000	1880000	2330000	4140000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	200 U	500 U	1000 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	200 U	500 U	1000 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	39.9 B	126 B	192 B	260 B
Titanium-DISS	ug/L	500	SW846 6010B	500 U	500 U	55.3 B	170 B	187 B	264 B
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	11.8 B	11.6 B	15.8 B
Zinc	ug/L	20	SW846 6010B	200 U	59.5 B J	132 B J	106 B	123 B	218
Zinc-DISS	ug/L	20	SW846 6010B	200 U	38.8 B	42 B	84.6 B	92.8 B	250 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.01 U	0.011	0.01 U	0.25 G U	0.25 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.02 G U	0.014	0.05 G U	0.25 G U	0.25 G U
Mercury	ug/L	0.2	SW846 7470A	0.61 B J	0.66 B J	0.065 B J	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.66 B J	0.93 B J	0.064 B J	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	170 J
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	66 J
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	0.61 J	5 U	11	52	33	980
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5.2 J	33 J	21 J	820
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	2000 U	10000 U	5000 U	50000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA ND U
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	20 U	100 U	50 U	500 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Acetone	ug/L	20	SW846 8260B	20 U	6 J	14 J	200 U	98 J	1000 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	200 U	1000 U	500 U	5000 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	200 U	1000 U	500 U	5000 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	280	880	400	290
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	7.6 J	29 J	23 J	270
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Methylene chloride	ug/L	5	SW846 8260B	1.1 J	5 U	10 U	50 U	25 U	250 U
Naphthalene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	130 J
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U

				Location F					
				Washington, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	3/24/2009	3/24/2009	3/27/2009	4/1/2009	4/9/2009	6/29/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA ND U
Toluene	ug/L	5	SW846 8260B	1.1 J	5 U	300	920	540	1600
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	10 U	50 U	25 U	250 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	15 U	120	340	280	3300
Semi-Volatile Organics									
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA	NA ND U
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	9.8 J	7.1 J	8.3 J	94 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	49 U	47 U	94 U	50 U	240 U	470 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	0.85 J	1.9 U	3.8 U	2 U	9.4 U	19 U
2-Methylphenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	9 J	7.9 J	7.5 J	94 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2-Nitroaniline	ug/L	50	SW846 8270C	49 U	47 U	94 U	50 U	240 U	470 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
2-Picoline	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	14 J	11	12 J	94 U
3-Nitroaniline	ug/L	50	SW846 8270C	49 U	47 U	94 U	50 U	240 U	470 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	49 U	47 U	94 U	50 U	240 U	470 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
4-Nitroaniline	ug/L	50	SW846 8270C	49 U	47 U	94 U	50 U	240 U	470 U
4-Nitrophenol	ug/L	50	SW846 8270C	49 U	47 U	94 U	50 U	240 U	470 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	98 U	94 U	190 U	100 U	470 U	940 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Acenaphthene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Acenaphthylene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Acetophenone	ug/L	10	SW846 8270C	0.46 J	9.4 U	19 U	11	47 U	94 U
Aniline	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Aramite	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Benzidine	ug/L	200	SW846 8270C	200 U	190 U	380 U	200 U	940 U	1900 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	2.2 J	9.4 U	19 U	33	870	94 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Chrysene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Diallate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Dibenzofuran	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	9 J
Diethyl phthalate	ug/L	10	SW846 8270C	2.3 J B	1.8 J B	19 U	10 U	47 U	94 U
Dimethoate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.8 U	0.29 J	19 U	14	47 U	94 U

				Location F					
				Washington, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**3/24/2009**	**3/24/2009**	**3/27/2009**	**4/1/2009**	**4/9/2009**	**6/29/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Dinoseb	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Diphenylamine	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Disulfoton	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Fluoranthene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Fluorene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Hexachloroethane	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Hexachloropropene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Isodrin	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Isophorone	ug/L	10	SW846 8270C	1.3 J	9.4 U	19 U	10 U	47 U	94 U
Isosafrole	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Nitrobenzene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
o-Toluidine	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Parathion	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Pentachloroethane	ug/L	20	SW846 8270C	20 U	19 U	38 U	20 U	94 U	190 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Phenanthrene	ug/L	2	SW846 8270C	0.6 J	1.9 U	3.8 U	0.29 J	9.4 U	3 J
Phenol	ug/L	2	SW846 8270C	2 U	1.9 U	16	15	16	19 U
Phorate	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Pronamide	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Pyrene	ug/L	2	SW846 8270C	2 U	1.9 U	3.8 U	2 U	9.4 U	19 U
Pyridine	ug/L	10	SW846 8270C	9.8 U	370	520	250	220	140
Safrole	ug/L	10	SW846 8270C	9.8 U	9.4 U	19 U	10 U	47 U	94 U
Thionazin	ug/L	10	SW846 8270C	0.95 U	0.95 U	19 U	10 U	0.95 U	4.8 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA	NA
Organochlorine Pesticides									
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.12 PG
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	0.47 U	NA	NA	0.48 U	0.49 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.093
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.049 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	0.094 U	NA	NA	0.097 U	0.098 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	1.9 U	NA	NA	1.9 U	2 U
PCBs									
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U	0.39 U

				Location F					
				Washington, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**3/24/2009**	**3/24/2009**	**3/27/2009**	**4/1/2009**	**4/9/2009**	**6/29/2009**
Organophosphorus Pesticides									
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	0.95 U	NA	NA	0.95 U	4.8 U
Alcohols									
2-Propanol	mg/L	10	SW846 8015	1 U	1 U	1 U	5 UJ	10 UJ	200 UJ
Butyl alcohol	mg/L	10	SW846 8015	1 U	1 U	1 U	5 UJ	10 UJ	200 UJ
Ethanol	mg/L	10	SW846 8015	1 U	1 U	1 U	5 UJ	10 UJ	200 UJ
Methanol	mg/L	10	SW846 8015	1 U	1.2	3.4	5 UJ	10 UJ	4500 J
n-Propanol	mg/L	10	SW846 8015	1 U	1 U	1 U	5 UJ	10 UJ	200 UJ
Glycols									
Ethylene Glycol	mg/L	50	SW846 8015	10 U	44	10 U	100 UJ	100 UJ	290 J
Propylene glycol	mg/L	50	SW846 8015	10 U	10 U	31 B	100 UJ	100 UJ	250 UJ
Acids									
Acetic Acid	mg/L	10	SW846 8015	NA	NA	10 UJ	10 UJ	100 UJ	50 UJ
Butyric Acid	mg/L	10	SW846 8015	NA	NA	10 UJ	10 UJ	100 UJ	50 UJ
Propionic Acid	mg/L	10	SW846 8015	NA	NA	10 UJ	10 UJ	100 UJ	50 UJ
Volatile Acids	mg/L	10		NA	75	1000	230	51000	100000

				Location G				
				Lycoming County, PA				
				Day 0	Day 1	Day 5	Day 15	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**3/31/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**10/21/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	1230	5 U	5	19.4	149
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	441 J	71.4 J	NA	359 J	220 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	189	302	144	7.3	2 U
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	261	553	697	171
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	502	2100	4470	12800	12700 J
Chloride	mg/L	1	MCAWW 300.0A	86	43300	77200	102000	166000 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	11.6	124 J	58.4	43 J	16.4
Fluoride	mg/L	1	MCAWW 300.0A	0.19	2.2 B	2.4 B	2.5 G U	5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	130	15000	44000	55000	96000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	3.4	1.6 B	2 B	2.5 G U	5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	2.4 J	1.9 J	0.63 J	0.16 J	0.051 B
Nitrite as N	mg/L	0.05	MCAWW 300.0A	2.5 G U	2.5 G U	2.5 G U	2.5 G U	146
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.7 U	4.6 U	10.8	4.6 U	4.8 U
Specific Conductance	umhos/cm	--	MCAWW 120.1	6720 J	147000 J	278000 J	360000 J	742000
Sulfate	mg/L	1	MCAWW 300.0A	2920	19 B J	39.2 B J	49.4 B J	100 G U
TOC	mg/L	1	SM20 5310B	11.4 J	123	60.8	42.2	63.3
Total Alkalinity	mg/L	5	SM18 2320 B	5 U	124 J	72.4 J	47.7 J	25 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	1920	74600	125000	169000	298000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	400	69.9	94.9	130	157 J
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.26	0.19	2.5 G U	2.5 G U	1 G U
Total Suspended Solids	mg/L	4	SM20 2540D	4	68	260	162	71.5
Turbidity	NTU	--	MCAWW 180.1	4.7	126	92	32.9	94.5
Cyanide, Total	ug/L	10	SW846 9012A	10 U	10 U	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3 U	1.6 B	3 U
pH	No Units	--	SW846 9040	6	7	6.3	6.4	5.8
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.017 J	0.01 U	0.0084 B	0.011 J	0.01 U
Sulfite	mg/L	1	SM4500-SO3 B	5 U	5.60	23.2	13.6	NA
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.0933	2.94	0.736	1.06	NA
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	2000 U	505 B	927 B J	835 B J	173 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	358 B	508 B J	562 B J	167 B J
Antimony	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	28.2 B	54.2 B	77.3 B	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	37.4 B	70.5 B	82.3 B	100 U
Barium	ug/L	200	SW846 6010B	339 B	1160000	3220000 J	5150000 J	8450000
Barium-DISS	ug/L	200	SW846 6010B	348 B	1340000	3260000	5070000	7530000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	59.3 B J	3030 J	3840	3880	2990
Boron-DISS	ug/L	2000	SW846 6010B	68.7 B J	3470 J	3890	3820	2680 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	3 B J	3.8 B J	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	3.2 B	50 U
Calcium	ug/L	5000	SW846 6010B	32900 B	4070000	9270000 J	13100000 J	22900000
Calcium-DISS	ug/L	5000	SW846 6010B	31800 B	4360000	9700000 J	14800000 J	20500000
Chromium	ug/L	5	SW846 6010B	50 U	50 U	20.8 B J	12.7 B J	50 U
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	6.6 B	50 U
Cobalt	ug/L	500	SW846 6010B	7.9 B	2500 U	1000 U	5000 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	14.2 B	2500 U	5000 U	5000 U	5000 U
Copper	ug/L	25	SW846 6010B	120 B	250 U	73.3 B	250 U	250 U
Copper-DISS	ug/L	25	SW846 6010B	85.3 B	250 U	250 U	250 U	250 U
Iron	ug/L	100	SW846 6010B	14300	15700	33500	39200	58700
Iron-DISS	ug/L	100	SW846 6010B	13100	3690	16700 J	31500 J	41700
Lead	ug/L	3	SW846 6010B	30 U	30 U	40.4 B J	78 B J	30 U
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	150 U	150 U	30 U
Lithium	ug/L	500	SW846 6010B	34.1 B	80300	153000	201000	262000
Lithium-DISS	ug/L	500	SW846 6010B	38.7 B	93000	155000	202000	230000 J
Magnesium	ug/L	5000	SW846 6010B	6190 B	271000	608000	781000	1280000
Magnesium-DISS	ug/L	5000	SW846 6010B	6240 B	293000	647000 J	875000 J	1170000
Manganese	ug/L	150	SW846 6010B	67.2 B	1680	3440 J	4780 J	9740
Manganese-DISS	ug/L	150	SW846 6010B	73.7 B	1930	3550	5170	8760
Molybdenum	ug/L	400	SW846 6010B	400 U	8.9 B	12.4 B	400 U	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	12.1 B	400 U	400 U	54.4 B
Nickel	ug/L	40	SW846 6010B	457	14.9 B	800 U	2000 U	400 U
Nickel-DISS	ug/L	40	SW846 6010B	452	20.1 B	2000 U	2000 U	400 U
Potassium	ug/L	5000	SW846 6010B	50000 U	127000	210000	312000	547000
Potassium-DISS	ug/L	5000	SW846 6010B	50000 U	144000	235000	274000	477000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	39.4 B	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	49.5 B	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	9.3 B	8.4 B	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	8.1 B	50 U

				Location G				
				Lycoming County, PA				
				Day 0	Day 1	Day 5	Day 15	Day 90
PARAMETER	UNITS	PQL	US EPA Method	3/31/2009	4/8/2009	4/13/2009	4/22/2009	10/21/2009
Sodium	ug/L	5000	SW846 6010B	45000 B	18100000	30800000	40300000	58600000
Sodium-DISS	ug/L	5000	SW846 6010B	44700 B	20900000	31400000	41100000	50700000 J
Strontium	ug/L	50	SW846 6010B	691	947000	2350000 J	3650000 J	6390000 J
Strontium-DISS	ug/L	50	SW846 6010B	686	1090000	2530000 J	3710000 J	5710000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	200 U	500 U	26.4 B
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	500 U	500 U	53.8 B
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	29.8 B
Titanium	ug/L	500	SW846 6010B	500 U	55.9 B	133 B	148 B	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	105 B	121 B	138 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	40.7 B	200 U	67.6 B J	52.2 B J	48 B J
Zinc-DISS	ug/L	20	SW846 6010B	46.9 B	200 U	41.6 B	49.8 B	42.3 B J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.5 G U	1 G U	2.5 G U	2 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.5 G U	1 G U	2.5 G U	2 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	1.3 J	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	20 U	13 J	16 J	26	12 J
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	2.2 J	5 U	5 U	5 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	1.7 J	5 U	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U

				Location G				
				Lycoming County, PA				
				Day 0	Day 1	Day 5	Day 15	Day 90
PARAMETER	UNITS	PQL	US EPA Method	3/31/2009	4/8/2009	4/13/2009	4/22/2009	10/21/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	15 U	15 U	15 U	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	47 U	46 U	47 U	48 U	50 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	2.7	1.9 U	1.9 U	2 U
2-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2-Nitroaniline	ug/L	50	SW846 8270C	47 U	46 U	47 U	48 U	50 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
2-Picoline	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
3-Nitroaniline	ug/L	50	SW846 8270C	47 U	46 U	47 U	48 U	50 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	47 U	46 U	47 U	48 U	50 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
4-Nitroaniline	ug/L	50	SW846 8270C	47 U	46 U	47 U	2.6 J	50 U
4-Nitrophenol	ug/L	50	SW846 8270C	47 U	46 U	47 U	48 U	50 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	94 U	92 U	94 U	95 U	100 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	0.22 J	1.9 U	1.9 U	2 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Acetophenone	ug/L	10	SW846 8270C	0.21 J	0.98 J	0.81 J	0.38 J	10 U
Aniline	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Aramite	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Benzidine	ug/L	200	SW846 8270C	190 U	180 U	190 U	190 U	200 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Diallate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Dibenzofuran	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.2 U	1.1 J	9.5 U	10 U
Dimethoate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U

				Location G				
				Lycoming County, PA				
				Day 0	Day 1	Day 5	Day 15	Day 90
PARAMETER	UNITS	PQL	US EPA Method	3/31/2009	4/8/2009	4/13/2009	4/22/2009	10/21/2009
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Dinoseb	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Disulfoton	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	0.22 J	1.9 U	1.9 U	2 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Hexachloroethane	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Hexachloropropene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Isodrin	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Isophorone	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Isosafrole	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
o-Toluidine	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Parathion	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	18 U	19 U	19 U	20 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Phenol	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Phorate	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Pronamide	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	1.8 U	1.9 U	1.9 U	2 U
Pyridine	ug/L	10	SW846 8270C	9.4 U	55	30	14	10 U
Safrole	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Thionazin	ug/L	10	SW846 8270C	9.4 U	9.2 U	9.4 U	9.5 U	10 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	NA	NA	0.47 U	0.72 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.072 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	NA	NA	0.094 U	0.14 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	NA	NA	1.9 U	2.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U

				Location G				
				Lycoming County, PA				
				Day 0	Day 1	Day 5	Day 15	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**3/31/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**10/21/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.94 U	NA	NA	0.94 U	1 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	5 UJ	NA	10 UJ	10 UJ	NA
Butyl alcohol	mg/L	10	SW846 8015	5 UJ	NA	10 UJ	10 UJ	NA
Ethanol	mg/L	10	SW846 8015	5 UJ	NA	10 UJ	10 UJ	NA
Methanol	mg/L	10	SW846 8015	8.3 J	NA	58 J	39 J	NA
n-Propanol	mg/L	10	SW846 8015	5 UJ	NA	10 UJ	10 UJ	NA
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	NA	100 UJ	100 UJ	NA
Propylene glycol	mg/L	50	SW846 8015	100 UJ	NA	100 UJ	100 UJ	NA
Acids								
Acetic Acid	mg/L	10	SW846 8015	10 UJ	NA	100 U	10 J	NA
Butyric Acid	mg/L	10	SW846 8015	10 UJ	NA	100 U	18 J	NA
Propionic Acid	mg/L	10	SW846 8015	10 UJ	NA	100 U	10 UJ	NA
Volatile Acids	mg/L	10		250	NA	430	10 UJ	NA

				Location H					
				Westmoreland County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/7/2009**	**4/7/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**7/22/2009**
Conventional Analyses									
Acidity	mg/L	5	SM20 2310B (4a)	5 U	87.5	5 U	447	90.5	720
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 NR U	0.01	0.01 NR U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	18.1 J	64.8 J	50.2 J	NA	291 J	416
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	110	1740	737	138	2070	4.1
Bromide	mg/L	1	MCAWW 300.0A	31.9	41.7	176	1190	1600	1990
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	924	6410	2470	6710	17600	2630
Chloride	mg/L	1	MCAWW 300.0A	3000	2810	14500	110000	143000	185000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	79.7 J	1270 J	612 J	140	73.2	3.3 J
Fluoride	mg/L	1	MCAWW 300.0A	1.2	58.3	32.9	17.3	5 G U	5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	1080	1010	5200	55000	63000	78000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.5 G U	0.5 G U	0.99 B	0.081 B	5 G U	5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.036 B J	0.15 J	0.5 J	0.22 J	0.091 B J	0.1 U
Nitrite as N	mg/L	0.05	MCAWW 300.0A	4.9	0.5 G U	2.5 G U	5 G U	5 G U	42.8
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.8 U	64.1	4.8 U	16.2	75.4	4.6 U
Specific Conductance	umhos/cm	--	MCAWW 120.1	10100 J	9980 J	49400 J	398000 J	482000 J	600000 J
Sulfate	mg/L	1	MCAWW 300.0A	53.3 J	58.5 J	68 J	47.1 B J	61.6 B J	100 G U
TOC	mg/L	1	SM20 5310B	78.3	1260	443 J	119 J	89.2 J	4
Total Alkalinity	mg/L	5	SM18 2320 B	75.8 J	81.8 J	253 J	54.5 J	38.1 J	7.5 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	5510	7080	19200	150000	206000	345000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	16.7	73.9	52.9	204	261	312
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.14	0.16	0.083 B	2.5 G U	2.5 G U	0.1 U
Total Suspended Solids	mg/L	4	SM20 2540D	24	230	27.5	246	439	436
Turbidity	NTU	--	MCAWW 180.1	33.7	305	53.8	198	238	106
Cyanide, Total	ug/L	10	SW846 9012A	20.2	680	75.6	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3 U	3 U	1.6 B	4
pH	No Units	--	SW846 9040	7.3	5.2	7.5	5.9	5.9	5.2
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.031	0.072	0.055	0.31	0.31 J	0.02 J
Sulfite	mg/L	1	SM4500-SO3 B	15.2	18.8	16.8	8.00	17.2	11.2
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.05 U	0.0506	0.05 U	0.737	1.4	0.469
Total and Dissolved Metals									
Aluminum	ug/L	200	SW846 6010B	264 B E	425 B	666 B	2460 J	2630 B J	173 B
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	223 B	466 B	731 B J	785 B J	2000 U
Antimony	ug/L	10	SW846 6010B	100 U	100 U	100 U	20 B	200 U	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	200 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	100 U	124	135 B	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	107	140 B	100 U
Barium	ug/L	200	SW846 6010B	5480	6280	11700	1550000 J	1800000 J	2160000
Barium-DISS	ug/L	200	SW846 6010B	6120	6320	18900	1320000	1860000	2370000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	80 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	80 U	2.7 B
Boron	ug/L	2000	SW846 6010B	2450 J	2580 J	12200 J	97900	114000	145000
Boron-DISS	ug/L	2000	SW846 6010B	2680 J	2470 J	14600 J	91300	115000	155000
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	8.6 B J	12.4 B J	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	5.7 B	9 B	50 U
Calcium	ug/L	5000	SW846 6010B	315000	329000	1180000	13600000 J	16400000 J	24000000 J
Calcium-DISS	ug/L	5000	SW846 6010B	325000	301000	1340000	13900000 J	19100000 J	24800000 J
Chromium	ug/L	5	SW846 6010B	50 U	50 U	13.5 B	92.4 J	94.2 B J	13.5 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	13.8 B	23.8 B	37.8 B	7.3 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	500 U	2500 U	2500 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	2500 U	2500 U	5000 U
Copper	ug/L	25	SW846 6010B	250 U	250 U	246 B	102 B	241 B	250 U
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	199 B	250 U	68 B	250 U
Iron	ug/L	100	SW846 6010B	4310	3560	8140	180000	242000	158000
Iron-DISS	ug/L	100	SW846 6010B	4010	3920	7920	107000 J	135000 J	151000
Lead	ug/L	3	SW846 6010B	30 U	30 U	33	104 B J	596 J	30 U
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	34.3	150 U	148 B	30 U
Lithium	ug/L	500	SW846 6010B	2240	2340	8460	96800	115000	137000
Lithium-DISS	ug/L	500	SW846 6010B	2450	2290	10300	95000	123000	148000
Magnesium	ug/L	5000	SW846 6010B	30600 B	32300 B	102000	1080000	1290000	1740000
Magnesium-DISS	ug/L	5000	SW846 6010B	31200 B	29200 B	115000	1090000 J	1460000 J	1830000
Manganese	ug/L	150	SW846 6010B	237	253	489	2650 J	3470 J	3040
Manganese-DISS	ug/L	150	SW846 6010B	242 E	235	558	2260	3400	3230
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	38.9 B	60.1 B	32.4 B	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	51.5 B	400 U	800 U	400 U
Nickel	ug/L	40	SW846 6010B	11.1 B	400 U	71 B	2000 U	2000 U	400 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	7.8 B	77.6 B	2000 U	2000 U	18 B
Potassium	ug/L	5000	SW846 6010B	53600	57400	187000	2430000	2820000	3950000
Potassium-DISS	ug/L	5000	SW846 6010B	56900	54600	224000	2270000	2920000	4080000
Selenium	ug/L	5	SW846 6010B	50 U	35.3 B	50 U	50 U	95.6 B	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	100 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	8.1 B	100 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	12.2 B	100 U	50 U

				Location H					
				Westmoreland County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/7/2009**	**4/7/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**7/22/2009**
Sodium	ug/L	5000	SW846 6010B	1380000	1460000	5160000	48100000	64900000	75800000
Sodium-DISS	ug/L	5000	SW846 6010B	1490000	1410000	6130000	46100000	62600000	82500000
Strontium	ug/L	50	SW846 6010B	76200	78500	281000	4440000 J	5410000 J	8020000 J
Strontium-DISS	ug/L	50	SW846 6010B	81100	74300	330000	4290000 J	6280000 J	8460000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	500 U	151 B	168
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	500 U	172 B	196
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	2000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	2000 U	24.2 B
Titanium	ug/L	500	SW846 6010B	500 U	500 U	92 B	313 B	247 B	500 U
Titanium-DISS	ug/L	500	SW846 6010B	28 B	27.8 B	136 B	153 B	207 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	13.8 B	23.8 B	37.8 B	13.5 B
Zinc	ug/L	20	SW846 6010B	40.5 B E	176 B	82.7 B	1230 J	2290 J	811
Zinc-DISS	ug/L	20	SW846 6010B	44.1 B	169 B	89.1 B	753	1790	840
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.05 G U	0.02 G U	0.25 G U	1 G U	0.25 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.019	0.05 G U	0.019 B	0.25 G U	0.5 G U	0.5 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.051 B	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.071 B J	0.093 B J	0.046 B J	0.27	0.2 U	0.2 U
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	24000	5 U	4000	630	5 U	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	11000	5 U	1900	280	5 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	800000 U	1000 U	100000 U	20000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	8000 U	10 U	1000 U	200 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	66000	23	5800	1600	20	13 J
Acrolein	ug/L	100	SW846 8260B	80000 U	100 U	10000 U	2000 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	80000 U	100 U	10000 U	2000 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	4000 U	6.7	500 U	100 U	5 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	10000	5 U	1400	260	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U

				Location H					
				Westmoreland County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/7/2009**	**4/7/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**7/22/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	4000 U	3 J	500 U	100 U	5 U	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	4000 U	5 U	500 U	100 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	5200 J	15 U	860 J	130 J	15 U	15 U
Semi-Volatile Organics									
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	48 U	49 U	47 U	47 U	48 U	47 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	0.72 J	2 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Nitroaniline	ug/L	50	SW846 8270C	48 U	49 U	47 U	47 U	48 U	47 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
2-Picoline	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	0.19 J	9.8 U	9.4 U	9.4 U	9.5 U	0.28 J
3-Nitroaniline	ug/L	50	SW846 8270C	48 U	49 U	47 U	47 U	48 U	47 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	48 U	49 U	47 U	47 U	48 U	47 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
4-Nitroaniline	ug/L	50	SW846 8270C	48 U	49 U	47 U	47 U	48 U	47 U
4-Nitrophenol	ug/L	50	SW846 8270C	48 U	49 U	47 U	47 U	48 U	47 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	97 U	98 U	94 U	94 U	95 U	94 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Aniline	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Aramite	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Benzidine	ug/L	200	SW846 8270C	190 U	200 U	190 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.7 U	16	9.4 U	10	20	5 J
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	1.7 J	9.4 U
Dimethoate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.7 U	9.8 U	1.3 J	1.3 J	11	0.39 J

				Location H					
				Westmoreland County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/7/2009**	**4/7/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**7/22/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	7.2 J
Dinoseb	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	0.13 J	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Hexachloroethane	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Hexachloropropene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Isophorone	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Isosafrole	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
o-Toluidine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Parathion	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	20 U	19 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	2 U	0.8 J	1.9 U	1.9 U	1.9 U
Phenol	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Phorate	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Pronamide	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Safrole	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Thionazin	ug/L	10	SW846 8270C	9.7 U	9.8 U	9.4 U	9.4 U	9.5 U	9.4 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA	#N/A
Organochlorine Pesticides									
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.35
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	0.48 U	NA	NA	0.48 U	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	0.22 PG	NA	NA	0.048 U	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.42	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.27 PG	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.07 PG	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.064 PG	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.057 PG	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.017 J PG	0.048 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA	0.048 U	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.096 U	0.096 U	NA	NA	0.095 U	0.095 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	1.9 U	NA	NA	1.9 U	1.9 U
PCBs									
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.38 U

				Location H					
				Westmoreland County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**4/7/2009**	**4/7/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**	**7/22/2009**
Organophosphorus Pesticides									
Ethyl parathion	ug/L	0.4	SW846 8141A	0.96 U	0.95 U	NA	NA	0.95 U	0.95 U
Alcohols									
2-Propanol	mg/L	10	SW846 8015	31 J	450 J	280 J	NA	66 J	10 J
Butyl alcohol	mg/L	10	SW846 8015	5 UJ	10 UJ	10 UJ	NA	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	5 UJ	10 UJ	10 UJ	NA	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	5 UJ	10 UJ	10 UJ	NA	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	5 UJ	10 UJ	10 UJ	NA	10 UJ	10 UJ
Glycols									
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	1000 UJ	100 UJ	NA	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	100 UJ	1000 UJ	300 J	NA	100 UJ	100 UJ
Acids									
Acetic Acid	mg/L	10	SW846 8015	50 UJ	50 UJ	50 UJ	NA	50 UJ	100 UJ
Butyric Acid	mg/L	10	SW846 8015	50 UJ	50 UJ	50 UJ	NA	50 UJ	100 UJ
Propionic Acid	mg/L	10	SW846 8015	50 UJ	50 UJ	50 UJ	NA	50 UJ	100 UJ
Volatile Acids	mg/L	10		57	170	260	NA	1600	700

				Location I					
				Cameron County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	5/9/2009	5/9/2009	5/15/2009	5/19/2009	5/28/2009	10/20/2009
Conventional Analyses									
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	123	216	336
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.064 B	5.9	127	199 J	229	278 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	578	399	99.4	10.4	3.4
Bromide	mg/L	1	MCAWW 300.0A	0.22	1	238	901	1010	1510
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	18.7	2560	8790	195	12100	20200 J
Chloride	mg/L	1	MCAWW 300.0A	49.9	90.2	58700	148000	181000	196000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	3.2 J	577	600	59.6	26.5	13.2
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.05 U	2.5 G U	2.5 G U	5 G U	5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	38	42	8600	42000	50800	104000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.05 U	0.02 B	2.5 G U	2.5 G U	5 G U	7.4
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.1 U	0.59	1.1	0.1 U	0.1 U	0.58
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.05 U	0.034 B	2.5 G U	2.5 G U	52	5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.8 U	62.2	53.9	4.8 U	4.8 U	4.7
Specific Conductance	umhos/cm	--	MCAWW 120.1	247 J	362 J	200000 J	470000 J	570000 J	763000
Sulfate	mg/L	1	MCAWW 300.0A	8.3 J	8.4 J	36.6 B J	50 G U	100 G U	44.2 B J
TOC	mg/L	1	SM20 5310B	4.7 J	607	610	48	12.8	14
Total Alkalinity	mg/L	5	SM18 2320 B	9.3 J	33.4 J	175 J	48.8 J	37.3 J	25.3 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	400	265	122000	238000	261000	271000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	3 U	65.4	150	160	131	218
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.14	0.062 B	0.084 B	0.45	0.1 U	0.08 B
Total Suspended Solids	mg/L	4	SM20 2540D	2 B	192	308	696	65.2	82
Turbidity	NTU	--	MCAWW 180.1	3.1	75.2	461	203	180	67.2
Cyanide, Total	ug/L	10	SW846 9012A	10 U	4.1 B	10 U	10 U	10 U	3.6 B
Total Sulfide	mg/L	3	SW846 9030B/9034	1.6 B	3 U	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	7.3	7.6	6.6	5.8	5.6	5.1
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.01 U	0.028	0.015	0.022	0.017	0.01 U
Sulfite	mg/L	1	SM4500-SO3 B	21.6	27.6	NA	6.80	31.2	NA
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.240	0.05 U	NA	1.31	0.191	NA
Total and Dissolved Metals									
Aluminum	ug/L	200	SW846 6010B	2000 U	2000 U	1750 B J	418 B J	846 B	904 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	227 B	286 B J	596 B J	983 B	130 B J
Antimony	ug/L	10	SW846 6010B	100 U	100 U	31.5 B	47.2 B	27.2 B	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	18.9 B	200 U	200 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	42.9 B	59.6 B	89.2 B	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	29.9 B	62.6 B	75.6 B	100 U
Barium	ug/L	200	SW846 6010B	1640 B	1170 B	516000	1400000	2460000	4670000
Barium-DISS	ug/L	200	SW846 6010B	1580 B J	1500 B J	532000 J	1740000	2500000	5810000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	80 U	80 U	3.4 B
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	80 U	80 U	6.8 B
Boron	ug/L	2000	SW846 6010B	34.3 B J	33.9 B J	5930 J	11900	16400	18700
Boron-DISS	ug/L	2000	SW846 6010B	44.2 B J	49.9 B J	6240	15400	16800	24300 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	2.9 B	9.6 B	11.8 B J	3.5 B J
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	2.6 B	11.4 B	12.2 B	3 B
Calcium	ug/L	5000	SW846 6010B	11600 B J	9900 B J	2950000	9400000 J	17300000 J	33000000
Calcium-DISS	ug/L	5000	SW846 6010B	12000 B J	13000 B J	3060000	11700000	17600000 J	41000000
Chromium	ug/L	5	SW846 6010B	50 U	50 U	50.4	12.2 B	28.8 B	9.7 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	18.7 B	100 U	24.4 B	8 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	1000 U	2500 U	2500 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	1000 U	2500 U	2500 U	5000 U
Copper	ug/L	25	SW846 6010B	250 U	250 U	68.3 B	500 U	79 B	48.1 B
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	35 B	500 U	500 U	28.6 B
Iron	ug/L	100	SW846 6010B	192 B	198 B	58700	49700	76600	131000
Iron-DISS	ug/L	100	SW846 6010B	1000 U	175 B	21000	39100 J	53900	152000
Lead	ug/L	3	SW846 6010B	30 U	30 U	60 U	150 U	150 U	13.2 B
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	60 U	150 U	150 U	30 U
Lithium	ug/L	500	SW846 6010B	42.2 B	29.7 B	34600	97600	170000	323000
Lithium-DISS	ug/L	500	SW846 6010B	32.7 B	51.7 B	36500	125000	172000	323000 J
Magnesium	ug/L	5000	SW846 6010B	1840 B	1360 B	177000	604000	1100000	2020000
Magnesium-DISS	ug/L	5000	SW846 6010B	1830 B	1720 B	185000	765000 J	1110000	2550000
Manganese	ug/L	150	SW846 6010B	13.9 B	150 U	2840	5520	9560	16900
Manganese-DISS	ug/L	150	SW846 6010B	150 U	11.5 B	2870	6810	9630	21200
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	90 B	27.6 B	34.4 B	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	84.2 B	29.2 B	31.8 B	400 U
Nickel	ug/L	40	SW846 6010B	400 U	400 U	66.8 B	2000 U	2000 U	400 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	66.8 B	2000 U	2000 U	400 U
Potassium	ug/L	5000	SW846 6010B	50000 U	50000 U	378000	811000	1300000	2860000
Potassium-DISS	ug/L	5000	SW846 6010B	2240 B	3790 B	410000	1040000	1320000	3850000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	100 U	100 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	100 U	100 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	100 U	100 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	100 U	100 U	50 U

				Location I					
				Cameron County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	5/9/2009	5/9/2009	5/15/2009	5/19/2009	5/28/2009	10/20/2009
Sodium	ug/L	5000	SW846 6010B	24400 B	54200	34700000	65100000	85600000	95500000
Sodium-DISS	ug/L	5000	SW846 6010B	24900 B	70800	35000000	83400000	88000000	117000000 J
Strontium	ug/L	50	SW846 6010B	1500	1070	492000 J	1800000	3120000	6290000 J
Strontium-DISS	ug/L	50	SW846 6010B	1460 J	1340 J	500000 J	2210000 J	3210000 J	7820000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	200 U	500 U	500 U	26.8 B
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	200 U	500 U	500 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	2000 U	2000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	2000 U	2000 U	1000 U
Titanium	ug/L	500	SW846 6010B	29.9 B J	27.1 B J	69.9 B	143 B	197 B	500 U
Titanium-DISS	ug/L	500	SW846 6010B	29.6 B J	24.4 B J	44.3 B	211 B	230 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	100 U	24.4 B	50 U
Zinc	ug/L	20	SW846 6010B	25.7 B J	45.7 B J	314	269 B J	591 J	810 J
Zinc-DISS	ug/L	20	SW846 6010B	61.5 B J	79.4 B J	187 B	195 B	566	992 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.25 G U	0.25 G U	0.5 U	0.25 G U	0.5 G U	0.5 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.25 G U	0.25 G U	0.27 B	0.25 U	0.25 G U	0.5 G U
Mercury	ug/L	0.2	SW846 7470A	0.053 B J	0.044 B J	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.05 B J	0.47 B J	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	3.1 J	5 U	2.4 J	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	2.3 J	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	5000 U	1000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	7.5	25 U	5 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	50 U	10 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	6.3 J B	20 U	390	130	25	20 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	500 U	100 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	500 U	100 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	1.6 J	25 U	5 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	13 B	25 U	5 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	0.95 J	25 U	5 U	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U

				Location I					
				Cameron County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	5/9/2009	5/9/2009	5/15/2009	5/19/2009	5/28/2009	10/20/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	1.3 J	8.9 J	5 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	6.7	25 U	5 U	3 J	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	0.81 J	25 U	5 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	25 U	5 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	2.6 J	75 U	15 U	6.9 J	15 U
Semi-Volatile Organics									
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	47 U	48 U	470 U	47 U	48 U	100 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.67 J	1.9 U	4 U
2-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	0.53 J	9.7 U	20 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2-Nitroaniline	ug/L	50	SW846 8270C	47 U	48 U	470 U	1.3 J	48 U	100 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
2-Picoline	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	1.2 J	8.1 J	20 U
3-Nitroaniline	ug/L	50	SW846 8270C	47 U	48 U	470 U	47 U	48 U	100 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	47 U	48 U	470 U	47 U	48 U	100 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	0.75 J	9.7 U	20 U
4-Nitroaniline	ug/L	50	SW846 8270C	47 U	48 U	470 U	47 U	48 U	100 U
4-Nitrophenol	ug/L	50	SW846 8270C	47 U	48 U	470 U	47 U	48 U	100 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	94 U	95 U	940 U	94 U	97 U	200 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.9 J	1.9 U	4 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.84 J	1.9 U	4 U
Acetophenone	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Aniline	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Aramite	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Benzidine	ug/L	200	SW846 8270C	190 U	190 U	1900 U	190 U	190 U	400 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.9 U	19 U	0.97 J	1.9 U	4 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.9 U	19 U	6.7	1.9 U	4 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	10	1.9 U	4 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	6.9	1.9 U	4 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	5.9	1.9 U	4 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.4 U	9.5 U	41 J	17	9.7 U	20 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	6.9 J	4 J	1.4 J
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.85 J	1.9 U	0.29 J B
Diallate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	11	1.9 U	4 U
Dibenzofuran	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	0.87 J	9.7 U	20 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	1.3 J	9.7 U	20 U
Dimethoate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	0.87 J	9.7 U	20 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	5.3 J	9.7 U	20 U

				Location I					
				Cameron County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**5/9/2009**	**5/9/2009**	**5/15/2009**	**5/19/2009**	**5/28/2009**	**10/20/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Dinoseb	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1 J	1.9 U	4 U
Disulfoton	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	5.5	19 U	6.1	1.9 U	4 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.82 J	1.9 U	4 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Hexachloroethane	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Hexachloropropene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	9.5	1.9 U	4 U
Isodrin	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Isophorone	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Isosafrole	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1.9 U	1.9 U	4 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	1 J	1.9 U	4 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
o-Toluidine	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Parathion	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	19 U	190 U	19 U	19 U	40 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.89 J	1.9 U	4 U
Phenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.7 J	1.9 U	4 U
Phorate	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Pronamide	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	19 U	0.89 J	1.9 U	4 U
Pyridine	ug/L	10	SW846 8270C	9.4 U	4.5 J	640	310	9.7 U	42
Safrole	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Thionazin	ug/L	10	SW846 8270C	9.4 U	9.5 U	94 U	9.4 U	9.7 U	20 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA	NA
Organochlorine Pesticides									
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.37	0.05 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	0.47 U	NA	NA	0.48 U	0.5 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	0.047 U	NA	NA	0.048 U	0.05 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	0.094 U	NA	NA	0.095 U	0.1 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	1.9 U	NA	NA	1.9 U	2 U
PCBs									
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U	0.4 U

				Location I					
				Cameron County, PA					
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**5/9/2009**	**5/9/2009**	**5/15/2009**	**5/19/2009**	**5/28/2009**	**10/20/2009**
Organophosphorus Pesticides									
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	0.97 U	NA	NA	0.95 U	1 U
Alcohols									
2-Propanol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ	UJ
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ	UJ
Ethanol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ	UJ
Methanol	mg/L	10	SW846 8015	10 UJ	130 J	52 J	59 J	48 J	J
n-Propanol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ	UJ
Glycols									
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	200 UJ	100 UJ	100 UJ	100 UJ	UJ
Propylene glycol	mg/L	50	SW846 8015	100 UJ	200 UJ	100 UJ	100 UJ	100 UJ	UJ
Acids									
Acetic Acid	mg/L	10	SW846 8015	1 U	50 UJ	10 UJ	10 UJ	100 UJ	UJ
Butyric Acid	mg/L	10	SW846 8015	1 U	50 UJ	10 UJ	10 UJ	100 UJ	UJ
Propionic Acid	mg/L	10	SW846 8015	1 U	50 UJ	10 UJ	10 UJ	100 UJ	UJ
Volatile Acids	mg/L	10		NA	NA	NA	57	460	

				Location J				
				Tioga County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/1/2009**	**5/1/2009**	**5/4/2009**	**5/8/2009**	**5/18/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	5 U	5 U
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 NR U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.017 B J	5.6 J	13.2	36.9	17.8 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	47.1	36.7	47.5	20.3
Bromide	mg/L	1	MCAWW 300.0A	0.14 B	36.6	39.1	233	65
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	10 U	47400	397	4870	8530
Chloride	mg/L	1	MCAWW 300.0A	42.3	2180	2460	26400	8060 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	3.2 J	168 J	207 J	30.7 J	82.8
Fluoride	mg/L	1	MCAWW 300.0A	0.033 B	0.05 U	0.5 G U	1.2 G U	0.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	140	1300	1060	7800	3100
Nitrate as N	mg/L	0.05	MCAWW 300.0A	1.7	1.6	0.83	2.3	0.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	1.8	2	0.94	0.89	0.92
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.05 U	0.05 U	0.39 B	1.2 G U	1.8
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.8 U	29.2	7.3	4.8 U	4.8 U
Specific Conductance	umhos/cm	--	MCAWW 120.1	380 J	9280 J	8740 J	90500 J	32000 J
Sulfate	mg/L	1	MCAWW 300.0A	43.7	27.7	17.4 J	17.6 B J	10 G U
TOC	mg/L	1	SM20 5310B	2.2	569	56.6	27.5	23.6
Total Alkalinity	mg/L	5	SM18 2320 B	71.4 J	191 J	107 J	187 J	119 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	746	4840	5090	48700	19100
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	3 U	17.1	14.2	96.1	17.9
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.044 B	0.072 B	0.14	0.088 B	0.3
Total Suspended Solids	mg/L	4	SM20 2540D	9.6	230	330	68.8	1150
Turbidity	NTU	--	MCAWW 180.1	1.3	101	330	30.2	524
Cyanide, Total	ug/L	10	SW846 9012A	10 U	4.6 B	15.2	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	2.4 B	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	7.2	7.2	7.4	6.6	6.8
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.01 J	0.027	0.03	0.01 U	0.009 B
Sulfite	mg/L	1	SM4500-SO3 B	10.0	20.4	13.2	6.00	9.6
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.962	0.05 U	0.134	0.0761	0.137
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	249 B J	400 B J	4030 J	111 B	4680 J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	2000 U	212 B	2000 U	266 B J
Antimony	ug/L	10	SW846 6010B	100 U	100 U	100 U	35.8 B	25.7 B
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	29.9 B	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	34.3 B	32.1 B	60.4 B
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	55.3 B	100 U
Barium	ug/L	200	SW846 6010B	338 B	87100	121000	1210000	589000
Barium-DISS	ug/L	200	SW846 6010B	241 B J	84400 J	64400 J	1290000 J	496000 J
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	29.8 B J	156 B J	1120 B J	3140 J	885 B J
Boron-DISS	ug/L	2000	SW846 6010B	39.2 B	202 B	1180 B	3500 J	901 B
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	2.5 B	50 U	1.5 B
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Calcium	ug/L	5000	SW846 6010B	37500 B J	241000 J	305000 J	1790000 J	847000
Calcium-DISS	ug/L	5000	SW846 6010B	43200 B	293000	318000	1950000 J	928000
Chromium	ug/L	5	SW846 6010B	50 U	50 U	359	15.1 B	460
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	5.8 B	50 U	5.7 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Copper	ug/L	25	SW846 6010B	250 U	250 U	41.3 B	250 U	253
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	250 U	250 U	250 U
Iron	ug/L	100	SW846 6010B	273 B	3080	55200	39000	223000
Iron-DISS	ug/L	100	SW846 6010B	1000 U	1510	14200	38200	45800
Lead	ug/L	3	SW846 6010B	30 U	30 U	26.4 B	30 U	453
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	34.7
Lithium	ug/L	500	SW846 6010B	33.8 B	2050	4060	37000	12200
Lithium-DISS	ug/L	500	SW846 6010B	40.7 B	2590	3790	40000	13300
Magnesium	ug/L	5000	SW846 6010B	5160 B	21000 B	25900 B	154000	77600
Magnesium-DISS	ug/L	5000	SW846 6010B	6160 B	25300 B	25900 B	167000	83800
Manganese	ug/L	150	SW846 6010B	145 B	395	1290	1100	2810
Manganese-DISS	ug/L	150	SW846 6010B	129 B	430	1190	1200	1710
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	372 B	400 U	188 B
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	185 B	14.9 B	25.6 B
Nickel	ug/L	40	SW846 6010B	400 U	400 U	203 B	400 U	216 B
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	24.1 B	400 U	33.3 B
Potassium	ug/L	5000	SW846 6010B	2850 B	11600 B	26700 B	48900 B	98900
Potassium-DISS	ug/L	5000	SW846 6010B	2260 B	13000 B	21600 B	53100	106000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location J				
				Tioga County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/1/2009**	**5/1/2009**	**5/4/2009**	**5/8/2009**	**5/18/2009**
Sodium	ug/L	5000	SW846 6010B	17800 B	884000	1090000	10700000	3940000
Sodium-DISS	ug/L	5000	SW846 6010B	21300 B	1120000	1160000	11700000	4120000
Strontium	ug/L	50	SW846 6010B	588	47900	56700	443000	197000 J
Strontium-DISS	ug/L	50	SW846 6010B	685 J	58200 J	58600 J	477000 J	210000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	23.5 B	50.3 B J	63.6 B
Titanium-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	62.5 B J	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	209	50 U	50 U
Zinc	ug/L	20	SW846 6010B	73.9 B J	76.8 B J	665 J	91 B J	1330
Zinc-DISS	ug/L	20	SW846 6010B	52.8 B	45.5 B	378	97.5 B J	178 B
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.05 G U	0.086	0.5 G U	0.52
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.05 G U	0.15	0.5 G U	0.5 U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.056 B	0.2 U	0.043 B J	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.051 B	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	2.6 J	5 U	5 U	10 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	1000 U	2000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	10 U	20 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Acetone	ug/L	20	SW846 8260B	20 U	10 J B	10 J B	22 B	330
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	200 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	200 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	0.99 J	10 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Bromoform	ug/L	5	SW846 8260B	5 U	7.8	5.8	5 U	10 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Naphthalene	ug/L	5	SW846 8260B	5 U	5 U	3.7 J	5 U	10 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U

				Location J				
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				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/1/2009**	**5/1/2009**	**5/4/2009**	**5/8/2009**	**5/18/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	1.3 J	5 U	5 U	2.5 J
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	10 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	2.6 J	15 U	15 U	30 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.8 U	200 U	25	9.4 U	9.5 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	49 U	1000 U	48 U	47 U	48 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	2 U	40 U	0.82 J	1.9 U	2
2-Methylphenol	ug/L	10	SW846 8270C	9.8 U	200 U	7.3 J	9.4 U	0.19 J
2-Naphthylamine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2-Nitroaniline	ug/L	50	SW846 8270C	49 U	1000 U	48 U	47 U	48 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
2-Picoline	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.8 U	200 U	4.5 J	9.4 U	0.61 J
3-Nitroaniline	ug/L	50	SW846 8270C	49 U	1000 U	48 U	47 U	48 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	49 U	1000 U	48 U	47 U	48 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
4-Nitroaniline	ug/L	50	SW846 8270C	49 U	1000 U	48 U	47 U	48 U
4-Nitrophenol	ug/L	50	SW846 8270C	49 U	1000 U	48 U	47 U	48 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	98 U	2000 U	96 U	94 U	95 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Acenaphthene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	0.67 J
Acenaphthylene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.8 U	200 U	13	1.1 J	1 J
Aniline	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Aramite	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Benzidine	ug/L	200	SW846 8270C	200 U	4000 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	2 U	4300	18	17	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.8 U	200 U	1.2 J	1.6 J B	9.6
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Chrysene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.8 U	200 U	1.6 J	9.4 U	9.5 U
Dimethoate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.8 U	200 U	0.3 J	5.3 J	130

				Location J				
				Tioga County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/1/2009**	**5/1/2009**	**5/4/2009**	**5/8/2009**	**5/18/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Dinoseb	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Diphenylamine	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	2.7
Disulfoton	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Fluoranthene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	0.78 J
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Hexachloroethane	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Hexachloropropene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Isophorone	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Isosafrole	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Nitrobenzene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	2.7
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
o-Toluidine	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Parathion	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Pentachloroethane	ug/L	20	SW846 8270C	20 U	400 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Phenanthrene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1 J
Phenol	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	0.76 J	1.9 U
Phorate	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Pronamide	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Pyrene	ug/L	2	SW846 8270C	2 U	40 U	1.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	9.8 U	200 U	3.2 J	9.4 U	3.5 J
Safrole	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Thionazin	ug/L	10	SW846 8270C	9.8 U	200 U	9.6 U	9.4 U	9.5 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.083
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.038 J P	NA	NA	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	0.49 U	NA	NA	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.044 J PG
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.27
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.36 PG
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.052 PG
Methoxychlor	ug/L	0.1	SW846 8081A	0.096 U	0.098 U	NA	NA	0.095 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	2 U	NA	NA	1.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U

				Location J				
				Tioga County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/1/2009**	**5/1/2009**	**5/4/2009**	**5/8/2009**	**5/18/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	1 U	NA	NA	0.95 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	13 J	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	NA	100 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	100 UJ	NA	100 UJ	100 UJ	100 UJ
Acids								
Acetic Acid	mg/L	10	SW846 8015	0.15 U	NA	0.15 U	10 UJ	1.5 UJ
Butyric Acid	mg/L	10	SW846 8015	0.16 U	NA	0.16 U	10 UJ	1.6 UJ
Propionic Acid	mg/L	10	SW846 8015	0.17 U	NA	0.17 U	10 UJ	1.7 JU
Volatile Acids	mg/L	10		NA	NA	NA	NA	110

				Location K			
				Bradford County, PA			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**05/07/2009**	**5/20/2009**	**5/22/2009**	**6/2/2009**
Conventional Analyses							
Acidity	mg/L	5	SM20 2310B (4a)	66.7	5 U	5 U	5 U
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 NR U	0.01 NR U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	14	16.8 J	29.4 J	3.7
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	430	650	214	30.5
Bromide	mg/L	1	MCAWW 300.0A	18.9	117	185	15.8
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	1260	855	1720	228
Chloride	mg/L	1	MCAWW 300.0A	82	10200	34000 J	1670 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	301 J	197	158	5.2
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.38	1.2 G U	0.05 U
Hardness, as CaCO3	mg/L	5	SM20 2340C	104	2100	5100	630
Nitrate as N	mg/L	0.05	MCAWW 300.0A	1.6	2.4	1.2 G U	0.65
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.37	0.32	0.2	0.68
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.056	1.1	4.8	1.7
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.9 U	4.8 U	4.9 U	9.4
Specific Conductance	umhos/cm	--	MCAWW 120.1	507 J	35700 J	79500 J	6800 J
Sulfate	mg/L	1	MCAWW 300.0A	21.5 J	21.6 J	6.6 B J	0.78 B J
TOC	mg/L	1	SM20 5310B	949 J	124	103	7.2
Total Alkalinity	mg/L	5	SM18 2320 B	116 J	311 J	245 J	91.3 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	804	18600	39400	3010
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	47.2	25.2	38	5.6
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.097 B	0.14	0.12	0.17
Total Suspended Solids	mg/L	4	SM20 2540D	26	172	61	561
Turbidity	NTU	--	MCAWW 180.1	249	63.8	140	548
Cyanide, Total	ug/L	10	SW846 9012A	320	16.7	7.4 B J	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	1.6 B	1.6 B	1.6 B	3 U
pH	No Units	--	SW846 9040	6.3	7.4	6.9	6.6
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.011	0.01 U	0.052	0.0097 B
Sulfite	mg/L	1	SM4500-SO3 B	10.4	8.8	5 U	14
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.05 U	0.575	0.012	0.0733
Total and Dissolved Metals							
Aluminum	ug/L	200	SW846 6010B	311 B	420 B J	2000 U	3990
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	166 B	205 B	2000 U
Antimony	ug/L	10	SW846 6010B	16.7 B	34.9 B	33.7 B	14.1 B
Antimony-DISS	ug/L	10	SW846 6010B	100 U	36.5 B	21.7 B	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	32.3 B	28.8 B	79.8 B
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	32.6 B	100 U
Barium	ug/L	200	SW846 6010B	1220 B	251000	893000	105000
Barium-DISS	ug/L	200	SW846 6010B	1360 B J	224000	1010000	102000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	71.4 B J	2850	3550	464 B
Boron-DISS	ug/L	2000	SW846 6010B	76.4 B J	2590	4170	313 B
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Calcium	ug/L	5000	SW846 6010B	26600 B J	577000 J	1440000 J	173000 J
Calcium-DISS	ug/L	5000	SW846 6010B	22900 B J	493000	1590000	204000 J
Chromium	ug/L	5	SW846 6010B	50 U	48.1 B	14.6 B	567
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	6.6 B	50 U
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	500 U	10.9 B
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U
Copper	ug/L	25	SW846 6010B	250 U	250 U	250 U	493
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	250 U	250 U
Iron	ug/L	100	SW846 6010B	745 B	18000	33600	166000
Iron-DISS	ug/L	100	SW846 6010B	567 B	11700	34400	26800
Lead	ug/L	3	SW846 6010B	30 U	70.9	30 U	138
Lead-DISS	ug/L	3	SW846 6010B	21.2 B	35.7	30 U	30 U
Lithium	ug/L	500	SW846 6010B	42 B	23600	41800	3410
Lithium-DISS	ug/L	500	SW846 6010B	56.3 B	20200	47800	4000
Magnesium	ug/L	5000	SW846 6010B	4320 B	52000	135000	18500 B
Magnesium-DISS	ug/L	5000	SW846 6010B	3760 B	44800 B	150000	21900 B
Manganese	ug/L	150	SW846 6010B	33.2 B	519	881	2170
Manganese-DISS	ug/L	150	SW846 6010B	27.5 B	440	1020	1230
Molybdenum	ug/L	400	SW846 6010B	400 U	54.4 B	33.1 B	149 B
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	42.7 B	34 B	400 U
Nickel	ug/L	40	SW846 6010B	400 U	176 B	400 U	769
Nickel-DISS	ug/L	40	SW846 6010B	400 U	33.4 B	400 U	62.1 B
Potassium	ug/L	5000	SW846 6010B	2750 B	35800 B	54600	8230 B
Potassium-DISS	ug/L	5000	SW846 6010B	2790 B	31900 B	64000	8140 B
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U

				Location K			
				Bradford County, PA			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	05/07/2009	5/20/2009	5/22/2009	6/2/2009
Sodium	ug/L	5000	SW846 6010B	67800	6630000	11700000	922000
Sodium-DISS	ug/L	5000	SW846 6010B	80700	5830000 J	13200000 J	1100000
Strontium	ug/L	50	SW846 6010B	1310	117000	357000	39000
Strontium-DISS	ug/L	50	SW846 6010B	899 J E	99700 J	390000 J	46100 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	23 B
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	22.3 B J	38.5 B	23.9 B	119 B
Titanium-DISS	ug/L	500	SW846 6010B	21.2 B J	39.4 B	39.2 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	99.7 B J	198 B J	147 B J	517 J
Zinc-DISS	ug/L	20	SW846 6010B	76.1 B J	109 B J	172 B J	75.7 B
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.5 G U	0.1 G U	0.17 B	0.05 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.5 G U	0.1 G U	0.17 B	0.047 B
Mercury	ug/L	0.2	SW846 7470A	0.052 B J	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.46 B J	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	42	14	7.7	3.9 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	20	7.7	5.3	2.8 J
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	6.7 J B	5.9 J	6.9 J	20 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	1.5 J
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	1.7 J	5 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	3.9 J	5 U	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	2.3 J

				Location K			
				Bradford County, PA			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	05/07/2009	5/20/2009	5/22/2009	6/2/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	1.6 J
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	35	4.8 J	3 J	3.7 J
Semi-Volatile Organics							
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	50 U	48 U	47 U	50 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
2-Methylphenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2-Nitroaniline	ug/L	50	SW846 8270C	50 U	48 U	47 U	50 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
2-Picoline	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	0.41 J
3-Nitroaniline	ug/L	50	SW846 8270C	50 U	48 U	47 U	50 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	50 U	48 U	47 U	50 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
4-Nitroaniline	ug/L	50	SW846 8270C	50 U	48 U	47 U	50 U
4-Nitrophenol	ug/L	50	SW846 8270C	50 U	48 U	47 U	50 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	99 U	95 U	94 U	100 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Acenaphthene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Acenaphthylene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Acetophenone	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Aniline	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Aramite	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Benzidine	ug/L	200	SW846 8270C	200 U	190 U	190 U	200 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.1 J	1.9 U	1.9 U	2 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	6.9	1.9 U	1.9 U	2 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	11	1.9 U	1.9 U	2 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	7.4	1.9 U	1.9 U	2 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	6.7	1.9 U	1.9 U	2 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	9.1 J
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	15 B	1.8 J	9.4 U	10 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Chrysene	ug/L	2	SW846 8270C	1.7 J	1.9 U	1.9 U	2 U
Diallate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	12	1.9 U	1.9 U	2 U
Dibenzofuran	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	0.73 J
Dimethoate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.9 U	5 J	9.4 U	10 U

				Location K			
				Bradford County, PA			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	05/07/2009	5/20/2009	5/22/2009	6/2/2009
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Dinoseb	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Diphenylamine	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Disulfoton	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Fluoranthene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Fluorene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Hexachloroethane	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Hexachloropropene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	10	1.9 U	1.9 U	2 U
Isodrin	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Isophorone	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Isosafrole	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Nitrobenzene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
o-Toluidine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Parathion	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Pentachloroethane	ug/L	20	SW846 8270C	20 U	19 U	19 U	20 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Phenanthrene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Phenol	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Phorate	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Pronamide	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Pyrene	ug/L	2	SW846 8270C	2 U	1.9 U	1.9 U	2 U
Pyridine	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	150
Safrole	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Thionazin	ug/L	10	SW846 8270C	9.9 U	9.5 U	9.4 U	10 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA
Organochlorine Pesticides							
4,4'-DDD	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.49 U	NA	NA	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.036 J PG
Heptachlor	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.1
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.049 U	NA	NA	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.098 U	NA	NA	0.097 U
Toxaphene	ug/L	2	SW846 8081A	2 U	NA	NA	1.9 U
PCBs							
Aroclor 1016	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.39 U	NA	NA	0.39 U

				Location K			
				Bradford County, PA			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**05/07/2009**	**5/20/2009**	**5/22/2009**	**6/2/2009**
Organophosphorus Pesticides							
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	NA	NA	0.95 U
Alcohols							
2-Propanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ
Glycols							
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	100 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	220 J	130 J	100 UJ	100 UJ
Acids							
Acetic Acid	mg/L	10	SW846 8015	50 UJ	42 J	39 J	10 UJ
Butyric Acid	mg/L	10	SW846 8015	50 UJ	20 UJ	10 UJ	10 UJ
Propionic Acid	mg/L	10	SW846 8015	50 UJ	20 UJ	10 UJ	10 UJ
Volatile Acids	mg/L	10		2300	170	400	110

				Location L				
				Butler County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/12/2009**		**5/14/2009**	**5/18/2009**	**5/27/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5.5	5 U	5 U	5 U	252
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.27	0.87	0.14	0.032	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	3.9	2.9	31.6	71.2	114 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	2 U	27.6	37.1	426
Bromide	mg/L	1	MCAWW 300.0A	30.6	9.2	162	413	704
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	594	511	1010	4250	12000
Chloride	mg/L	1	MCAWW 300.0A	101	115	9580	35100 J	49000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	222 J	361 J	313	117	57.2
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.05 U	0.5 G U	1.2 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	124	114	2200	12600	27000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.59	0.91	1.7	1.2 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.61	1	0.74	0.54	0.33
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.3	0.34	0.5 G U	1.2 G U	13.4
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.6 U	20 U	5.2 U	8.4 U	103
Specific Conductance	umhos/cm	--	MCAWW 120.1	519 J	599 J	33800 J	118000 J	181000 J
Sulfate	mg/L	1	MCAWW 300.0A	48.3 J	40 J	58.9 J	51.4 J	28.8 B
TOC	mg/L	1	SM20 5310B	202 J	155 J	115	80.5	83.2
Total Alkalinity	mg/L	5	SM18 2320 B	33.6 J	62 J	186 J	109 J	99.8 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	390	221	20400	72700	109000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	17.9	24	46.4	67.6	110
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.088 B	0.063 B	0.1 U	1 G U	0.039 B
Total Suspended Solids	mg/L	4	SM20 2540D	14 B	4 U	71	23.2	865
Turbidity	NTU	--	MCAWW 180.1	9.1	2.7	16.2	20.9	1090
Cyanide, Total	ug/L	10	SW846 9012A	625	954	177	46.1	2.7 B
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3 U	2.4 B	3.2
pH	No Units	--	SW846 9040	6.8	7.8	7.8	6.7	6.1
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.011	0.01	0.022	0.026	0.04
Sulfite	mg/L	1	SM4500-SO3 B	10.8	NA	9.60	12.4	7.20
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.317	NA	0.301	0.234	0.126
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	2000 U	2000 U	290 B J	350 B J	728 B
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	2000 U	223 B J	310 B J	418 B
Antimony	ug/L	10	SW846 6010B	100 U	100 U	17.9 B	100 U	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	21.1 B	19.8 B	100 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	100 U	40.7 B	110
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	43.5 B
Barium	ug/L	200	SW846 6010B	243 B	108 B	7110	34700	82300
Barium-DISS	ug/L	200	SW846 6010B	222 B J	91.2 B J	6520 J	60700 J	75600
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	47.9 B J	43.3 B J	7290 J	14100 J	17800
Boron-DISS	ug/L	2000	SW846 6010B	54.1 B J	54.5 B J	6690	14400	18300
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	4.4 B J
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	1.8 B
Calcium	ug/L	5000	SW846 6010B	32000 B J	31500 B J	833000	3890000	7300000 J
Calcium-DISS	ug/L	5000	SW846 6010B	33900 B J	33800 B J	757000	3970000	7570000 J
Chromium	ug/L	5	SW846 6010B	50 U	50 U	10.4 B	10.5 B	167
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	4.5 B	500 U	27.8 B
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	15.6 B
Copper	ug/L	25	SW846 6010B	250 U	250 U	57.2 B	250 U	212 B
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	47.2 B	250 U	250 U
Iron	ug/L	100	SW846 6010B	1810	137 B	5570	21500	574000
Iron-DISS	ug/L	100	SW846 6010B	968 B	1000 U	4950	20200	135000
Lead	ug/L	3	SW846 6010B	30 U	30 U	26.1 B	51.1	171
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	60 U
Lithium	ug/L	500	SW846 6010B	500 U	500 U	17400	49700	78500
Lithium-DISS	ug/L	500	SW846 6010B	500 U	500 U	15900	52100	78700
Magnesium	ug/L	5000	SW846 6010B	6530 B	6740 B	89000	424000	792000
Magnesium-DISS	ug/L	5000	SW846 6010B	7090 B	7170 B	81300	440000	813000
Manganese	ug/L	150	SW846 6010B	29.3 B	7.5 B	682	2110	18600
Manganese-DISS	ug/L	150	SW846 6010B	27.8 B	150 U	608	2160	16700
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	151 B	47.2 B	69.4 B
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	135 B	48.6 B	400 U
Nickel	ug/L	40	SW846 6010B	400 U	400 U	41.7 B	400 U	82.6 B
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	32.7 B	400 U	35.8 B
Potassium	ug/L	5000	SW846 6010B	2360 B	2250 B	126000	308000	496000
Potassium-DISS	ug/L	5000	SW846 6010B	3250 B	4220 B	118000	322000	508000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location L				
				Butler County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/12/2009**		**5/14/2009**	**5/18/2009**	**5/27/2009**
Sodium	ug/L	5000	SW846 6010B	46900 B	64800	6290000	17900000	26600000
Sodium-DISS	ug/L	5000	SW846 6010B	49400 B	72000	5630000	18600000	26400000
Strontium	ug/L	50	SW846 6010B	634	206 B	169000 J	738000 J	1620000
Strontium-DISS	ug/L	50	SW846 6010B	580 J	158 B J	151000 J	763000 J	1650000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	200 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	26.9 B	200 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	19.4 B J	500 U	53.7 B	175 B
Titanium-DISS	ug/L	500	SW846 6010B	26.9 B J	500 U	500 U	42.8 B	105 B
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	35.8 B J	34.8 B J	95.6 B	172 B	330 J
Zinc-DISS	ug/L	20	SW846 6010B	75.9 B J	138 B J	79.5 B	147 B	74.5 B
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.25 G U	0.25 G U	0.01 U	0.25 U	0.1 U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.25 G U	0.25 U	0.01 U	0.25 U	0.1 U
Mercury	ug/L	0.2	SW846 7470A	0.054 B J	0.05 B J	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.53 B J	0.57 B J	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	27	5 U	0.81 J	38	770
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	14	5 U	0.78 J	32	670
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	2000 U	10000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	20 U	100 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Acetone	ug/L	20	SW846 8260B	9.8 J	20 U	6 J	17 J	200 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	200 U	1000 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	200 U	1000 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	39	99	260
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Bromoform	ug/L	5	SW846 8260B	50	9.3	5 U	10 U	50 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Chlorobenzene	ug/L	5	SW846 8260B	1.3 J	5 U	5 U	10 U	50 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Ethylbenzene	ug/L	5	SW846 8260B	0.65 J	5 U	1.3 J	17	220
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	86
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Naphthalene	ug/L	5	SW846 8260B	4.6 J	3.8 J	5 U	10 U	50 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U

				Location L				
				Butler County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	5/12/2009		5/14/2009	5/18/2009	5/27/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Tetrachloroethene	ug/L	5	SW846 8260B	2.2 J	5 U	5 U	10 U	50 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	5 U	46	260	1500
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	10 U	50 U
Xylenes (total)	ug/L	15	SW846 8260B	2 J	15 U	15	220	2700
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
1-Naphthylamine	ug/L	10	SW846 8270C	12 U	0.81 J	9.6 U	9.4 U	9.4 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	12 U	9.7 U	1.5 J	9.4 U	9.4 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	58 U	48 U	48 U	47 U	47 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	12 U	9.7 U	2.7 J	4 J	9.4 U
2-Naphthylamine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2-Nitroaniline	ug/L	50	SW846 8270C	58 U	48 U	48 U	47 U	47 U
2-Nitrophenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
2-Picoline	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	12 U	9.7 U	3 J	5.2 J	9.4 U
3-Nitroaniline	ug/L	50	SW846 8270C	58 U	48 U	48 U	47 U	47 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	58 U	48 U	48 U	47 U	47 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
4-Chloroaniline	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
4-Nitroaniline	ug/L	50	SW846 8270C	58 U	48 U	48 U	47 U	47 U
4-Nitrophenol	ug/L	50	SW846 8270C	58 U	48 U	48 U	47 U	47 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	120 U	97 U	96 U	94 U	94 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Acenaphthene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	12 U	1.2 J	9.6 U	9.4 U	9.4 U
Aniline	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Aramite	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Benzidine	ug/L	200	SW846 8270C	230 U	190 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	12 U	16	9.6 U	7.1 J	9.4 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	6.7	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	6.4 J
Butyl benzyl phthalate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Chlorobenzilate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Chrysene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Diethyl phthalate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	3 J	9.4 U
Dimethoate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Dimethyl phthalate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	6.3 J	5.5 J	9.6 U	9.4 U	9.4 U

				Location L				
				Butler County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/12/2009**		**5/14/2009**	**5/18/2009**	**5/27/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Dinoseb	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Diphenylamine	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Fluoranthene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Hexachloroethane	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Hexachloropropene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Isophorone	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Isosafrole	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Nitrobenzene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
o-Toluidine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Parathion	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Pentachlorobenzene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Pentachloroethane	ug/L	20	SW846 8270C	23 U	19 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Pentachlorophenol	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Phenanthrene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	0.62 J
Phenol	ug/L	2	SW846 8270C	2.3 U	1.9 U	5.5	10	1.9 U
Phorate	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Pronamide	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Pyrene	ug/L	2	SW846 8270C	2.3 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Safrole	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Thionazin	ug/L	10	SW846 8270C	12 U	9.7 U	9.6 U	9.4 U	9.4 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.037 J PG
beta-BHC	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.069 PG
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.47 U	0.48 U	NA	NA	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.046 J PG
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.38
Heptachlor	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.047 U	0.048 U	NA	NA	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.094 U	0.096 U	NA	NA	0.095 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	1.9 U	NA	NA	1.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.38 U

				Location L				
				Butler County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/12/2009**		**5/14/2009**	**5/18/2009**	**5/27/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.99 U	0.98 U	NA	NA	0.95 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	13 J
Ethanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	10 UJ	NA	10 UJ	10 UJ	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	NA	100 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	100 UJ	NA	100 UJ	100 UJ	100 UJ
Acids								
Acetic Acid	mg/L	10	SW846 8015	1.5 UJ	NA	7.5 UJ	7.5 UJ	7.5 UJ
Butyric Acid	mg/L	10	SW846 8015	1.6 UJ	NA	8 UJ	8 UJ	8 UJ
Propionic Acid	mg/L	10	SW846 8015	1.7 UJ	NA	8.5 UJ	8.5 UJ	8.5 UJ
Volatile Acids	mg/L	10		NA	NA	NA	NA	290

				Location M				
				McKean County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	5/19/2009	5/19/2009	6/6/2009	6/10/2009	6/19/2009
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	11.4	NA	NA	200
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.0097 B	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.25 J	1.5 J	173	192	268 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	137	36.3	103	10.2
Bromide	mg/L	1	MCAWW 300.0A	2 G U	10 G U	NA	NA	1190
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	10 U	490	10700	7600	9180
Chloride	mg/L	1	MCAWW 300.0A	4.1 B	29.9 B	NA	NA	151000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	1.4	84.3	77	33.1	5
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.009 B	2.5 G U	2.5 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	18	26	NA	NA	95000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.24 B	2.5 U	2.5 G U	2.5 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.24	0.24	0.01 B	0.049 B J	0.11
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.21 B	2.5 G U	NA	25.9	55.8
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.6 U	33.2	NA	NA	7.4
Specific Conductance	umhos/cm	--	MCAWW 120.1	54.8 J	177 J	NA	NA	710000 J
Sulfate	mg/L	1	MCAWW 300.0A	3.8 B	2.9 B	50 G U	50 G U	50 G U
TOC	mg/L	1	SM20 5310B	1.8	86.6	2.2	3.7	1.2
Total Alkalinity	mg/L	5	SM18 2320 B	6.2 J	9.6 J	NA	NA	26.1 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	51	371	NA	NA	228000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	2.2 B	31.3	158	178	199
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.1 U	0.096 B	1.4	0.1 U	2.2
Total Suspended Solids	mg/L	4	SM20 2540D	4 U	110	NA	NA	40.8
Turbidity	NTU	--	MCAWW 180.1	4.3	254	NA	NA	67.8
Cyanide, Total	ug/L	10	SW846 9012A	10 U	12.5	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	1.6 B	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	7.1	6.2	5.9	7.2	5.8
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.01 U	0.0069 B	0.007 B	0.29	0.006 B
Sulfite	mg/L	1	SM4500-SO3 B	6	12	24.4	11.6	10.4
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.05 U	0.05	0.241	0.291	0.198
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	122 B J	180 B J	165 B	131 B	158 B
Aluminum-DISS	ug/L	200	SW846 6010B	160 B	239 B	289 B J	188 B J	210 B J
Antimony	ug/L	10	SW846 6010B	14.6 B	100 U	13.9 B	17.3 B	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	16.9 B	20.9 B	15.7 B
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Barium	ug/L	200	SW846 6010B	271 B	579 B	1450000	1730000	1970000
Barium-DISS	ug/L	200	SW846 6010B	274 B	621 B	1430000	1760000	1990000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	2000 U	2000 U	12000	10500	10000
Boron-DISS	ug/L	2000	SW846 6010B	2000 U	2000 U	11800	11000	9740
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	1.5 B	1.5 B
Calcium	ug/L	5000	SW846 6010B	4880 B J	6690 B J	19700000 J	23500000 J	26400000 J
Calcium-DISS	ug/L	5000	SW846 6010B	3690 B	6080 B	19700000 J	23800000 J	26200000 J
Chromium	ug/L	5	SW846 6010B	50 U	50 U	15.7 B	50 U	50 U
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	5000 U	5000 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	5000 U	5000 U	5000 U
Copper	ug/L	25	SW846 6010B	250 U	44.5 B	255	78.9 B	250 U
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	81.1 B	57.7 B	250 U
Iron	ug/L	100	SW846 6010B	605 B	497 B	67200	53100	61000
Iron-DISS	ug/L	100	SW846 6010B	543 B	460 B	37600	44800	53300
Lead	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	30 U
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	30 U
Lithium	ug/L	500	SW846 6010B	500 U	500 U	129000	137000	155000
Lithium-DISS	ug/L	500	SW846 6010B	500 U	28.1 B	126000 J	154000 J	158000 J
Magnesium	ug/L	5000	SW846 6010B	1080 B	1250 B	1320000	1550000	1800000
Magnesium-DISS	ug/L	5000	SW846 6010B	1440 B	1460 B	1310000	1600000	1740000
Manganese	ug/L	150	SW846 6010B	134 B	127 B	5960	7040	8560
Manganese-DISS	ug/L	150	SW846 6010B	127 B	130 B	5850	7170	8420
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	48.2 B	400 U	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	34.7 B J	400 U	400 U
Nickel	ug/L	40	SW846 6010B	400 U	19.5 B	400 U	400 U	400 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	400 U	400 U	400 U
Potassium	ug/L	5000	SW846 6010B	50000 U	50000 U	923000	849000	972000 E
Potassium-DISS	ug/L	5000	SW846 6010B	50000 U	50000 U	1000000	1010000	1010000 E
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location M				
				McKean County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**5/19/2009**	**5/19/2009**	**6/6/2009**	**6/10/2009**	**6/19/2009**
Sodium	ug/L	5000	SW846 6010B	4200 B	32600 B	20600000	17200000	23200000
Sodium-DISS	ug/L	5000	SW846 6010B	3600 B J	34200 B J	31500000	31300000	30400000
Strontium	ug/L	50	SW846 6010B	352 B	768	4330000	4830000	5570000 E
Strontium-DISS	ug/L	50	SW846 6010B	340 B J	816 J	4280000 J	4920000 J	5350000 J E
Thallium	ug/L	10	SW846 6010B	100 U	100 U	27.2 B	100 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	29.8 B	500 U	500 U	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	56.7 B J	50.2 B J	391 J	270 J	223 J
Zinc-DISS	ug/L	20	SW846 6010B	41.1 B J	40.6 B J	314 J	240 J	143 B J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.01 G U	0.5 G U	0.5 G U	1 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.05 G U	0.5 G U	0.5 G U	1 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	1.6 J	4 J	0.98 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	1.2 J	3.3 J	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	3.6 J	5 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	20 U	20 U	21	18 J	18 J
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	3.5 J	3.2 J	6.2
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	0.63 J	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	0.53 J	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U

				Location M				
				McKean County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	5/19/2009	5/19/2009	6/6/2009	6/10/2009	6/19/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	5 U	3.8 J	4.8 J	3.4 J
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	15 U	3.2 J	6 J	6.2 J
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	48 U	50 U	48 U	47 U	48 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	9.6 U	10 U	0.28 J	0.26 J	9.6 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2-Nitroaniline	ug/L	50	SW846 8270C	48 U	50 U	48 U	47 U	48 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
2-Picoline	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	0.69 J	9.6 U
3-Nitroaniline	ug/L	50	SW846 8270C	48 U	50 U	48 U	47 U	48 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	48 U	50 U	48 U	47 U	48 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
4-Nitroaniline	ug/L	50	SW846 8270C	48 U	50 U	48 U	47 U	48 U
4-Nitrophenol	ug/L	50	SW846 8270C	48 U	50 U	48 U	47 U	48 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	96 U	100 U	95 U	94 U	96 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	0.8 J	9.6 U
Aniline	ug/L	10	SW846 8270C	9.6 U	10 U	2.2 J	2.1 J	2 J
Aramite	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Benzidine	ug/L	200	SW846 8270C	190 U	200 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	6 J	10 U	2.8 J	9.4 U	2.5 J
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.6 U	10 U	2.4 J B	9.4 U	9.6 U
Dimethoate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.6 U	10 U	1.3 J	9.4 U	9.6 U

				Location M				
				McKean County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	5/19/2009	5/19/2009	6/6/2009	6/10/2009	6/19/2009
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Dinoseb	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Hexachloroethane	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Hexachloropropene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Isophorone	ug/L	10	SW846 8270C	2.2 J	10 U	9.5 U	9.4 U	9.6 U
Isosafrole	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
o-Toluidine	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Parathion	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	20 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Phenol	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Phorate	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Pronamide	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	2.6 J	2 J	140	100	94
Safrole	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Thionazin	ug/L	10	SW846 8270C	9.6 U	10 U	9.5 U	9.4 U	9.6 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	0.49 U	NA	NA	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.026 J
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	0.05	NA	NA	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Heptachlor	ug/L	0.05	SW846 8081A	0.8 PG	0.84 PG	NA	NA	0.048 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	0.049 U	NA	NA	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	0.098 U	NA	NA	0.096 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	2 U	NA	NA	1.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.39 U	NA	NA	0.38 U

				Location M				
				McKean County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	5/19/2009	5/19/2009	6/6/2009	6/10/2009	6/19/2009
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	0.97 U	NA	NA	1 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	10 UJ	20 UJ	23 J	21 J	16 J
n-Propanol	mg/L	10	SW846 8015	10 UJ	20 UJ	10 UJ	10 UJ	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	200 UJ	100 UJ	100 UJ	100 U
Propylene glycol	mg/L	50	SW846 8015	100 UJ	200 UJ	100 UJ	100 UJ	100 U
Acids								
Acetic Acid	mg/L	10	SW846 8015	1 U	100 UJ	10 UJ	500 UJ	10 UJ
Butyric Acid	mg/L	10	SW846 8015	1 U	100 UJ	10 UJ	500 UJ	10 UJ
Propionic Acid	mg/L	10	SW846 8015	1 U	100 UJ	10 UJ	500 UJ	10 UJ
Volatile Acids	mg/L	10		57	2300	1100	1200	52000

				Location N			
				Potter County, PA			
				Supply Water	Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	**07/14/09**	**07/14/09**	**7/15/2009**	**7/19/2009**
Conventional Analyses							
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	5 U
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.08	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.3 J	83.3 J	83.6 J	182
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	166	73.2	70.9
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	0.9	165	608
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	11.6 J	734 J	1760 J	3200
Chloride	mg/L	1	MCAWW 300.0A	8.3	132	17500	67200
Dissolved Organic Carbon	mg/L	--	SM20 5310B	2.5	218	20.2	32
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.05 U	0.5 G U	1.2 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	26	50	5100	30000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.17	0.12	0.5 G U	1.2 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.14	0.23	0.45	0.14
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.05 U	0.22	4.7	13.2
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.6 U	4.6 U	4.8 U	5.1
Specific Conductance	umhos/cm	--	MCAWW 120.1	91.6 J	1350 J	73600 J	273000 J
Sulfate	mg/L	1	MCAWW 300.0A	6.9 J	165 J	110 J	7.3 B J
TOC	mg/L	1	SM20 5310B	3 J	208 J	28.1 J	37.8
Total Alkalinity	mg/L	5	SM18 2320 B	16.2 J	154 J	254 J	145 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	35	735	31800	116000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	3 U	142	101	137
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.1 U	15.4	4.1	0.71
Total Suspended Solids	mg/L	4	SM20 2540D	2 B	14.4	112	171
Turbidity	NTU	--	MCAWW 180.1	2.9	8.8	50.4	328
Cyanide, Total	ug/L	10	SW846 9012A	85.9	5.4 B	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	7.4	8.2	7.4	6.6
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.01 U	0.01 U	0.014	0.017
Sulfite	mg/L	1	SM4500-SO3 B	NA	6.80	6.80	12.8
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	NA	0.0809	0.0969	0.0657
Total and Dissolved Metals							
Aluminum	ug/L	200	SW846 6010B	2000 U	2000 U	2000 U	360 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	2000 U	2000 U	208 B J
Antimony	ug/L	10	SW846 6010B	14.2 B J	21.6 B J	34.9 B J	19.4 B
Antimony-DISS	ug/L	10	SW846 6010B	17.2 B J	100 U	41.5 B J	18.5 B
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	46 B	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	48.8 B	100 U
Barium	ug/L	200	SW846 6010B	309 B J	1420 B J	271000 J	3530000
Barium-DISS	ug/L	200	SW846 6010B	290 B	3400	272000	3170000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	36.4 B J	40700 J	6680 J	8360
Boron-DISS	ug/L	2000	SW846 6010B	28.2 B J	44700 J	6540 J	7710
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Calcium	ug/L	5000	SW846 6010B	7450 B	15600 B	1400000	8520000 J
Calcium-DISS	ug/L	5000	SW846 6010B	6730 B	16100 B	1340000	7930000 J
Chromium	ug/L	5	SW846 6010B	50 U	50 U	36.8 B	44.7 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	29.4 B	27.2 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	500 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	5000 U
Copper	ug/L	25	SW846 6010B	250 U	71.3 B	57.1 B	64.8 B
Copper-DISS	ug/L	25	SW846 6010B	250 U	87.2 B	36.6 B	250 U
Iron	ug/L	100	SW846 6010B	1000 U	834 B	13900	46900
Iron-DISS	ug/L	100	SW846 6010B	1000 U	688 B	10900	6490
Lead	ug/L	3	SW846 6010B	30 U	30 U	55.2	20.6 B
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	48.8	30 U
Lithium	ug/L	500	SW846 6010B	500 U	180 B J	26000 J	106000
Lithium-DISS	ug/L	500	SW846 6010B	500 U	196 B	24600	97200 J
Magnesium	ug/L	5000	SW846 6010B	1100 B	1740 B	112000	678000
Magnesium-DISS	ug/L	5000	SW846 6010B	1070 B	1790 B	108000	629000
Manganese	ug/L	150	SW846 6010B	26.9 B	18.3 B	725	2590
Manganese-DISS	ug/L	150	SW846 6010B	150 U	17 B	683	2360
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	36.6 B	16.6 B J
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	34.3 B	400 U
Nickel	ug/L	40	SW846 6010B	400 U	400 U	42.9 B	19.1 B
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	35 B	400 U
Potassium	ug/L	5000	SW846 6010B	2660 B	48300 B	115000	339000
Potassium-DISS	ug/L	5000	SW846 6010B	50000 U	50700	110000	304000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U

				Location N			
				Potter County, PA			
				Supply Water	Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	**07/14/09**	**07/14/09**	**7/15/2009**	**7/19/2009**
Sodium	ug/L	5000	SW846 6010B	8930 B J	74400 J	8210000 J	31100000
Sodium-DISS	ug/L	5000	SW846 6010B	8100 B	80000	7800000	29000000
Strontium	ug/L	50	SW846 6010B	204 B J	3020 J	388000 J	2980000 J
Strontium-DISS	ug/L	50	SW846 6010B	187 B J	3150 J	368000 J	2690000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	28.3 B	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	37.8 B	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	500 U	23.4 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	29.3 B	44.7 B
Zinc	ug/L	20	SW846 6010B	54.6 B J	75.5 B J	617 J	241 J
Zinc-DISS	ug/L	20	SW846 6010B	27.2 B J	80.7 B J	538 J	262 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.01 U	0.5 U	0.5 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.0062 B	0.37 B	0.5 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	4.2 J	25 U	0.54 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	3.4 J	25 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	5000 U	5000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	25 U	25 U	3.4 J
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	50 U	50 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	25 U	25 U	0.65 J
Acetone	ug/L	20	SW846 8260B	20 U	170	90 J	210
Acrolein	ug/L	100	SW846 8260B	100 U	500 U	500 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	500 U	500 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	25 U	5.5 J	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U

				Location N			
				Potter County, PA			
				Supply Water	Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	07/14/09	07/14/09	7/15/2009	7/19/2009
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	25 U	25 U	0.91 J
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	25 U	25 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	25 J	75 U	4.7 J
Semi-Volatile Organics							
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.5 U	0.39 J	9.4 U	9.4 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	48 U	48 U	47 U	47 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	2.5	0.41 J
2-Methylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	0.2 J	9.4 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
2-Picoline	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	0.33 J	9.4 U
3-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
4-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U
4-Nitrophenol	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	95 U	95 U	94 U	94 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	0.29 J	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.5 U	9.5 U	0.82 J	9.4 U
Aniline	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Aramite	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Benzidine	ug/L	200	SW846 8270C	190 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	9.7	9.1 J	6.5 J	5.8 J
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	1.2 J	9.4 U
Dimethoate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	9.5 U	0.29 J	0.54 J	0.61 J

				Location N			
				Potter County, PA			
				Supply Water	Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	**07/14/09**	**07/14/09**	**7/15/2009**	**7/19/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Dinoseb	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	1.9 U	0.45 J	0.097 J
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Hexachloroethane	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Hexachloropropene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Isophorone	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Isosafrole	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
o-Toluidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Parathion	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	0.89 J	1.9 U
Phenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U
Phorate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Pronamide	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	0.18 J	1.9 U
Pyridine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Safrole	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Thionazin	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA
Organochlorine Pesticides							
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Aldrin	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
beta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	0.48 U	NA	NA
delta-BHC	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Endrin	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Heptachlor	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.048 U	0.048 U	NA	NA
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	0.095 U	NA	NA
Toxaphene	ug/L	2	SW846 8081A	1.9 U	1.9 U	NA	NA
PCBs							
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA

				Location N			
				Potter County, PA			
				Supply Water	Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	**07/14/09**	**07/14/09**	**7/15/2009**	**7/19/2009**
Organophosphorus Pesticides							
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	0.95 U	NA	NA
Alcohols							
2-Propanol	mg/L	10	SW846 8015	NA	10 UJ	10 UJ	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	NA	10 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	NA	10 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	NA	10 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	NA	10 UJ	10 UJ	10 UJ
Glycols							
Ethylene Glycol	mg/L	50	SW846 8015	NA	500 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	NA	500 UJ	100 UJ	100 UJ
Acids							
Acetic Acid	mg/L	10	SW846 8015	NA	15	22 J	23
Butyric Acid	mg/L	10	SW846 8015	NA	1 U	2 UJ	1 U
Propionic Acid	mg/L	10	SW846 8015	NA	1 U	2 UJ	1 U
Volatile Acids	mg/L	10		NA	20	200	350

				Location O			
				Susquehanna County			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**7/1/2009**	**7/1/2009**	**7/6/2009**	**07/15/2009**
Conventional Analyses							
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	48.7	473
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 NR U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	10	52	135	237 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	924	606	1520	725
Bromide	mg/L	1	MCAWW 300.0A	20 G U	69.8	885 J	872
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	2420	1480	7390	10000 J
Chloride	mg/L	1	MCAWW 300.0A	1060	7860	86800	98300 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	558 J	271	240	695
Fluoride	mg/L	1	MCAWW 300.0A	5 G U	2.5 G U	2.5 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	570	25000	36000	54000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	5 G U	2.5 G U	2.5 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.1	0.18	0.1 U	0.1 U
Nitrite as N	mg/L	0.05	MCAWW 300.0A	5 G U	6.7	19.9 J	25.9
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	255	4.6 U	40.7	17.5
Specific Conductance	umhos/cm	--	MCAWW 120.1	4000 J	30700 J	261000 J	428000 J
Sulfate	mg/L	1	MCAWW 300.0A	100 G U	50 G U	50 G U	50 G U
TOC	mg/L	1	SM20 5310B	575 J	308	237	509 J
Total Alkalinity	mg/L	5	SM18 2320 B	66.1 J	114 J	94.2 J	95.1 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	2670	17400	125000	186000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	89.9	88.8	147	180
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.5	21.8	2.3	0.038 B
Total Suspended Solids	mg/L	4	SM20 2540D	5290	4 U	302	324
Turbidity	NTU	--	MCAWW 180.1	505	152	54.6	244
Cyanide, Total	ug/L	10	SW846 9012A	10 U	21.5	5.2 B	1.9 B
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3.2	3 U
pH	No Units	--	SW846 9040	7.2	6.5	6.5	6.6
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.77 J	0.036 J	0.15 J	0.13
Sulfite	mg/L	1	SM4500-SO3 B	47.2	26.8	16.8	73.6
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.05 U	0.198	0.0897	4.60
Total and Dissolved Metals							
Aluminum	ug/L	200	SW846 6010B	1030 B	1120 B	536 B	845 B
Aluminum-DISS	ug/L	200	SW846 6010B	162 B J	274 B	172 B J	912 B
Antimony	ug/L	10	SW846 6010B	100 U	15.8 B	100 U	48.8 B J
Antimony-DISS	ug/L	10	SW846 6010B	100 U	15 B	100 U	45 B J
Arsenic	ug/L	10	SW846 6010B	100 U	48 B	100 U	76.6 B
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	28 B	100 U	86.5 B
Barium	ug/L	200	SW846 6010B	72200	387000	13900000	12500000 J
Barium-DISS	ug/L	200	SW846 6010B	62300	447000	12700000	13600000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	1190 B	808 B	3570	2520 J
Boron-DISS	ug/L	2000	SW846 6010B	1310 B	944 B	3200	2760 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	3.1 B
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	3.3 B
Calcium	ug/L	5000	SW846 6010B	123000 J	676000 J	9250000 J	10300000
Calcium-DISS	ug/L	5000	SW846 6010B	120000 J	800000 J	8200000 J	11200000
Chromium	ug/L	5	SW846 6010B	17.3 B	37.5 B	33.4 B	31.2 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	12.9 B	27.7 B	19.4 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	25000 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	25000 U	5000 U
Copper	ug/L	25	SW846 6010B	79.4 B	250 U	250 U	54.8 B
Copper-DISS	ug/L	25	SW846 6010B	34.1 B	250 U	250 U	250 U
Iron	ug/L	100	SW846 6010B	7400	20900 J	43500	77500
Iron-DISS	ug/L	100	SW846 6010B	954 B	18000	38400	58700
Lead	ug/L	3	SW846 6010B	19.4 B	30 U	30 U	60 U
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	30 U	60 U
Lithium	ug/L	500	SW846 6010B	1800	14200	132000	147000 J
Lithium-DISS	ug/L	500	SW846 6010B	1930	17300	125000	162000
Magnesium	ug/L	5000	SW846 6010B	14700 B	65700	691000	794000
Magnesium-DISS	ug/L	5000	SW846 6010B	14800 B	76400	610000	858000
Manganese	ug/L	150	SW846 6010B	288	760 J	5550	7100
Manganese-DISS	ug/L	150	SW846 6010B	196	823	4960	7630
Molybdenum	ug/L	400	SW846 6010B	50.6 B J	25.9 B	400 U	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	58.4 B	24.1 B	400 U	400 U
Nickel	ug/L	40	SW846 6010B	400 U	48.3 B	400 U	800 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	39.5 B	400 U	800 U
Potassium	ug/L	5000	SW846 6010B	7840 B	33500 B	353000	233000
Potassium-DISS	ug/L	5000	SW846 6010B	6850 B	39900 B	284000	253000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	34 B
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U

				Location O			
				Susquehanna County			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**7/1/2009**	**7/1/2009**	**7/6/2009**	**07/15/2009**
Sodium	ug/L	5000	SW846 6010B	589000	3920000	34100000	36800000 J
Sodium-DISS	ug/L	5000	SW846 6010B	658000	4670000	30900000	39100000
Strontium	ug/L	50	SW846 6010B	27000 J E	196000 J	2960000 J	3520000 J
Strontium-DISS	ug/L	50	SW846 6010B	28200 J E	233000 J	2660000 J	3580000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	200 U
Thallium-DISS	ug/L	10	SW846 6010B	29.5 B	100 U	38 B	200 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	33.8 B	500 U	126 B
Titanium-DISS	ug/L	500	SW846 6010B	500 U	48.6 B	500 U	152 B
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	33.4 B	50 U
Zinc	ug/L	20	SW846 6010B	1610 E	244	211	229 J
Zinc-DISS	ug/L	20	SW846 6010B	924	287 J	183 B	127 B J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.1 U	0.1 U	2 G U	13.2
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.05 U	0.1 U	2 G U	2 U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.17 B	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	67	59	5 U	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	7.7 J	6.7 J	5 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	10000 U	5000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	50 U	17 J	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	100 U	50 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	130 J	69 J	20 U	20 U
Acrolein	ug/L	100	SW846 8260B	1000 U	500 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	1000 U	500 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	820	720	0.5 J	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U

				Location O			
				Susquehanna County			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**7/1/2009**	**7/1/2009**	**7/6/2009**	**07/15/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	19 J	25 U	0.94 J	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	50 U	25 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	46 J	26 J	15 U	15 U
Semi-Volatile Organics							
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
1-Naphthylamine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	940 U	470 U	49 U	4700 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
2-Chlorophenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	260	52	2 U	190 U
2-Methylphenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2-Naphthylamine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2-Nitroaniline	ug/L	50	SW846 8270C	940 U	470 U	49 U	4700 U
2-Nitrophenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
2-Picoline	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
3-Nitroaniline	ug/L	50	SW846 8270C	940 U	470 U	49 U	4700 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	940 U	470 U	49 U	4700 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
4-Chloroaniline	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
4-Nitroaniline	ug/L	50	SW846 8270C	940 U	470 U	49 U	4700 U
4-Nitrophenol	ug/L	50	SW846 8270C	940 U	470 U	49 U	4700 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	1900 U	940 U	98 U	9400 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Acenaphthene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Acenaphthylene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Acetophenone	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Aniline	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Aramite	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Benzidine	ug/L	200	SW846 8270C	3800 U	1900 U	200 U	19000 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	38 U	19 U	2 U	190 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	38 U	19 U	2 U	190 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Benzyl alcohol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	190 U	94 U	2.5 J	940 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Chlorobenzilate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Chrysene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Diallate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Dibenzofuran	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Diethyl phthalate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Dimethoate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Dimethyl phthalate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U

				Location O			
				Susquehanna County			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**7/1/2009**	**7/1/2009**	**7/6/2009**	**07/15/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Dinoseb	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Diphenylamine	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Disulfoton	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Fluoranthene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Fluorene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	38 U	19 U	2 U	190 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	190 U	94 U	9.8 U	940 U
Hexachloroethane	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Hexachloropropene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Isodrin	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Isophorone	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Isosafrole	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Nitrobenzene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
o-Toluidine	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Parathion	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Pentachlorobenzene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Pentachloroethane	ug/L	20	SW846 8270C	380 U	190 U	20 U	1900 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Pentachlorophenol	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Phenanthrene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Phenol	ug/L	2	SW846 8270C	38 U	3.5 J	2 U	190 U
Phorate	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Pronamide	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Pyrene	ug/L	2	SW846 8270C	38 U	19 U	2 U	190 U
Pyridine	ug/L	10	SW846 8270C	190 U	94 U	1.1 J	940 U
Safrole	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Thionazin	ug/L	10	SW846 8270C	190 U	94 U	9.8 U	940 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA
Organochlorine Pesticides							
4,4'-DDD	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.11 PG	NA	NA	0.048 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.51 U	NA	NA	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Heptachlor	ug/L	0.05	SW846 8081A	0.065 PG	NA	NA	0.048 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.051 U	NA	NA	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.1 U	NA	NA	0.095 U
Toxaphene	ug/L	2	SW846 8081A	2 U	NA	NA	1.9 U
PCBs							
Aroclor 1016	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.41 U	NA	NA	0.38 U

				Location O			
				Susquehanna County			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**7/1/2009**	**7/1/2009**	**7/6/2009**	**07/15/2009**
Organophosphorus Pesticides							
Ethyl parathion	ug/L	0.4	SW846 8141A	1 U	NA	NA	4.8 U
Alcohols							
2-Propanol	mg/L	10	SW846 8015	20 UJ	10 UJ	10 UJ	10 UJ
Butyl alcohol	mg/L	10	SW846 8015	20 UJ	10 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	120 J	230 J	110 J	39 J
Methanol	mg/L	10	SW846 8015	20 UJ	10 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	20 UJ	10 UJ	10 UJ	10 UJ
Glycols							
Ethylene Glycol	mg/L	50	SW846 8015	200 UJ	200 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	200 UJ	200 UJ	100 UJ	100 UJ
Acids							
Acetic Acid	mg/L	10	SW846 8015	50 UJ	1 U	1 U	20 UJ
Butyric Acid	mg/L	10	SW846 8015	50 UJ	1 U	1 U	20 UJ
Propionic Acid	mg/L	10	SW846 8015	50 UJ	1 U	1 U	20 UJ
Volatile Acids	mg/L	10		200	200	300	800

				Location P				
				Butler County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	7/14/2009	7/15/2009	7/20/2009	7/29/2009	10/29/2009
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	28.8	5 U	253
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.28 J	17.4 J	107 J	78 J	134 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	4.2	391	1260	752	525
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	60	477	487	678
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	35.3 J	1180 J	4820	3170	4440
Chloride	mg/L	1	MCAWW 300.0A	152 J	6450	43900	45600	66300 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	5	302	240	237	121
Fluoride	mg/L	1	MCAWW 300.0A	0.27	1.3	1.2 G U	1.2 G U	5 U
Hardness, as CaCO3	mg/L	5	SM20 2340C	194	2200	24000	21000	53000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.52	0.75	1.2 G U	1.2 G U	5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.47	0.56	0.46	0.83	0.031 B
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.11	2.9	11.8	9.4	5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	5 U	4.9 U	57.7	5 U	4.6 U
Specific Conductance	umhos/cm	--	MCAWW 120.1	726 J	24600 J	160000 J	175000 J	231000
Sulfate	mg/L	1	MCAWW 300.0A	73.7 J	65.6 J	53.1 J	48.7	64 B J
TOC	mg/L	1	SM20 5310B	5.6 J	292 J	287	226	297
Total Alkalinity	mg/L	5	SM18 2320 B	38.6 J	255 J	93.2 J	121 J	80.5 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	401	11600	78600	63900	117000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	2.3 B	61.6	92.9	42.2	121
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.1 U	0.17	0.11	0.14	0.2 G U
Total Suspended Solids	mg/L	4	SM20 2540D	10	18	10.8	79.2	112
Turbidity	NTU	--	MCAWW 180.1	3.4	15.7	486	708	416
Cyanide, Total	ug/L	10	SW846 9012A	10 U	9.8 B	10 U	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	3 U	3 U	3 U
pH	No Units	--	SW846 9040	7.3	7.6	6.3	6.6	6.2
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.01 U	0.027	0.037	0.02	0.04
Sulfite	mg/L	1	SM4500-SO3 B	10	8.40	2.5 U	7.20	NA
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.05 U	0.178	0.0777	0.125	NA
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	2000 U	2000 U	378 B J	529 B J	225 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	227 B	435 B J	301 B J	208 B J
Antimony	ug/L	10	SW846 6010B	100 U	25.3 B J	100 U	14.9 B	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	19.3 B J	15.2 B	100 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Barium	ug/L	200	SW846 6010B	173 B J	2590 J	28900	43900	56000
Barium-DISS	ug/L	200	SW846 6010B	187 B	2690	41000	72000	63200
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	80.8 B J	6510 J	21000	20600	24400
Boron-DISS	ug/L	2000	SW846 6010B	90.2 B J	7200 J	22900	21100	27800 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	1.6 B	50 U
Calcium	ug/L	5000	SW846 6010B	63200	616000	6160000 J	5700000 J	8370000
Calcium-DISS	ug/L	5000	SW846 6010B	69900	655000	6450000 J	5780000 J	9390000
Chromium	ug/L	5	SW846 6010B	50 U	33.2 B	44.2 B	98.3	52.2
Chromium-DISS	ug/L	5	SW846 6010B	50 U	26.4 B	45 B	75.5	48.1 B
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	5.3 B	500 U	500 U	500 U
Copper	ug/L	25	SW846 6010B	250 U	250 U	250 U	250 U	104 B
Copper-DISS	ug/L	25	SW846 6010B	32.1 B	250 U	250 U	250 U	81.9 B
Iron	ug/L	100	SW846 6010B	1000 U	5240	28800	67300	140000
Iron-DISS	ug/L	100	SW846 6010B	1000 U	5120	30300	21600	111000
Lead	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	105
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	30 U
Lithium	ug/L	500	SW846 6010B	500 U	7900 J	40200	56500	62900
Lithium-DISS	ug/L	500	SW846 6010B	500 U	8300	43000 J	57400 J	71000 J
Magnesium	ug/L	5000	SW846 6010B	9410 B	65500	658000	613000	908000
Magnesium-DISS	ug/L	5000	SW846 6010B	10400 B	70100	715000	632000	1030000
Manganese	ug/L	150	SW846 6010B	23.7 B	369	1300	2240	3150
Manganese-DISS	ug/L	150	SW846 6010B	15.4 B	397	1390	2240	3540
Molybdenum	ug/L	400	SW846 6010B	400 U	72.4 B	44.4 B J	87.8 B J	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	75.4 B	47 B	93.2 B	400 U
Nickel	ug/L	40	SW846 6010B	21.1 B	28.6 B	400 U	25.2 B	30.9 B
Nickel-DISS	ug/L	40	SW846 6010B	16.6 B	30.8 B	400 U	400 U	27.4 B
Potassium	ug/L	5000	SW846 6010B	4590 B	99500	656000 E	614000	821000 E
Potassium-DISS	ug/L	5000	SW846 6010B	4010 B	105000	723000 E	628000	952000 E
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location P				
				Butler County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**7/14/2009**	**7/15/2009**	**7/20/2009**	**7/29/2009**	**10/29/2009**
Sodium	ug/L	5000	SW846 6010B	56700 J	3040000 J	18000000	21100000	25100000
Sodium-DISS	ug/L	5000	SW846 6010B	62000	3230000	18700000	21000000	28200000 J
Strontium	ug/L	50	SW846 6010B	417 B J	93100 J	1240000 J E	1210000 J	1790000 J E
Strontium-DISS	ug/L	50	SW846 6010B	464 B J	98300 J	1320000 J E	1240000 J	2020000 J E
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	33.9 B	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	23.6 B	41 B	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	21.4 B	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	26.4 B	44.2 B	98.3	48.1 B
Zinc	ug/L	20	SW846 6010B	72.3 B J	184 B J	150 B J	90.3 B J	424 J
Zinc-DISS	ug/L	20	SW846 6010B	45.3 B J	154 B J	245 J	105 B J	236 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.01 U	0.25 G U	0.1 G U	0.25 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.0068 B	0.25 G U	0.1 G U	0.25 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	0.79 J	1.4 J	840	710	84
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	10 U	940	770	79
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	2000 U	100000 U	100000 U	5000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
2-Butanone	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	20 U	1000 U	1000 U	50 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Acetone	ug/L	20	SW846 8260B	12 J	320	5200	2000 U	190
Acrolein	ug/L	100	SW846 8260B	100 U	200 U	10000 U	10000 U	500 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	200 U	10000 U	10000 U	500 U
Benzene	ug/L	5	SW846 8260B	5 U	140	2000	1100	200
Benzyl chloride	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Bromodichloromethane	ug/L	5	SW846 8260B	2.2 J	10 U	500 U	500 U	25 U
Bromoform	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Bromomethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	230 J	25 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Chloroethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Chloroform	ug/L	5	SW846 8260B	2.4 J	10 U	500 U	500 U	25 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5.9 J	500 U	500 U	25 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Dibromochloromethane	ug/L	5	SW846 8260B	2.1 J	10 U	500 U	500 U	25 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	2.5 J	650	470 J	46
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	10 U	160 J	120 J	25 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Naphthalene	ug/L	5	SW846 8260B	0.55 J	10 U	500 U	500 U	25 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	90 J	25 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Styrene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U

				Location P				
				Butler County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**7/14/2009**	**7/15/2009**	**7/20/2009**	**7/29/2009**	**10/29/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	0.93 J	92	6200	5200	580
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	10 U	500 U	500 U	25 U
Xylenes (total)	ug/L	15	SW846 8260B	5.1 J	32	6500	5400	530
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	12
2,4-Dinitrophenol	ug/L	40	SW846 8270C	47 U	48 U	98 U	47 U	47 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	15
2-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2-Nitroaniline	ug/L	50	SW846 8270C	47 U	48 U	98 U	47 U	47 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
2-Picoline	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.4 U	2.5 J	20 U	9.4 U	16
3-Nitroaniline	ug/L	50	SW846 8270C	47 U	48 U	98 U	47 U	47 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	47 U	48 U	98 U	47 U	47 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
4-Nitroaniline	ug/L	50	SW846 8270C	47 U	48 U	98 U	47 U	47 U
4-Nitrophenol	ug/L	50	SW846 8270C	47 U	48 U	98 U	47 U	47 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	94 U	97 U	200 U	94 U	94 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.4 U	0.95 J	20 U	9.4 U	16
Aniline	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Aramite	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Benzidine	ug/L	200	SW846 8270C	190 U	190 U	390 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	4.2 J	5.9 J	16 J	4.6 J	9.4 U
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Diethyl phthalate	ug/L	10	SW846 8270C	0.49 J	0.51 J	20 U	9.4 U	9.4 U
Dimethoate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	0.6 J	0.46 J	0.84 J	9.4 U	9.4 U

				Location P				
				Butler County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**7/14/2009**	**7/15/2009**	**7/20/2009**	**7/29/2009**	**10/29/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.7 U	15 J	9.4 U	9.4 U
Dinoseb	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Hexachloroethane	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Hexachloropropene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Isophorone	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Isosafrole	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
o-Toluidine	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Parathion	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	19 U	39 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	1.9 U
Phenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	3.9 U	1.9 U	21
Phorate	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Pronamide	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	0.28 J	3.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	9.4 U	360	470	220	340
Safrole	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Thionazin	ug/L	10	SW846 8270C	9.4 U	9.7 U	20 U	9.4 U	9.4 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Aldrin	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
beta-BHC	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.47 U	NA	NA	0.5 U	0.47 U
delta-BHC	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Dieldrin	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Endrin	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Heptachlor	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.047 U	NA	NA	0.05 U	0.047 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.094 U	NA	NA	0.1 U	0.094 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	NA	NA	2 U	1.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.4 U	0.38 U

				Location P				
				Butler County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**7/14/2009**	**7/15/2009**	**7/20/2009**	**7/29/2009**	**10/29/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.97 U	NA	NA	0.95 U	0.95 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ	NA
Butyl alcohol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ	NA
Ethanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ	NA
Methanol	mg/L	10	SW846 8015	10 UJ	190 J	160 J	140 J	NA
n-Propanol	mg/L	10	SW846 8015	10 UJ	10 UJ	10 UJ	10 UJ	NA
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	100 UJ	100 UJ	100 UJ	100 UJ	NA
Propylene glycol	mg/L	50	SW846 8015	100 UJ	100 UJ	100 UJ	100 UJ	NA
Acids								
Acetic Acid	mg/L	10	SW846 8015	1 U	1 U	20 UJ	10 UJ	NA
Butyric Acid	mg/L	10	SW846 8015	1 U	1 U	20 UJ	10 UJ	NA
Propionic Acid	mg/L	10	SW846 8015	1 U	1 U	20 UJ	10 UJ	NA
Volatile Acids	mg/L	10		20	80	250	150	NA

				Location Q				
				Westmoreland County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/30/2009**	**7/1/2009**	**7/6/2009**	**7/15/2009**	**10/27/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	63.2	698
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 NR U	0.01 NR U	0.01 NR U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	1.8	16.1	65.4	102 J	215 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	121	184	144	98.1	121
Bromide	mg/L	1	MCAWW 300.0A	4.5	87.9	310	720	1090
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	1770	1080	1850	14000 J	7080
Chloride	mg/L	1	MCAWW 300.0A	78.1 J	8960 J	33500	71500	131000
Dissolved Organic Carbon	mg/L	--	SM20 5310B	467	341 J	160	25.8	18.4
Fluoride	mg/L	1	MCAWW 300.0A	0.25 G U	2.5 G U	2.5 G U	2.5 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	88	2200	9100	32000	90000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	0.25 G U	2.5 G U	2.5 G U	2.5 G U	2.5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.33	0.51	0.055 B J	0.025 B	0.069 B
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.25 G U	6.5	13.2	19.9	84.5
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	5 U	4.8 U	4.6 U	4.8 U	6.4
Specific Conductance	umhos/cm	--	MCAWW 120.1	426 J	39800 J	130000 J	249000 J	464000
Sulfate	mg/L	1	MCAWW 300.0A	45.3 J	31.8 B J	50 G U	50 G U	50 G U
TOC	mg/L	1	SM20 5310B	410 J	142 J	46.5 J	24 J	34.1
Total Alkalinity	mg/L	5	SM18 2320 B	49 J	338 J	140 J	113 J	52.9 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	311	16600	38500	120000	207000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	11.9	24.3	61.7	83.1	128
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.034 B	0.16	0.097 B	0.055 B J	1 G U
Total Suspended Solids	mg/L	4	SM20 2540D	120	9.2	95	62	534
Turbidity	NTU	--	MCAWW 180.1	20.7	11.7	68.2	10.5	264
Cyanide, Total	ug/L	10	SW846 9012A	92.4	21.2	72.1	10 U	10 U
Total Sulfide	mg/L	3	SW846 9030B/9034	4.8	3.2	2.4 B	3 U	3 U
pH	No Units	--	SW846 9040	6.9	7.5	6.6	6.2	5.9
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.033 J	0.0087 B J	0.018 J	0.01 U	0.01 U
Sulfite	mg/L	1	SM4500-SO3 B	12.0	12.4	6.4	14.8	14.8
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.501	0.05 U	0.133	0.836	0.836
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	2000 U	395 B	246 B	640 B	271 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	190 B	173 B J	737 B	181 B J
Antimony	ug/L	10	SW846 6010B	100 U	24.7 B	100 U	37.2 B J	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	25.2 B	100 U	38.5 B J	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	100 U	46.4 B	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	65 B	100 U
Barium	ug/L	200	SW846 6010B	227 B	37600	415000	1700000 J	3440000
Barium-DISS	ug/L	200	SW846 6010B	294 B	43800	401000	1730000	2560000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	2000 U	5110	9070	10400 J	13600
Boron-DISS	ug/L	2000	SW846 6010B	33.5 B	5840	8500	10800 J	10200 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	50 U	1.4 B	2.6 B J
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	1.9 B	50 U
Calcium	ug/L	5000	SW846 6010B	27800 B J	641000 J	3120000 J	8790000	18000000
Calcium-DISS	ug/L	5000	SW846 6010B	26800 B J	728000 J	2890000 J	8730000	13400000
Chromium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	14.8 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cobalt	ug/L	500	SW846 6010B	500 U	500 U	500 U	1000 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	1000 U	5000 U
Copper	ug/L	25	SW846 6010B	39.7 B	250 U	28.9 B	250 U	56.6 B
Copper-DISS	ug/L	25	SW846 6010B	35.6 B	250 U	250 U	250 U	250 U
Iron	ug/L	100	SW846 6010B	429 B J	5830 J	37500	72700	321000
Iron-DISS	ug/L	100	SW846 6010B	1000 U	5000	30400	72900	220000
Lead	ug/L	3	SW846 6010B	30 U	14.5 B	30 U	60 U	50
Lead-DISS	ug/L	3	SW846 6010B	30 U	14.5 B	30 U	60 U	15.7 B
Lithium	ug/L	500	SW846 6010B	500 U	12300	29300	68700 J	100000
Lithium-DISS	ug/L	500	SW846 6010B	500 U	14300	27000	69100	74500 J
Magnesium	ug/L	5000	SW846 6010B	6400 B	59800	331000	938000	1690000
Magnesium-DISS	ug/L	5000	SW846 6010B	6090 B	67100	307000	963000	1290000
Manganese	ug/L	150	SW846 6010B	8.2 B J	752 J	2300	4790	10200
Manganese-DISS	ug/L	150	SW846 6010B	150 U	826	2130	4890	7700
Molybdenum	ug/L	400	SW846 6010B	400 U	21.1 B	20.6 B J	14.8 B	17.5 B
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	24.1 B	400 U	400 U	400 U
Nickel	ug/L	40	SW846 6010B	400 U	400 U	400 U	800 U	49.9 B
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	400 U	800 U	36.5 B
Potassium	ug/L	5000	SW846 6010B	50000 U	45400 B	187000	265000	858000
Potassium-DISS	ug/L	5000	SW846 6010B	4110 B	53500	163000	267000	611000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	44.2 B	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location Q				
				Westmoreland County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/30/2009**	**7/1/2009**	**7/6/2009**	**7/15/2009**	**10/27/2009**
Sodium	ug/L	5000	SW846 6010B	63200	5400000	1.7E+07	30800000 J	49700000
Sodium-DISS	ug/L	5000	SW846 6010B	67900	5960000	1.6E+07	31300000	36800000 J
Strontium	ug/L	50	SW846 6010B	292 B J	86200 J	422000 J	1310000 J	2860000 J
Strontium-DISS	ug/L	50	SW846 6010B	254 B J	98800 J	396000 J	1300000 J	2100000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	200 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	200 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	22.4 B	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	44.5 B	500 U	139 B	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	35.4 B	500 U	113 B	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	37.7 B	78.6 B	156 B	144 B J	247000 J
Zinc-DISS	ug/L	20	SW846 6010B	69 B J	100 B J	159 B	137 B J	182000 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.5 G U	0.5 G U	0.1 G U	0.25 G U	1 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.5 G U	0.5 G U	0.1 G U	0.25 U	1 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.095 B	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	4.9 J
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	10000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	100 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Acetone	ug/L	20	SW846 8260B	28	16 J	42	520	20 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	1000 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	1000 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	5 U	4 J	50 U	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U

				Location Q				
				Westmoreland County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/30/2009**	**7/1/2009**	**7/6/2009**	**7/15/2009**	**10/27/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	5 U	1.2 J	50 U	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	15 U	4.4 J	150 U	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	48 U	48 U	47 U	47 U	47 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U	47 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
2-Picoline	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	0.2 J	9.4 U	9.4 U
3-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U	47 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U	47 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
4-Nitroaniline	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U	47 U
4-Nitrophenol	ug/L	50	SW846 8270C	48 U	48 U	47 U	47 U	47 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	95 U	95 U	94 U	94 U	94 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.5 U	1.2 J	0.34 J	0.33 J	9.4 U
Aniline	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Aramite	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Benzidine	ug/L	200	SW846 8270C	190 U	190 U	190 U	190 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzyl alcohol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	4.4 J	9.4 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	10	9.5 U	9.4 U	3.7 J	2 J
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Diallate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Dimethoate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	1.1 J	9.5 U	9.4 U	9.4 U	9.4 U

				Location Q				
				Westmoreland County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/30/2009**	**7/1/2009**	**7/6/2009**	**7/15/2009**	**10/27/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Dinoseb	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Disulfoton	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Hexachloroethane	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Hexachloropropene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isodrin	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Isophorone	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Isosafrole	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
o-Toluidine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Parathion	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	19 U	19 U	19 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phorate	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Pronamide	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyridine	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Safrole	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Thionazin	ug/L	10	SW846 8270C	9.5 U	9.5 U	9.4 U	9.4 U	9.4 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Aldrin	ug/L	0.05	SW846 8081A	0.17 PG	NA	NA	0.047 U	0.048 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
beta-BHC	ug/L	0.05	SW846 8081A	0.26	NA	NA	0.047 U	0.048 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.48 U	NA	NA	0.47 U	0.48 U
delta-BHC	ug/L	0.05	SW846 8081A	0.072 PG	NA	NA	0.047 U	0.048 U
Dieldrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Endosulfan II	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Endrin	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.048 U	NA	NA	0.047 U	0.048 U
Heptachlor	ug/L	0.05	SW846 8081A	0.12	NA	NA	0.047 U	0.048 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.26 PG	NA	NA	0.047 U	0.048 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.095 U	NA	NA	0.094 U	0.096 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	NA	NA	1.9 U	1.9 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	NA	NA	0.38 U	0.4 U

				Location Q				
				Westmoreland County, PA				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/30/2009**	**7/1/2009**	**7/6/2009**	**7/15/2009**	**10/27/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.95 U	NA	NA	0.95 U	0.98 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	110 J	38 J	28 J	20 J	20 J
Butyl alcohol	mg/L	10	SW846 8015	20 UJJ	5 UJ	10 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	20 UJJ	5 UJ	10 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	20 UJ	5 UJ	10 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	20 UJ	5 UJ	10 UJ	10 UJ	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	200 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	200 UJ	100 UJ	100 UJ	100 UJ	100 UJ
Acids								
Acetic Acid	mg/L	10	SW846 8015	20 UJ	1 U	33	33 J	33 J
Butyric Acid	mg/L	10	SW846 8015	20 UJ	5 UJ	1 U	10 UJ	10 UJ
Propionic Acid	mg/L	10	SW846 8015	20 UJ	1 U	1 U	10 UJ	10 UJ
Volatile Acids	mg/L	10		300	100	120	600	600

				Location R				
				Tyler County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/22/2009**	**6/23/2009**	**7/13/2009**	**7/7/2009**	**10/28/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	408	133
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 NR U	0.01 NR U	0.01 NR U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.58	13.4	41.1 J	15	273 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	271	692	1250	6.2	1410
Bromide	mg/L	1	MCAWW 300.0A	10 G U	72.7	272	113	809
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	1990	1660	3200	1760	30600
Chloride	mg/L	1	MCAWW 300.0A	18 B	7060	32100 J	12300	82200 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	452	540	501	343	1560
Fluoride	mg/L	1	MCAWW 300.0A	2.5 G U	0.5 G U	2.5 G U	0.5 G U	5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	34	1500	8300	4000	61000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	2.5 G U	0.5 G U	2.5 G U	0.5 G U	5 G U
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	0.13	0.035 B	0.053 B J	0.038 B	0.11
Nitrite as N	mg/L	0.05	MCAWW 300.0A	2.5 G U	3.8	11.8	3.8	5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	134	5 U	655	96.1	469
Specific Conductance	umhos/cm	--	MCAWW 120.1	192 J	29800 J	98400 J	41500 J	285000
Sulfate	mg/L	1	MCAWW 300.0A	11 B	25.3 J	34.5 B J	10 G U	34.7 B J
TOC	mg/L	1	SM20 5310B	173	604	388 J	323	1320
Total Alkalinity	mg/L	5	SM18 2320 B	60.4 J	577 J	327 J	85.2 J	64.8 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	481	15100	46900	20900	144000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	27.2	44.7	65.6	30.5	277
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.63	1.4	0.96	0.87	0.11 B G
Total Suspended Solids	mg/L	4	SM20 2540D	732	36.8	1180	286	918
Turbidity	NTU	--	MCAWW 180.1	650	10	1540	233	1480
Cyanide, Total	ug/L	10	SW846 9012A	46.4	22.9	18.5	7.3 B	4.4 B J
Total Sulfide	mg/L	3	SW846 9030B/9034	3 U	3 U	5.6	3.2	3 U
pH	No Units	--	SW846 9040	7.2	7.1	6.7	4.9	5.9
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.035	0.027	0.046	0.059 J	0.027
Sulfite	mg/L	1	SM4500-SO3 B	14.0	10.8	11.6	13.2	NA
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.03 U	0.0505	1.52	1.66	NA
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	430 B	608 B	1870 B	1900 B	564 B J
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	655 B	2000 U	426 B J	272 B J
Antimony	ug/L	10	SW846 6010B	100 U	24.8 B	39.7 B	100 U	100 U
Antimony-DISS	ug/L	10	SW846 6010B	100 U	26.8 B	100 U	100 U	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	55.1 B	43 B	100 U	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	62.4 B	40.2 B	100 U	100 U
Barium	ug/L	200	SW846 6010B	67.5 B	36500	686000	296000	3770000
Barium-DISS	ug/L	200	SW846 6010B	78.6 B	33700	603000	251000	3940000
Beryllium	ug/L	4	SW846 6010B	3 B	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	2000 U	7850	17300	5330	16900
Boron-DISS	ug/L	2000	SW846 6010B	2000 U	9150	17100	5130	17900 J
Cadmium	ug/L	5	SW846 6010B	50 U	50 U	2.2 B	50 U	50 U
Cadmium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	5.5 B
Calcium	ug/L	5000	SW846 6010B	7200 B J	430000 J	2560000 J	1190000 J	11000000
Calcium-DISS	ug/L	5000	SW846 6010B	5450 B J	494000 J	2610000 J	1130000 J	11500000
Chromium	ug/L	5	SW846 6010B	704	31 B	152	65.5	25.6 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	32 B	67.4	40 B	50 U
Cobalt	ug/L	500	SW846 6010B	11.9 B	500 U	500 U	500 U	5000 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	5000 U
Copper	ug/L	25	SW846 6010B	40.5 B	250 U	4150	518	218 B
Copper-DISS	ug/L	25	SW846 6010B	250 U	250 U	274	387	107 B
Iron	ug/L	100	SW846 6010B	7500 J	16700 J	172000 J	214000	140000
Iron-DISS	ug/L	100	SW846 6010B	468 B	18200	93100	183000	51600
Lead	ug/L	3	SW846 6010B	30 U	54.7	606	25.2 B	59.8
Lead-DISS	ug/L	3	SW846 6010B	1.3 B	39.9	30 U	30 U	30 U
Lithium	ug/L	500	SW846 6010B	500 U	9500	37700	12500	85400
Lithium-DISS	ug/L	500	SW846 6010B	500 U	11300	36100	12100	88700 J
Magnesium	ug/L	5000	SW846 6010B	1490 B	37500 B	283000	133000	1150000
Magnesium-DISS	ug/L	5000	SW846 6010B	1090 B	43200 B	287000	126000	1230000
Manganese	ug/L	150	SW846 6010B	104 B J	1280 J	4030 J	5100	7910
Manganese-DISS	ug/L	150	SW846 6010B	150 U	1420	3440	4780	8300
Molybdenum	ug/L	400	SW846 6010B	91.8 B	23.6 B	147 B	23.1 B J	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	25.2 B	104 B	400 U	400 U
Nickel	ug/L	40	SW846 6010B	440	22 B	67 B	98.3 B	400 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	22.6 B	19.9 B	93.3 B	400 U
Potassium	ug/L	5000	SW846 6010B	50000 U	25100 B	109000	46500 B	321000
Potassium-DISS	ug/L	5000	SW846 6010B	50000 U	31200 B	111000	39400 B	347000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location R				
				Tyler County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/22/2009**	**6/23/2009**	**7/13/2009**	**7/7/2009**	**10/28/2009**
Sodium	ug/L	5000	SW846 6010B	33300 B	4280000	16900000	5970000	38600000
Sodium-DISS	ug/L	5000	SW846 6010B	41900 B	4970000	16800000	5680000	39900000 J
Strontium	ug/L	50	SW846 6010B	58.5 B J E	43100 J	387000 J	175000 J	1960000 J
Strontium-DISS	ug/L	50	SW846 6010B	73.9 B J E	50400 J	364000 J	163000 J	2070000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	25.1 B	30.5 B	100 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	23.5 B	1000 U
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	26.7 B
Titanium	ug/L	500	SW846 6010B	39.1 B	26.3 B	107 B	500 U	500 U
Titanium-DISS	ug/L	500	SW846 6010B	22.9 B	34.5 B	35 B	500 U	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	32 B	67.4	65.5	50 U
Zinc	ug/L	20	SW846 6010B	67.9 B	56.1 B	740	1290	510 J
Zinc-DISS	ug/L	20	SW846 6010B	52 B J	61.2 B J	122 B J	1160	471 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.25 G U	0.05 G U	0.5 G U	0.1 G U	1 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.25 U	0.05 G U	0.5 G U	0.25 G U	0.38 B
Mercury	ug/L	0.2	SW846 7470A	0.065 B J	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	8.1	4 J	3.7 J	1.1 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	1 J	5 U
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	1000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	#N/A	NA ND U	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	8.1	5 U	5 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Acetone	ug/L	20	SW846 8260B	25	100	30	42	20 U
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	100 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	9.1 J	100 U	100 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	4.2 J	5 U	5 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	150	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	1 J	1.4 J	5 U	5 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	0.95 J	5 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	2.2 J	5 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	14	2.1 J	0.66 J	5 U
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U

				Location R				
				Tyler County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/22/2009**	**6/23/2009**	**7/13/2009**	**7/7/2009**	**10/28/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	1.4 J	5 U	5 U	5 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	1.2 J	3.2 J	2.5 J	1.3 J	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	8.4 J	13 J	6 J	6.6 J	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
1-Naphthylamine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA ND U	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	50 U	55 U	94 U	470 U	950 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
2-Chlorophenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	2 U	3.1	3.8 U	120	38 U
2-Methylphenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2-Naphthylamine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2-Nitroaniline	ug/L	50	SW846 8270C	50 U	55 U	94 U	470 U	950 U
2-Nitrophenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
2-Picoline	ug/L	10	SW846 8270C	5.3 J	25	19 U	94 U	190 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
3-Nitroaniline	ug/L	50	SW846 8270C	50 U	55 U	94 U	470 U	950 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	50 U	55 U	94 U	470 U	950 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
4-Chloroaniline	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
4-Nitroaniline	ug/L	50	SW846 8270C	50 U	55 U	94 U	470 U	950 U
4-Nitrophenol	ug/L	50	SW846 8270C	50 U	55 U	94 U	470 U	950 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	100 U	110 U	190 U	940 U	1900 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Acenaphthene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Acenaphthylene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Acetophenone	ug/L	10	SW846 8270C	10 U	4.9 J	22	94 U	190 U
Aniline	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Aramite	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Benzidine	ug/L	200	SW846 8270C	200 U	220 U	380 U	1900 U	3800 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Benzo(a)pyrene	ug/L	5	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Benzo(ghi)perylene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Benzyl alcohol	ug/L	10	SW846 8270C	10 U	11 U	19 U	750	190 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	21	11 U	8.7 J	49 J	58 J B
Butyl benzyl phthalate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Chlorobenzilate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Chrysene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Diallate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Dibenzofuran	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Diethyl phthalate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Dimethoate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Dimethyl phthalate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	1 J	11 U	19 U	94 U	190 U

				Location R				
				Tyler County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/22/2009**	**6/23/2009**	**7/13/2009**	**7/7/2009**	**10/28/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Dinoseb	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Diphenylamine	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Disulfoton	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Fluoranthene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	4.1 J B
Fluorene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Hexachlorobenzene	ug/L	0.05	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Hexachlorobutadiene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Hexachloroethane	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Hexachloropropene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Isodrin	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Isophorone	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Isosafrole	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Nitrobenzene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
o-Toluidine	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Parathion	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Pentachlorobenzene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Pentachloroethane	ug/L	20	SW846 8270C	20 U	22 U	38 U	190 U	380 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Pentachlorophenol	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Phenanthrene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	22	29 J B
Phenol	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	19 U	38 U
Phorate	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Pronamide	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Pyrene	ug/L	2	SW846 8270C	2 U	2.2 U	3.8 U	13 J	24 J B
Pyridine	ug/L	10	SW846 8270C	4.1 J	31	10 J	94 U	190 U
Safrole	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Thionazin	ug/L	10	SW846 8270C	10 U	11 U	19 U	94 U	190 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.72	0.25 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
Aldrin	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
beta-BHC	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.87 PG	0.41 PG
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.5 U	NA	NA	0.48 U	2.5 U
delta-BHC	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.4 PG	0.25 U
Dieldrin	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.31 PG	0.25 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	1.8 PG
Endosulfan II	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.28 PG	0.25 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
Endrin	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.32 PG	0.25 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.048 U	0.25 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.96	0.34
Heptachlor	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.49 PG	0.41 PG
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.05 U	NA	NA	0.22 PG	0.31
Methoxychlor	ug/L	0.1	SW846 8081A	0.1 U	NA	NA	0.096 U	0.5 U
Toxaphene	ug/L	2	SW846 8081A	2 U	NA	NA	1.9 U	10 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.38 U	0.4 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.38 U	0.4 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.38 U	0.4 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.38 U	0.4 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.4 U	NA	NA	8	0.4 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.38 U	0.4 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.4 U	NA	NA	0.38 U	0.4 U

				Location R				
				Tyler County, WV				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**6/22/2009**	**6/23/2009**	**7/13/2009**	**7/7/2009**	**10/28/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.96 U	NA	NA	0.95 U	0.99 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	57 J	41 J	57 J	11 J	NA
Butyl alcohol	mg/L	10	SW846 8015	20 UJ	10 UJ	20 UJ	10 UJ	NA
Ethanol	mg/L	10	SW846 8015	20 UJ	10 UJ	20 UJ	10 UJ	NA
Methanol	mg/L	10	SW846 8015	20 UJ	220 J	380 J	44 J	NA
n-Propanol	mg/L	10	SW846 8015	20 UJ	10 UJ	20 UJ	10 UJ	NA
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	200 U	100 U	200 UJ	100 UJ	NA
Propylene glycol	mg/L	50	SW846 8015	200 U	100 U	200 UJ	100 UJ	NA
Acids								
Acetic Acid	mg/L	10	SW846 8015	10 UJ	39	50 UJ	450 J	NA
Butyric Acid	mg/L	10	SW846 8015	10 UJ	1 U	50 UJ	1 U	NA
Propionic Acid	mg/L	10	SW846 8015	10 UJ	1 U	50 UJ	1 U	NA
Volatile Acids	mg/L	10		300	100	250	600	NA

				Location S				
				Centre County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**8/25/2009**	**8/25/2009**	**8/25/2009**	**8/29/2009**	**9/8/2009**
Conventional Analyses								
Acidity	mg/L	5	SM20 2310B (4a)	5 U	5 U	5 U	22.9	90.2
Amenable cyanide	mg/L	0.01	SM18 4500-CN E	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ammonia Nitrogen	mg/L	0.1	MCAWW 350.1	0.52 J	3 J	2.8 J	44.8 J	128 J
Biochemical Oxygen Demand	mg/L	2	SM18 5210 B	2 U	2220	1440	218	990
Bromide	mg/L	1	MCAWW 300.0A	0.2 U	0.2 U	0.2 U	306	602
Chemical Oxygen Demand (COD)	mg/L	10	MCAWW 410.4	18.4 J	4810 J	3420 J	1810	21900
Chloride	mg/L	1	MCAWW 300.0A	28.1	58.5	64.2	36800 J	79000 J
Dissolved Organic Carbon	mg/L	--	SM20 5310B	2.3 J	906 J	657 J	217	214
Fluoride	mg/L	1	MCAWW 300.0A	0.05 U	0.05 U	0.077	1.2 G U	2.5 G U
Hardness, as CaCO3	mg/L	5	SM20 2340C	156	156	156	15400	34000
Nitrate as N	mg/L	0.05	MCAWW 300.0A	1.8	2.6	2.7	1.2 G U	0.43 B
Nitrate-Nitrite	mg/L	0.1	MCAWW 353.2	3	3.1	2.8	1.2 J	0.41
Nitrite as N	mg/L	0.05	MCAWW 300.0A	0.05 U	0.06	0.045 B	10.3	2.5 G U
Oil & Grease (HEM)	mg/L	5	CFR136A 1664A HEM	4.6 U	158	13.7	7.5	36.2
Specific Conductance	umhos/cm	--	MCAWW 120.1	466 J	480 J	479 J	116000 J	266000 J
Sulfate	mg/L	1	MCAWW 300.0A	8.4	32.6	17.7	2.4 B J	33.5 B J
TOC	mg/L	1	SM20 5310B	2.7	931	672	104	150
Total Alkalinity	mg/L	5	SM18 2320 B	88.8 J	109 J	123 J	175 J	74.2 J
Total Dissolved Solids	mg/L	10	SM18 2540 C	277	280	680	58300	124000
Total Kjeldahl Nitrogen	mg/L	3	MCAWW 351.3	3 U	42.3	47.5	75.9	116
Total phosphorus	mg/L	0.1	MCAWW 365.2	0.1 U	0.082 B	0.037 B	0.053 B	0.035 B
Total Suspended Solids	mg/L	4	SM20 2540D	4 U	200	142	62	51
Turbidity	NTU	--	MCAWW 180.1	1.7	308	300	293	460
Cyanide, Total	ug/L	10	SW846 9012A	10 U	3.5 B	6.6 B	10 U	7.4 B
Total Sulfide	mg/L	3	SW846 9030B/9034	3.2	3 U	3 U	3 U	1.6 B
pH	No Units	--	SW846 9040	7	7.2	7.9	6.4	6.6
Total Recoverable Phenolics	mg/L	0.01	SW846 9066	0.0065 B	0.044	0.048	0.021	0.1
Sulfite	mg/L	1	SM4500-SO3 B	11.2	20	15.2	38.0	9.20
MBAS (mol.wt 320)	mg/L	0.05	SM5540 C	0.0969	0.05 U	0.0613	0.189	0.0945
Total and Dissolved Metals								
Aluminum	ug/L	200	SW846 6010B	177 B	623 B	507 B	152 B	2000 U
Aluminum-DISS	ug/L	200	SW846 6010B	2000 U	203 B	165 B	2000 U	2000 U
Antimony	ug/L	10	SW846 6010B	15.4 B	16.8 B	100 U	31.3 B	49.1 B
Antimony-DISS	ug/L	10	SW846 6010B	100 U	100 U	13.5 B	24.1 B	100 U
Arsenic	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Arsenic-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Barium	ug/L	200	SW846 6010B	840 B	410 B	332 B	652000	1500000
Barium-DISS	ug/L	200	SW846 6010B	734 B	346 B	240 B	712000	1510000
Beryllium	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Beryllium-DISS	ug/L	4	SW846 6010B	40 U	40 U	40 U	40 U	40 U
Boron	ug/L	2000	SW846 6010B	18.9 B	17.8 B	18.1 B	7920	13600
Boron-DISS	ug/L	2000	SW846 6010B	15.8 B	13.8 B	14.2 B	8950	14000
Cadmium	ug/L	5	SW846 6010B	1.7 B	2.1 B	2.2 B	3.8 B	3.9 B
Cadmium-DISS	ug/L	5	SW846 6010B	2 B	50 U	1.3 B	50 U	3 B
Calcium	ug/L	5000	SW846 6010B	40100 B J	35200 B J	35200 B J	4080000 J	11800000 J
Calcium-DISS	ug/L	5000	SW846 6010B	37500 B J	36000 B J	37800 B J	4510000 J	12000000 J
Chromium	ug/L	5	SW846 6010B	50 U	50 U	7.5 B	50 U	10.2 B
Chromium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Cobalt	ug/L	500	SW846 6010B	500 U	4.4 B	5.7 B	500 U	2500 U
Cobalt-DISS	ug/L	500	SW846 6010B	500 U	5.4 B	6.2 B	500 U	2500 U
Copper	ug/L	25	SW846 6010B	250 U	109 B	43.9 B	71.4 B	35.3 B
Copper-DISS	ug/L	25	SW846 6010B	250 U	123 B	37.2 B	55 B	38.8 B
Iron	ug/L	100	SW846 6010B	394 B	1790	6490	77900	73200
Iron-DISS	ug/L	100	SW846 6010B	1000 U	726 B	1670	34700	34000
Lead	ug/L	3	SW846 6010B	30 U	30 U	30 U	21.2 B	21.7 B
Lead-DISS	ug/L	3	SW846 6010B	30 U	30 U	30 U	30 U	30 U
Lithium	ug/L	500	SW846 6010B	500 U	42 B	500 U	34800	94900
Lithium-DISS	ug/L	500	SW846 6010B	42.1 B	31.1 B	500 U	37800	9310
Magnesium	ug/L	5000	SW846 6010B	18300 B	15700 B	16000 B	373000	987000
Magnesium-DISS	ug/L	5000	SW846 6010B	17000 B	16200 B	17300 B	412000	1000000
Manganese	ug/L	150	SW846 6010B	8.7 B	37.9 B	146 B	1850	2670
Manganese-DISS	ug/L	150	SW846 6010B	150 U	30.5 B	119 B	2030	2680
Molybdenum	ug/L	400	SW846 6010B	400 U	400 U	14.2 B	39.1 B	400 U
Molybdenum-DISS	ug/L	400	SW846 6010B	400 U	400 U	400 U	26.8 B	400 U
Nickel	ug/L	40	SW846 6010B	400 U	400 U	16.7 B	19 B	400 U
Nickel-DISS	ug/L	40	SW846 6010B	400 U	400 U	400 U	400 U	400 U
Potassium	ug/L	5000	SW846 6010B	2930 B	2420 B	2690 B	301000	1020000
Potassium-DISS	ug/L	5000	SW846 6010B	3090 B	2590 B	3000 B	354000	1050000
Selenium	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Selenium-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Silver-DISS	ug/L	5	SW846 6010B	50 U	50 U	50 U	50 U	50 U

				Location S				
				Centre County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**8/25/2009**	**8/25/2009**	**8/25/2009**	**8/29/2009**	**9/8/2009**
Sodium	ug/L	5000	SW846 6010B	37700 B	60800	63800	16400000	32700000
Sodium-DISS	ug/L	5000	SW846 6010B	35300 B	71800	69200	18000000	33000000
Strontium	ug/L	50	SW846 6010B	723 E	597	580	1560000	5020000
Strontium-DISS	ug/L	50	SW846 6010B	653 J E	624 J	594 J	1710000 J	4930000 J
Thallium	ug/L	10	SW846 6010B	100 U	100 U	100 U	24.6 B	100 U
Thallium-DISS	ug/L	10	SW846 6010B	100 U	100 U	100 U	100 U	100 U
Tin	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	20.7 B
Tin-DISS	ug/L	1000	SW846 6010B	1000 U	1000 U	1000 U	1000 U	1000 U
Titanium	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Titanium-DISS	ug/L	500	SW846 6010B	500 U	500 U	500 U	500 U	500 U
Trivalent Chrom	ug/L	50	SW846 6010B	50 U	50 U	50 U	50 U	50 U
Zinc	ug/L	20	SW846 6010B	172 B J	164 B J	138 B J	343 J	604 J
Zinc-DISS	ug/L	20	SW846 6010B	156 B J	140 B J	73.8 B J	238 J	673 J
Diss Hexavalent Cr-DISS	mg/L	0.01	SW846 7196A	0.01 U	0.0078 B	0.05 G U	0.5 G U	0.5 G U
Hexavalent Chromium	mg/L	0.01	SW846 7196A	0.01 U	0.05 G U	0.05 G U	0.42 B G	0.25 G U
Mercury	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury-DISS	ug/L	0.2	SW846 7470A	0.2 U	0.2 U	0.2 U	0.049 B J	0.2 U
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1,1-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1,2-Trichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,1-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	6.5
1,2,3-Trichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	1.5 J
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	11	33	50 U	3.9 J
1,2-Dibromo-3-chloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dibromoethane (EDB)	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dichloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5 U	2.8 J	13	50 U	1.1 J
1,3-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,3-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,4-Dichlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
1,4-Dioxane	ug/L	1000	SW846 8260B	1000 U	1000 U	1000 U	10000 U	1000 U
1-chloro-4-trifluoromethylbenzene	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
2,2-Dichloropropane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
2-Butanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
2-Chloroethyl vinyl ether	ug/L	10	SW846 8260B	10 U	10 U	10 U	100 U	10 U
2-Hexanone	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
4-Chlorotoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Acetone	ug/L	20	SW846 8260B	20 U	5.4 J	14 J	1300	31
Acrolein	ug/L	100	SW846 8260B	100 U	100 U	100 U	1000 U	100 U
Acrylonitrile	ug/L	100	SW846 8260B	100 U	100 U	100 U	1000 U	100 U
Benzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Benzyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromodichloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromoform	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Bromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Carbon disulfide	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Carbon tetrachloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chlorobenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chloroethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chloroform	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Chloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
cis-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
cis-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Dibromochloromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Dibromomethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Dichlorodifluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Ethylbenzene	ug/L	5	SW846 8260B	5 U	0.81 J	1.8 J	50 U	5 U
Isopropylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Methyl tert-butyl ether (MTBE)	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Methylene chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Naphthalene	ug/L	5	SW846 8260B	5 U	5 U	1.8 J	50 U	2.8 J
n-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
n-Propylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
p-Isopropyltoluene	ug/L	5	SW846 8260B	5 U	5 U	5 U	28 J	5 U
sec-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Styrene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U

				Location S				
				Centre County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**8/25/2009**	**8/25/2009**	**8/25/2009**	**8/29/2009**	**9/8/2009**
tert-butyl acetate	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
tert-Butylbenzene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Tetrachloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
tetrahydrofuran	ug/L	--	SW846 8260B	NA	NA	NA	NA	NA
Toluene	ug/L	5	SW846 8260B	5 U	1.6 J	3.8 J	50 U	5 U
trans-1,2-Dichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
trans-1,3-Dichloropropene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Trichloroethene	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Trichlorofluoromethane	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Vinyl acetate	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Vinyl chloride	ug/L	5	SW846 8260B	5 U	5 U	5 U	50 U	5 U
Xylenes (total)	ug/L	15	SW846 8260B	15 U	5.4 J	16	150 U	15 U
Semi-Volatile Organics								
1,2,4,5-Tetrachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
1,2-Diphenylhydrazine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
1,3-Dinitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
1,4-Naphthoquinone	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
1-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2,3,4,6-Tetrachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2,3,7,8-TCDD	ug/L	--	SW846 8270C	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2,4,6-Trichlorophenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2,4-Dimethylphenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2,4-Dinitrophenol	ug/L	40	SW846 8270C	47 U	47 U	47 U	470 U	48 U
2,4-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2,6-Dichlorophenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
2,6-Dinitrotoluene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2-Acetylaminofluorene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2-Chloronaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
2-Chlorophenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2-Methylnaphthalene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
2-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2-Naphthylamine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2-Nitroaniline	ug/L	50	SW846 8270C	47 U	47 U	47 U	470 U	48 U
2-Nitrophenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
2-Picoline	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
3,3'-Dichlorobenzidine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
3-Methylcholanthrene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	1.9 J	9.5 U
3-Nitroaniline	ug/L	50	SW846 8270C	47 U	47 U	47 U	470 U	48 U
4,6-Dinitro-2-methylphenol	ug/L	50	SW846 8270C	47 U	47 U	47 U	470 U	48 U
4-Aminobiphenyl	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
4-Bromophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
4-Chloro-3-methylphenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
4-Chloroaniline	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
4-Chlorophenyl phenyl ether	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
4-Nitroaniline	ug/L	50	SW846 8270C	47 U	47 U	47 U	470 U	48 U
4-Nitrophenol	ug/L	50	SW846 8270C	47 U	47 U	47 U	470 U	48 U
5-Nitro-o-toluidine	ug/L	100	SW846 8270C	94 U	94 U	94 U	940 U	95 U
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Acenaphthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
Acenaphthylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
Acetophenone	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Aniline	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Aramite	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Benzidine	ug/L	200	SW846 8270C	190 U	190 U	190 U	1900 U	190 U
Benzo(a)anthracene	ug/L	10	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.2 J
Benzo(a)pyrene	ug/L	5	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.1 J
Benzo(b)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1 J
Benzo(ghi)perylene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.2 J
Benzo(k)fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	0.91 J
Benzyl alcohol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
bis(2-Chloroethoxy)methane	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
bis(2-Chloroisopropyl) ether	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	1.9 J B	14	9.4 U	94 U	7.5 J B
Butyl benzyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Chlorobenzilate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Chrysene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.1 J
Diallate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	2.3
Dibenzofuran	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Diethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	7.7 J B	2.6 J B
Dimethoate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Dimethyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Di-n-butyl phthalate	ug/L	10	SW846 8270C	0.6 J	2 J	9.4 U	94 U	1.5 J

				Location S				
				Centre County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**8/25/2009**	**8/25/2009**	**8/25/2009**	**8/29/2009**	**9/8/2009**
Di-n-octyl phthalate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.3 J
Dinoseb	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Diphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.7 J
Disulfoton	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Ethyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Fluoranthene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.3 J
Fluorene	ug/L	2	SW846 8270C	1.9 U	2	1.9 U	19 U	1.4 J
Hexachlorobenzene	ug/L	0.05	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1 J
Hexachlorobutadiene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
Hexachlorocyclopentadiene	ug/L	2	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Hexachloroethane	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Hexachloropropene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	2.4
Isodrin	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Isophorone	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Isosafrole	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Methyl methanesulfonate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Nitrobenzene	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
N-Nitrosodiethylamine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
N-Nitrosodimethylamine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
N-Nitrosodi-n-butylamine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
N-Nitrosodi-n-propylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.7 J
N-Nitrosomethylethylamine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
N-Nitrosomorpholine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
N-Nitrosopiperidine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
N-Nitrosopyrrolidine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
O,O,O-Triethyl phosphorothioate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
o-Toluidine	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Parathion	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
p-Dimethylaminoazobenzene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Pentachlorobenzene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Pentachloroethane	ug/L	20	SW846 8270C	19 U	19 U	19 U	190 U	19 U
Pentachloronitrobenzene	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Pentachlorophenol	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Phenanthrene	ug/L	2	SW846 8270C	1.9 U	3.4	3.5	19 U	1.3 J
Phenol	ug/L	2	SW846 8270C	1.9 U	1.9 U	1.9 U	19 U	1.9 U
Phorate	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Pronamide	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Pyrene	ug/L	2	SW846 8270C	1.9 U	0.76 J	0.89 J	19 U	1.1 J
Pyridine	ug/L	10	SW846 8270C	9.4 U	70	18	530	280
Safrole	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Thionazin	ug/L	10	SW846 8270C	9.4 U	9.4 U	9.4 U	94 U	9.5 U
Tetraethyldithiopyrophosphate	ug/L	10	SW846 8270C	NA	NA	NA	NA	NA
Organochlorine Pesticides								
4,4'-DDD	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
4,4'-DDE	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
4,4'-DDT	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Aldrin	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
alpha-BHC	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
beta-BHC	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Chlordane (technical)	ug/L	0.05	SW846 8081A	0.47 U	0.47 U	NA	NA	0.49 U
delta-BHC	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.048 J PG
Dieldrin	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Endosulfan I	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.5
Endosulfan II	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Endosulfan sulfate	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Endrin	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Endrin aldehyde	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Endrin ketone	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A	0.047 U	0.041 J	NA	NA	0.049 U
Heptachlor	ug/L	0.05	SW846 8081A	0.051	0.063	NA	NA	0.049 U
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.047 U	0.047 U	NA	NA	0.049 U
Methoxychlor	ug/L	0.1	SW846 8081A	0.094 U	0.094 U	NA	NA	0.098 U
Toxaphene	ug/L	2	SW846 8081A	1.9 U	1.9 U	NA	NA	2 U
PCBs								
Aroclor 1016	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U
Aroclor 1221	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U
Aroclor 1232	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U
Aroclor 1242	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U
Aroclor 1248	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U
Aroclor 1254	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U
Aroclor 1260	ug/L	0.4	SW846 8082	0.38 U	0.38 U	NA	NA	0.39 U

				Location S				
				Centre County, PA				
				Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**8/25/2009**	**8/25/2009**	**8/25/2009**	**8/29/2009**	**9/8/2009**
Organophosphorus Pesticides								
Ethyl parathion	ug/L	0.4	SW846 8141A	0.94 U	0.95 U	NA	NA	0.98 U
Alcohols								
2-Propanol	mg/L	10	SW846 8015	10 U	310	150 J	140 J	83 J
Butyl alcohol	mg/L	10	SW846 8015	10 U	20 U	20 UJ	10 UJ	10 UJ
Ethanol	mg/L	10	SW846 8015	10 U	20 U	20 UJ	10 UJ	10 UJ
Methanol	mg/L	10	SW846 8015	10 U	20 U	20 UJ	10 UJ	10 UJ
n-Propanol	mg/L	10	SW846 8015	10 U	20 U	20 UJ	10 UJ	10 UJ
Glycols								
Ethylene Glycol	mg/L	50	SW846 8015	100 U	200 U	200 UJ	100 UJ	100 UJ
Propylene glycol	mg/L	50	SW846 8015	100 U	240	200 UJ	150 J	110 J
Acids								
Acetic Acid	mg/L	10	SW846 8015	1 U	50 U	1.4	5.8 J	6.6 J
Butyric Acid	mg/L	10	SW846 8015	1 U	50 U	1 U	1 U	2 UJ
Propionic Acid	mg/L	10	SW846 8015	1 U	50 U	1 U	2 UJ	2 UJ
Volatile Acids	mg/L	10		15	150	75	600	600

Pesticides

				Location C	Location D	Location E	Location F	Location H		
				Day 90	Day 0	Day 90	Day 90	Day 0	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**5/15/2009**	**2/12/2009**	**4/17/2009**	**6/29/2009**	**4/7/2009**	**4/22/2009**	**7/22/2009**
4,4'-DDE	ug/L	0.05	SW846 8081A		0.11					
Aldrin	ug/L	0.05	SW846 8081A				0.12 PG			0.35
beta-BHC	ug/L	0.05	SW846 8081A			0.062 PG				
delta-BHC	ug/L	0.05	SW846 8081A							
Dieldrin	ug/L	0.05	SW846 8081A							
Endosulfan I	ug/L	0.05	SW846 8081A					0.22 PG		
Endosulfan II	ug/L	0.05	SW846 8081A						0.42	
Endrin	ug/L	0.05	SW846 8081A							
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A							
Heptachlor	ug/L	0.05	SW846 8081A	0.24			0.093			
Heptachlor epoxide	ug/L	0.05	SW846 8081A							
Aroclor 1248	ug/L	0.4	SW846 8082							

PG - indicates that the result is estimated and the sample was diluted due to matrix interference

Pesticides

				Location I	Location J	Location K	Location L	Location M		Location O
				Day 14	Day 14	Day 14	Day 14	Supply Water	Day 0	Day 0
PARAMETER	UNITS	PQL	US EPA Method	**5/28/2009**	**5/18/2009**	**6/2/2009**	**5/27/2009**	**5/19/2009**	**5/19/2009**	**7/1/2009**
4,4'-DDE	ug/L	0.05	SW846 8081A							
Aldrin	ug/L	0.05	SW846 8081A		0.083					0.11 PG
beta-BHC	ug/L	0.05	SW846 8081A	0.37			0.069 PG			
delta-BHC	ug/L	0.05	SW846 8081A							
Dieldrin	ug/L	0.05	SW846 8081A							
Endosulfan I	ug/L	0.05	SW846 8081A							
Endosulfan II	ug/L	0.05	SW846 8081A							
Endrin	ug/L	0.05	SW846 8081A							
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A		0.27		0.38			
Heptachlor	ug/L	0.05	SW846 8081A			0.1		0.8 PG	0.84 PG	0.065 PG
Heptachlor epoxide	ug/L	0.05	SW846 8081A							
Aroclor 1248	ug/L	0.4	SW846 8082							

PG - indicates that the result is estimated and the sample was diluted c

Pesticides

				Location Q	Location R		Location S		
				Day 0	Day 14	Day 90	Supply Water	Day 0	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**6/30/2009**	**7/7/2009**	**10/28/2009**	**8/25/2009**	**8/25/2009**	**9/8/2009**
4,4'-DDE	ug/L	0.05	SW846 8081A		0.72				
Aldrin	ug/L	0.05	SW846 8081A	0.17 PG					
beta-BHC	ug/L	0.05	SW846 8081A	0.26	0.87 PG	0.41 PG			
delta-BHC	ug/L	0.05	SW846 8081A	0.072 PG	0.4 PG				
Dieldrin	ug/L	0.05	SW846 8081A		0.31 PG				
Endosulfan I	ug/L	0.05	SW846 8081A			1.8 PG			0.5
Endosulfan II	ug/L	0.05	SW846 8081A		0.28 PG				
Endrin	ug/L	0.05	SW846 8081A		0.32 PG				
gamma-BHC (Lindane)	ug/L	0.05	SW846 8081A		0.96	0.34			
Heptachlor	ug/L	0.05	SW846 8081A	0.12	0.49 PG	0.41 PG	0.051	0.063	
Heptachlor epoxide	ug/L	0.05	SW846 8081A	0.26 PG	0.22 PG	0.31			
Aroclor 1248	ug/L	0.4	SW846 8082		8				

PG - indicates that the result is estimated and the sample was diluted c

Semi-Volatile Organic Compounds

				Location A				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/7/2009	2/8/2009	2/11/2009	2/20/2009	5/8/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C					
2,6-Dichlorophenol	ug/L	2	SW846 8270C	2				
2-Methylnaphthalene	ug/L	2	SW846 8270C					
2-Methylphenol	ug/L	10	SW846 8270C					
2-Naphthylamine	ug/L	10	SW846 8270C					
2-Picoline	ug/L	10	SW846 8270C					
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C					
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C					
Acetophenone	ug/L	10	SW846 8270C					
Benzo(a)pyrene	ug/L	5	SW846 8270C					
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					
Benzo(ghi)perylene	ug/L	2	SW846 8270C					
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					
Benzyl alcohol	ug/L	10	SW846 8270C					
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C					
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C					
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C					
Diethyl phthalate	ug/L	10	SW846 8270C			35 J		
Di-n-butyl phthalate	ug/L	10	SW846 8270C					
Di-n-octyl phthalate	ug/L	10	SW846 8270C					
Fluoranthene	ug/L	2	SW846 8270C					
Fluorene	ug/L	2	SW846 8270C					
Hexachlorobenzene	ug/L	0.05	SW846 8270C					
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C					
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C					
Phenanthrene	ug/L	2	SW846 8270C	2.7				
Phenol	ug/L	2	SW846 8270C					
Phorate	ug/L	10	SW846 8270C					
Pyrene	ug/L	2	SW846 8270C					
Pyridine	ug/L	10	SW846 8270C	86	2600	1800	860	490

NOTES
NA - Not Applicable
NR - Analytical data has not been reported by the laboratory to date.
ND - The constituent was not detected. The reported concentration is less than the laboratory detection limit.
J - The reported result is an estimated result. The result is less than the laboratory reporting limit.
E - The resported result is an estimated result.

Semi-Volatile Organic Compounds

				Location B				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	1/26/2009	1/29/2009	2/2/2009	2/10/2009	4/29/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C					
2,6-Dichlorophenol	ug/L	2	SW846 8270C					
2-Methylnaphthalene	ug/L	2	SW846 8270C	120	94			
2-Methylphenol	ug/L	10	SW846 8270C					11
2-Naphthylamine	ug/L	10	SW846 8270C	41 J				
2-Picoline	ug/L	10	SW846 8270C					
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C			14	11	14
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C					
Acetophenone	ug/L	10	SW846 8270C					
Benzo(a)pyrene	ug/L	5	SW846 8270C					
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					
Benzo(ghi)perylene	ug/L	2	SW846 8270C					
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					
Benzyl alcohol	ug/L	10	SW846 8270C					
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C					
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C					9.8
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C			3.2		
Diethyl phthalate	ug/L	10	SW846 8270C					
Di-n-butyl phthalate	ug/L	10	SW846 8270C					
Di-n-octyl phthalate	ug/L	10	SW846 8270C					
Fluoranthene	ug/L	2	SW846 8270C					
Fluorene	ug/L	2	SW846 8270C	11 J	8.4 J			
Hexachlorobenzene	ug/L	0.05	SW846 8270C			0.99 J		
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C			3.1		
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C					
Phenanthrene	ug/L	2	SW846 8270C	22 J	16 J			
Phenol	ug/L	2	SW846 8270C		11 J			
Phorate	ug/L	10	SW846 8270C					
Pyrene	ug/L	2	SW846 8270C					
Pyridine	ug/L	10	SW846 8270C	310	350	250	77	260

NOTES
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ND - The constituent was not detected. The reported concentration is less than the la
J - The reported result is an estimated result. The result is less than the laboratory re
E - The resported result is an estimated result.

Semi-Volatile Organic Compounds

				Location D			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	2/12/2009	2/13/2009	2/17/2009	5/13/09
2,4-Dimethylphenol	ug/L	10	SW846 8270C				
2,6-Dichlorophenol	ug/L	2	SW846 8270C				
2-Methylnaphthalene	ug/L	2	SW846 8270C	7.5	3.7		
2-Methylphenol	ug/L	10	SW846 8270C				
2-Naphthylamine	ug/L	10	SW846 8270C				
2-Picoline	ug/L	10	SW846 8270C				
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C		0.35 J		1.1 J
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C				9.5
Acetophenone	ug/L	10	SW846 8270C				
Benzo(a)pyrene	ug/L	5	SW846 8270C				
Benzo(b)fluoranthene	ug/L	2	SW846 8270C				
Benzo(ghi)perylene	ug/L	2	SW846 8270C				
Benzo(k)fluoranthene	ug/L	2	SW846 8270C				
Benzyl alcohol	ug/L	10	SW846 8270C				
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C				
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C			30	
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C				
Diethyl phthalate	ug/L	10	SW846 8270C				
Di-n-butyl phthalate	ug/L	10	SW846 8270C				
Di-n-octyl phthalate	ug/L	10	SW846 8270C				
Fluoranthene	ug/L	2	SW846 8270C				
Fluorene	ug/L	2	SW846 8270C				
Hexachlorobenzene	ug/L	0.05	SW846 8270C				
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C				
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C				
Phenanthrene	ug/L	2	SW846 8270C				
Phenol	ug/L	2	SW846 8270C				2.4
Phorate	ug/L	10	SW846 8270C				
Pyrene	ug/L	2	SW846 8270C				
Pyridine	ug/L	10	SW846 8270C	17			

NOTES
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ND - The constituent was not detected. The reported concentration is less than the la
J - The reported result is an estimated result. The result is less than the laboratory re
E - The resported result is an estimated result.

Semi-Volatile Organic Compounds

				Location E				
				Day 0	Day1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	4/1/2009	4/3/2009	4/7/2009	4/17/2009	4/17/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C					
2,6-Dichlorophenol	ug/L	2	SW846 8270C					
2-Methylnaphthalene	ug/L	2	SW846 8270C					
2-Methylphenol	ug/L	10	SW846 8270C					
2-Naphthylamine	ug/L	10	SW846 8270C					
2-Picoline	ug/L	10	SW846 8270C					
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C					
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C					
Acetophenone	ug/L	10	SW846 8270C			10		
Benzo(a)pyrene	ug/L	5	SW846 8270C					
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					
Benzo(ghi)perylene	ug/L	2	SW846 8270C					
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					
Benzyl alcohol	ug/L	10	SW846 8270C					
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C					
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C					
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C					
Diethyl phthalate	ug/L	10	SW846 8270C					
Di-n-butyl phthalate	ug/L	10	SW846 8270C					
Di-n-octyl phthalate	ug/L	10	SW846 8270C					
Fluoranthene	ug/L	2	SW846 8270C					
Fluorene	ug/L	2	SW846 8270C					
Hexachlorobenzene	ug/L	0.05	SW846 8270C					
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C					
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C					
Phenanthrene	ug/L	2	SW846 8270C					
Phenol	ug/L	2	SW846 8270C		2.6 J	3.2		
Phorate	ug/L	10	SW846 8270C					
Pyrene	ug/L	2	SW846 8270C					
Pyridine	ug/L	10	SW846 8270C	35	430	310	200	57

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Semi-Volatile Organic Compounds

				Location F				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	3/24/2009	3/27/2009	4/1/2009	4/9/2009	6/29/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C					
2,6-Dichlorophenol	ug/L	2	SW846 8270C					
2-Methylnaphthalene	ug/L	2	SW846 8270C					
2-Methylphenol	ug/L	10	SW846 8270C					
2-Naphthylamine	ug/L	10	SW846 8270C					
2-Picoline	ug/L	10	SW846 8270C					
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C			11	12 J	
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C					
Acetophenone	ug/L	10	SW846 8270C			11		
Benzo(a)pyrene	ug/L	5	SW846 8270C					
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					
Benzo(ghi)perylene	ug/L	2	SW846 8270C					
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					
Benzyl alcohol	ug/L	10	SW846 8270C					
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C					
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C			33	870	
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C					
Diethyl phthalate	ug/L	10	SW846 8270C					
Di-n-butyl phthalate	ug/L	10	SW846 8270C			14		
Di-n-octyl phthalate	ug/L	10	SW846 8270C					
Fluoranthene	ug/L	2	SW846 8270C					
Fluorene	ug/L	2	SW846 8270C					
Hexachlorobenzene	ug/L	0.05	SW846 8270C					
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C					
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C					
Phenanthrene	ug/L	2	SW846 8270C					3 J
Phenol	ug/L	2	SW846 8270C		16	15	16	
Phorate	ug/L	10	SW846 8270C					
Pyrene	ug/L	2	SW846 8270C					
Pyridine	ug/L	10	SW846 8270C	370	520	250	220	140

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Semi-Volatile Organic Compounds

				Location G			Locaction H		
				Day1	Day 5	Day 14	Day 0	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	4/8/2009	4/13/2009	4/22/2009	4/7/2009	4/13/2009	4/22/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C						
2,6-Dichlorophenol	ug/L	2	SW846 8270C						
2-Methylnaphthalene	ug/L	2	SW846 8270C	2.7					
2-Methylphenol	ug/L	10	SW846 8270C						
2-Naphthylamine	ug/L	10	SW846 8270C						
2-Picoline	ug/L	10	SW846 8270C						
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C						
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C						
Acetophenone	ug/L	10	SW846 8270C						
Benzo(a)pyrene	ug/L	5	SW846 8270C						
Benzo(b)fluoranthene	ug/L	2	SW846 8270C						
Benzo(ghi)perylene	ug/L	2	SW846 8270C						
Benzo(k)fluoranthene	ug/L	2	SW846 8270C						
Benzyl alcohol	ug/L	10	SW846 8270C						
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C						
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C				16	10	20
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C						
Diethyl phthalate	ug/L	10	SW846 8270C						
Di-n-butyl phthalate	ug/L	10	SW846 8270C						11
Di-n-octyl phthalate	ug/L	10	SW846 8270C						
Fluoranthene	ug/L	2	SW846 8270C						
Fluorene	ug/L	2	SW846 8270C						
Hexachlorobenzene	ug/L	0.05	SW846 8270C						
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C						
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C						
Phenanthrene	ug/L	2	SW846 8270C						
Phenol	ug/L	2	SW846 8270C						
Phorate	ug/L	10	SW846 8270C						
Pyrene	ug/L	2	SW846 8270C						
Pyridine	ug/L	10	SW846 8270C	55	30	14			

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Semi-Volatile Organic Compounds

				Location I			
				Day 0	Day 1	Day 5	Day 90
PARAMETER	UNITS	PQL	US EPA Method	5/9/2009	5/15/2009	5/19/2009	10/20/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C				
2,6-Dichlorophenol	ug/L	2	SW846 8270C				
2-Methylnaphthalene	ug/L	2	SW846 8270C				
2-Methylphenol	ug/L	10	SW846 8270C				
2-Naphthylamine	ug/L	10	SW846 8270C				
2-Picoline	ug/L	10	SW846 8270C				
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C				
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C				
Acetophenone	ug/L	10	SW846 8270C				
Benzo(a)pyrene	ug/L	5	SW846 8270C			6.7	
Benzo(b)fluoranthene	ug/L	2	SW846 8270C			10	
Benzo(ghi)perylene	ug/L	2	SW846 8270C			6.9	
Benzo(k)fluoranthene	ug/L	2	SW846 8270C			5.9	
Benzyl alcohol	ug/L	10	SW846 8270C		41 J	17	
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C				
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C				
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C			11	
Diethyl phthalate	ug/L	10	SW846 8270C				
Di-n-butyl phthalate	ug/L	10	SW846 8270C				
Di-n-octyl phthalate	ug/L	10	SW846 8270C				
Fluoranthene	ug/L	2	SW846 8270C	5.5		6.1	
Fluorene	ug/L	2	SW846 8270C				
Hexachlorobenzene	ug/L	0.05	SW846 8270C				
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C			9.5	
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C				
Phenanthrene	ug/L	2	SW846 8270C				
Phenol	ug/L	2	SW846 8270C				
Phorate	ug/L	10	SW846 8270C				
Pyrene	ug/L	2	SW846 8270C				
Pyridine	ug/L	10	SW846 8270C		640	310	42

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Semi-Volatile Organic Compounds

				Location J				Location K	
				Day0	Day 1	Day 5	Day 14	Day 0	Day 14
PARAMETER	UNITS	PQL	US EPA Method	5/1/2009	5/4/2009	5/8/2009	5/18/2009	05/07/2009	6/2/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C						
2,6-Dichlorophenol	ug/L	2	SW846 8270C						
2-Methylnaphthalene	ug/L	2	SW846 8270C				2		
2-Methylphenol	ug/L	10	SW846 8270C						
2-Naphthylamine	ug/L	10	SW846 8270C						
2-Picoline	ug/L	10	SW846 8270C						
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C						
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C						
Acetophenone	ug/L	10	SW846 8270C		13				
Benzo(a)pyrene	ug/L	5	SW846 8270C					6.9	
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					11	
Benzo(ghi)perylene	ug/L	2	SW846 8270C					7.4	
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					6.7	
Benzyl alcohol	ug/L	10	SW846 8270C						
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C	4300	18	17			
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C				9.6		
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C					12	
Diethyl phthalate	ug/L	10	SW846 8270C						
Di-n-butyl phthalate	ug/L	10	SW846 8270C				130		
Di-n-octyl phthalate	ug/L	10	SW846 8270C						
Fluoranthene	ug/L	2	SW846 8270C						
Fluorene	ug/L	2	SW846 8270C						
Hexachlorobenzene	ug/L	0.05	SW846 8270C						
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C					10	
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C				2.7		
Phenanthrene	ug/L	2	SW846 8270C						
Phenol	ug/L	2	SW846 8270C						
Phorate	ug/L	10	SW846 8270C						
Pyrene	ug/L	2	SW846 8270C						
Pyridine	ug/L	10	SW846 8270C						150

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Semi-Volatile Organic Compounds

				Location L		
				Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	5/13/2009	5/14/2009	5/18/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C			
2,6-Dichlorophenol	ug/L	2	SW846 8270C			
2-Methylnaphthalene	ug/L	2	SW846 8270C			
2-Methylphenol	ug/L	10	SW846 8270C			
2-Naphthylamine	ug/L	10	SW846 8270C			
2-Picoline	ug/L	10	SW846 8270C			
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C			
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C			
Acetophenone	ug/L	10	SW846 8270C			
Benzo(a)pyrene	ug/L	5	SW846 8270C			
Benzo(b)fluoranthene	ug/L	2	SW846 8270C			
Benzo(ghi)perylene	ug/L	2	SW846 8270C			
Benzo(k)fluoranthene	ug/L	2	SW846 8270C			
Benzyl alcohol	ug/L	10	SW846 8270C	16		
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C			
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C			
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C			
Diethyl phthalate	ug/L	10	SW846 8270C			
Di-n-butyl phthalate	ug/L	10	SW846 8270C			
Di-n-octyl phthalate	ug/L	10	SW846 8270C			
Fluoranthene	ug/L	2	SW846 8270C			
Fluorene	ug/L	2	SW846 8270C			
Hexachlorobenzene	ug/L	0.05	SW846 8270C			
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C			
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C			
Phenanthrene	ug/L	2	SW846 8270C			
Phenol	ug/L	2	SW846 8270C		5.5	10
Phorate	ug/L	10	SW846 8270C			
Pyrene	ug/L	2	SW846 8270C			
Pyridine	ug/L	10	SW846 8270C			

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Semi-Volatile Organic Compounds

				Location M			Location N
				Day 1	Day 5	Day 14	Day 1
PARAMETER	UNITS	PQL	US EPA Method	6/6/2009	6/10/2009	6/19/2009	7/15/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C				
2,6-Dichlorophenol	ug/L	2	SW846 8270C				
2-Methylnaphthalene	ug/L	2	SW846 8270C				2.5
2-Methylphenol	ug/L	10	SW846 8270C				
2-Naphthylamine	ug/L	10	SW846 8270C				
2-Picoline	ug/L	10	SW846 8270C				
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C				
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C				
Acetophenone	ug/L	10	SW846 8270C				
Benzo(a)pyrene	ug/L	5	SW846 8270C				
Benzo(b)fluoranthene	ug/L	2	SW846 8270C				
Benzo(ghi)perylene	ug/L	2	SW846 8270C				
Benzo(k)fluoranthene	ug/L	2	SW846 8270C				
Benzyl alcohol	ug/L	10	SW846 8270C				
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C				
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C				
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C				
Diethyl phthalate	ug/L	10	SW846 8270C				
Di-n-butyl phthalate	ug/L	10	SW846 8270C				
Di-n-octyl phthalate	ug/L	10	SW846 8270C				
Fluoranthene	ug/L	2	SW846 8270C				
Fluorene	ug/L	2	SW846 8270C				
Hexachlorobenzene	ug/L	0.05	SW846 8270C				
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C				
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C				
Phenanthrene	ug/L	2	SW846 8270C				
Phenol	ug/L	2	SW846 8270C				
Phorate	ug/L	10	SW846 8270C				
Pyrene	ug/L	2	SW846 8270C				
Pyridine	ug/L	10	SW846 8270C	140	100	94	

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Semi-Volatile Organic Compounds

				Location O	
				Day 0	Day 1
PARAMETER	UNITS	PQL	US EPA Method	7/1/2009	7/1/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C		
2,6-Dichlorophenol	ug/L	2	SW846 8270C		
2-Methylnaphthalene	ug/L	2	SW846 8270C	260	52
2-Methylphenol	ug/L	10	SW846 8270C		
2-Naphthylamine	ug/L	10	SW846 8270C		
2-Picoline	ug/L	10	SW846 8270C		
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C		
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C		
Acetophenone	ug/L	10	SW846 8270C		
Benzo(a)pyrene	ug/L	5	SW846 8270C		
Benzo(b)fluoranthene	ug/L	2	SW846 8270C		
Benzo(ghi)perylene	ug/L	2	SW846 8270C		
Benzo(k)fluoranthene	ug/L	2	SW846 8270C		
Benzyl alcohol	ug/L	10	SW846 8270C		
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C		
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C		
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C		
Diethyl phthalate	ug/L	10	SW846 8270C		
Di-n-butyl phthalate	ug/L	10	SW846 8270C		
Di-n-octyl phthalate	ug/L	10	SW846 8270C		
Fluoranthene	ug/L	2	SW846 8270C		
Fluorene	ug/L	2	SW846 8270C		
Hexachlorobenzene	ug/L	0.05	SW846 8270C		
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C		
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C		
Phenanthrene	ug/L	2	SW846 8270C		
Phenol	ug/L	2	SW846 8270C		3.5 J
Phorate	ug/L	10	SW846 8270C		
Pyrene	ug/L	2	SW846 8270C		
Pyridine	ug/L	10	SW846 8270C		

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Semi-Volatile Organic Compounds

				Location P				Location Q
				Day 1	Day 5	Day 14	Day 90	Day 0
PARAMETER	UNITS	PQL	US EPA Method	7/15/2009	7/20/2009	7/29/2009	10/29/2009	6/30/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C				12	
2,6-Dichlorophenol	ug/L	2	SW846 8270C					
2-Methylnaphthalene	ug/L	2	SW846 8270C					
2-Methylphenol	ug/L	10	SW846 8270C				15	
2-Naphthylamine	ug/L	10	SW846 8270C					
2-Picoline	ug/L	10	SW846 8270C					
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C				16	
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C					
Acetophenone	ug/L	10	SW846 8270C				16	
Benzo(a)pyrene	ug/L	5	SW846 8270C					
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					
Benzo(ghi)perylene	ug/L	2	SW846 8270C					
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					
Benzyl alcohol	ug/L	10	SW846 8270C					
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C					
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C		16 J			10
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C					
Diethyl phthalate	ug/L	10	SW846 8270C					
Di-n-butyl phthalate	ug/L	10	SW846 8270C					
Di-n-octyl phthalate	ug/L	10	SW846 8270C		15 J			
Fluoranthene	ug/L	2	SW846 8270C					
Fluorene	ug/L	2	SW846 8270C					
Hexachlorobenzene	ug/L	0.05	SW846 8270C					
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C					
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C					
Phenanthrene	ug/L	2	SW846 8270C					
Phenol	ug/L	2	SW846 8270C				21	
Phorate	ug/L	10	SW846 8270C				9.4 U	
Pyrene	ug/L	2	SW846 8270C					
Pyridine	ug/L	10	SW846 8270C	360	470	220	340	

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Semi-Volatile Organic Compounds

				Location R				
				Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	6/22/2009	6/23/2009	7/13/2009	7/7/2009	10/28/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C					
2,6-Dichlorophenol	ug/L	2	SW846 8270C					
2-Methylnaphthalene	ug/L	2	SW846 8270C		3.1		120	
2-Methylphenol	ug/L	10	SW846 8270C					
2-Naphthylamine	ug/L	10	SW846 8270C					
2-Picoline	ug/L	10	SW846 8270C		25			
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C					
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C					
Acetophenone	ug/L	10	SW846 8270C			22		
Benzo(a)pyrene	ug/L	5	SW846 8270C					
Benzo(b)fluoranthene	ug/L	2	SW846 8270C					
Benzo(ghi)perylene	ug/L	2	SW846 8270C					
Benzo(k)fluoranthene	ug/L	2	SW846 8270C					
Benzyl alcohol	ug/L	10	SW846 8270C				750	
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C					
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	21			49 J	58 J B
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C					
Diethyl phthalate	ug/L	10	SW846 8270C					
Di-n-butyl phthalate	ug/L	10	SW846 8270C					
Di-n-octyl phthalate	ug/L	10	SW846 8270C					
Fluoranthene	ug/L	2	SW846 8270C					4.1 J B
Fluorene	ug/L	2	SW846 8270C					
Hexachlorobenzene	ug/L	0.05	SW846 8270C					
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C					
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C					
Phenanthrene	ug/L	2	SW846 8270C				22	29 J B
Phenol	ug/L	2	SW846 8270C					
Phorate	ug/L	10	SW846 8270C					
Pyrene	ug/L	2	SW846 8270C				13 J	24 J B
Pyridine	ug/L	10	SW846 8270C		31	10 J		

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Semi-Volatile Organic Compounds

				Location S			
				Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	8/25/2009	8/25/2009	8/29/2009	9/8/2009
2,4-Dimethylphenol	ug/L	10	SW846 8270C				
2,6-Dichlorophenol	ug/L	2	SW846 8270C				
2-Methylnaphthalene	ug/L	2	SW846 8270C				
2-Methylphenol	ug/L	10	SW846 8270C				
2-Naphthylamine	ug/L	10	SW846 8270C				
2-Picoline	ug/L	10	SW846 8270C				
3-Methylphenol & 4-Methylphenol	ug/L	10	SW846 8270C				
7,12-Dimethylbenz(a)anthracene	ug/L	10	SW846 8270C				
Acetophenone	ug/L	10	SW846 8270C				
Benzo(a)pyrene	ug/L	5	SW846 8270C				
Benzo(b)fluoranthene	ug/L	2	SW846 8270C				
Benzo(ghi)perylene	ug/L	2	SW846 8270C				
Benzo(k)fluoranthene	ug/L	2	SW846 8270C				
Benzyl alcohol	ug/L	10	SW846 8270C				
bis(2-Chloroethyl) ether	ug/L	2	SW846 8270C				
bis(2-Ethylhexyl) phthalate	ug/L	10	SW846 8270C	14			
Dibenz(a,h)anthracene	ug/L	2	SW846 8270C				2.3
Diethyl phthalate	ug/L	10	SW846 8270C				
Di-n-butyl phthalate	ug/L	10	SW846 8270C				
Di-n-octyl phthalate	ug/L	10	SW846 8270C				
Fluoranthene	ug/L	2	SW846 8270C				
Fluorene	ug/L	2	SW846 8270C	2			
Hexachlorobenzene	ug/L	0.05	SW846 8270C				
Indeno(1,2,3-cd)pyrene	ug/L	2	SW846 8270C				2.4
N-Nitrosodiphenylamine	ug/L	2	SW846 8270C				
Phenanthrene	ug/L	2	SW846 8270C	3.4	3.5		
Phenol	ug/L	2	SW846 8270C				
Phorate	ug/L	10	SW846 8270C				
Pyrene	ug/L	2	SW846 8270C				
Pyridine	ug/L	10	SW846 8270C	70	18	530	280

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Volatile Organic Compounds

				Location A				Location B				
				Day 0	Day 1	Day 5	Day 14	Day 0	Day 1	Day 5	Day 14	Day 90
PARAMETER	UNITS	PQL	US EPA Method	**2/7/2009**	**2/8/2009**	**2/11/2009**	**2/20/2009**	**1/26/2009**	**1/29/2009**	**2/2/2009**	**2/10/2009**	**4/29/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B									16 J
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B									
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	16				140 J	82	110 J	74	23 J
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	6				100 J	33	120	65	19 J
2-Butanone	ug/L	5	SW846 8260B									
Acetone	ug/L	20	SW846 8260B			76						75 J B
Acrolein	ug/L	100	SW846 8260B									
Acrylonitrile	ug/L	100	SW846 8260B									
Benzene	ug/L	5	SW846 8260B		7.7	8	8.5 J		240	1200	420	360
Bromoform	ug/L	5	SW846 8260B									
Bromomethane	ug/L	5	SW846 8260B									
Carbon disulfide	ug/L	5	SW846 8260B					1500				
Chloroform	ug/L	5	SW846 8260B		28							
Chloromethane	ug/L	5	SW846 8260B									
Ethylbenzene	ug/L	5	SW846 8260B					19 J	14 J	85 J	42 J	21 J
Isopropylbenzene	ug/L	5	SW846 8260B									
Methylene chloride	ug/L	5	SW846 8260B									
Naphthalene	ug/L	5	SW846 8260B					24 J	18 J			
n-Butylbenzene	ug/L	5	SW846 8260B									
n-Propylbenzene	ug/L	5	SW846 8260B									
p-Isopropyltoluene	ug/L	5	SW846 8260B							54 J	22 J	
sec-Butylbenzene	ug/L	5	SW846 8260B					84 J		68 J		
Tetrachloroethene	ug/L	5	SW846 8260B									
Toluene	ug/L	5	SW846 8260B		5.1			81 J	340		820	660
Xylenes (total)	ug/L	15	SW846 8260B	18				210 J B		1100		300

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Volatile Organic Compounds

				Location C				Location D				Location E			
				Day 0	Day 1	Day 5	Day 14	Day 0	Day 1	Day 5	Day 90	Day 0	Day1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**2/11/2009**	**2/17/2009**	**2/20/2009**	**2/27/2009**	**2/12/2009**	**2/13/2009**	**2/17/2009**	**5/13/09**	**4/1/2009**	**4/3/2009**	**4/7/2009**	**4/17/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B												
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B												
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B												
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B												
2-Butanone	ug/L	5	SW846 8260B												
Acetone	ug/L	20	SW846 8260B							140 J	20				
Acrolein	ug/L	100	SW846 8260B												
Acrylonitrile	ug/L	100	SW846 8260B												
Benzene	ug/L	5	SW846 8260B										7.8	5.8	17
Bromoform	ug/L	5	SW846 8260B												
Bromomethane	ug/L	5	SW846 8260B												
Carbon disulfide	ug/L	5	SW846 8260B	23000	1400	260	19	54000	7300	400					
Chloroform	ug/L	5	SW846 8260B												
Chloromethane	ug/L	5	SW846 8260B												
Ethylbenzene	ug/L	5	SW846 8260B												
Isopropylbenzene	ug/L	5	SW846 8260B												
Methylene chloride	ug/L	5	SW846 8260B												
Naphthalene	ug/L	5	SW846 8260B												
n-Butylbenzene	ug/L	5	SW846 8260B												
n-Propylbenzene	ug/L	5	SW846 8260B												
p-Isopropyltoluene	ug/L	5	SW846 8260B												
sec-Butylbenzene	ug/L	5	SW846 8260B												
Tetrachloroethene	ug/L	5	SW846 8260B												
Toluene	ug/L	5	SW846 8260B									5.6		7.7	13
Xylenes (total)	ug/L	15	SW846 8260B												

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Volatile Organic Compounds

				Location F				Loc G	Location H				
				Day 1	Day 5	Day 14	Day 90	Day 14	Supply Water	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**3/27/2009**	**4/1/2009**	**4/9/2009**	**6/29/2009**	**4/22/2009**	**4/7/2009**	**4/7/2009**	**4/8/2009**	**4/13/2009**	**4/22/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B				170 J						
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B				66 J						
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	11	52	33	980		24000		4000	630	
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	5.2 J	33 J	21 J	820		11000		1900	280	
2-Butanone	ug/L	5	SW846 8260B										
Acetone	ug/L	20	SW846 8260B	14 J		98 J		26	66000	23	5800	1600	20
Acrolein	ug/L	100	SW846 8260B										
Acrylonitrile	ug/L	100	SW846 8260B										
Benzene	ug/L	5	SW846 8260B	280	880	400	290			6.7			
Bromoform	ug/L	5	SW846 8260B										
Bromomethane	ug/L	5	SW846 8260B										
Carbon disulfide	ug/L	5	SW846 8260B										
Chloroform	ug/L	5	SW846 8260B										
Chloromethane	ug/L	5	SW846 8260B										
Ethylbenzene	ug/L	5	SW846 8260B	7.6 J	29 J	23 J	270						
Isopropylbenzene	ug/L	5	SW846 8260B										
Methylene chloride	ug/L	5	SW846 8260B										
Naphthalene	ug/L	5	SW846 8260B				130 J		10000		1400	260	
n-Butylbenzene	ug/L	5	SW846 8260B										
n-Propylbenzene	ug/L	5	SW846 8260B										
p-Isopropyltoluene	ug/L	5	SW846 8260B										
sec-Butylbenzene	ug/L	5	SW846 8260B										
Tetrachloroethene	ug/L	5	SW846 8260B										
Toluene	ug/L	5	SW846 8260B	300	920	540	1600						
Xylenes (total)	ug/L	15	SW846 8260B	120	340	280	3300		5200 J		860 J	130 J	

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Volatile Organic Compounds

				Location I				Location J				Location K		
				Day 0	Day 1	Day 5	Day 14	Day 0	Day 1	Day 5	Day 14	Day 0	Day 1	Day 5
PARAMETER	UNITS	PQL	US EPA Method	**5/9/2009**	**5/15/2009**	**5/19/2009**	**5/28/2009**	**5/1/2009**	**5/4/2009**	**5/8/2009**	**5/18/2009**	**05/07/2009**	**5/20/2009**	**5/22/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B											
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B											
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B									42	14	7.7
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B									20	7.7	5.3
2-Butanone	ug/L	5	SW846 8260B	7.5										
Acetone	ug/L	20	SW846 8260B		390	130	25			22 B	330			
Acrolein	ug/L	100	SW846 8260B											
Acrylonitrile	ug/L	100	SW846 8260B											
Benzene	ug/L	5	SW846 8260B											
Bromoform	ug/L	5	SW846 8260B					7.8	5.8					
Bromomethane	ug/L	5	SW846 8260B											
Carbon disulfide	ug/L	5	SW846 8260B											
Chloroform	ug/L	5	SW846 8260B											
Chloromethane	ug/L	5	SW846 8260B											
Ethylbenzene	ug/L	5	SW846 8260B											
Isopropylbenzene	ug/L	5	SW846 8260B											
Methylene chloride	ug/L	5	SW846 8260B	13 B										
Naphthalene	ug/L	5	SW846 8260B											
n-Butylbenzene	ug/L	5	SW846 8260B											
n-Propylbenzene	ug/L	5	SW846 8260B											
p-Isopropyltoluene	ug/L	5	SW846 8260B											
sec-Butylbenzene	ug/L	5	SW846 8260B											
Tetrachloroethene	ug/L	5	SW846 8260B		8.9 J									
Toluene	ug/L	5	SW846 8260B	6.7										
Xylenes (total)	ug/L	15	SW846 8260B									35		

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Volatile Organic Compounds

				Location L					Location M		Location N			Location O	
				Supply Water	Day 0	Day 1	Day 5	Day 14	Day 1	Day 14	Day 0	Day 1	Day 5	Day 0	Day 1
PARAMETER	UNITS	PQL	US EPA Method	**5/12/2009**	**5/13/2009**	**5/14/2009**	**5/18/2009**	**5/27/2009**	**6/6/2009**	**6/19/2009**	**07/14/09**	**7/15/2009**	**7/19/2009**	**7/1/2009**	**7/1/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B												
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B												
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B	27			38	770						67	59
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B	14			32	670						7.7 J	6.7 J
2-Butanone	ug/L	5	SW846 8260B												17 J
Acetone	ug/L	20	SW846 8260B						21		170	90 J	210	130 J	69 J
Acrolein	ug/L	100	SW846 8260B												
Acrylonitrile	ug/L	100	SW846 8260B												
Benzene	ug/L	5	SW846 8260B			39	99	260		6.2					
Bromoform	ug/L	5	SW846 8260B	50	9.3										
Bromomethane	ug/L	5	SW846 8260B												
Carbon disulfide	ug/L	5	SW846 8260B												
Chloroform	ug/L	5	SW846 8260B												
Chloromethane	ug/L	5	SW846 8260B												
Ethylbenzene	ug/L	5	SW846 8260B				17	220							
Isopropylbenzene	ug/L	5	SW846 8260B					86							
Methylene chloride	ug/L	5	SW846 8260B									5.5 J			
Naphthalene	ug/L	5	SW846 8260B											820	720
n-Butylbenzene	ug/L	5	SW846 8260B												
n-Propylbenzene	ug/L	5	SW846 8260B												
p-Isopropyltoluene	ug/L	5	SW846 8260B												
sec-Butylbenzene	ug/L	5	SW846 8260B												
Tetrachloroethene	ug/L	5	SW846 8260B												
Toluene	ug/L	5	SW846 8260B			46	260	1500						19 J	
Xylenes (total)	ug/L	15	SW846 8260B			15	220	2700			25 J			46 J	26 J

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Volatile Organic Compounds

				Location P				Location Q			
				Day 1	Day 5	Day 14	Day 90	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**7/15/2009**	**7/20/2009**	**7/29/2009**	**10/29/2009**	**6/30/2009**	**7/1/2009**	**7/6/2009**	**7/15/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B								
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B								
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B		840	710	84				
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B		940	770	79				
2-Butanone	ug/L	5	SW846 8260B								
Acetone	ug/L	20	SW846 8260B	320	5200		190	28	16 J	42	520
Acrolein	ug/L	100	SW846 8260B								
Acrylonitrile	ug/L	100	SW846 8260B								
Benzene	ug/L	5	SW846 8260B	140	2000	1100	200				
Bromoform	ug/L	5	SW846 8260B								
Bromomethane	ug/L	5	SW846 8260B			230 J					
Carbon disulfide	ug/L	5	SW846 8260B								
Chloroform	ug/L	5	SW846 8260B								
Chloromethane	ug/L	5	SW846 8260B	5.9 J							
Ethylbenzene	ug/L	5	SW846 8260B		650	470 J	46				
Isopropylbenzene	ug/L	5	SW846 8260B		160 J	120 J					
Methylene chloride	ug/L	5	SW846 8260B								
Naphthalene	ug/L	5	SW846 8260B								
n-Butylbenzene	ug/L	5	SW846 8260B								
n-Propylbenzene	ug/L	5	SW846 8260B			90 J					
p-Isopropyltoluene	ug/L	5	SW846 8260B								
sec-Butylbenzene	ug/L	5	SW846 8260B								
Tetrachloroethene	ug/L	5	SW846 8260B								
Toluene	ug/L	5	SW846 8260B	92	6200	5200	580				
Xylenes (total)	ug/L	15	SW846 8260B	32	6500	5400	530				

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Volatile Organic Compounds

				Location R				Location S			
				Day 0	Day 1	Day 5	Day 14	Day 0	Day 1	Day 5	Day 14
PARAMETER	UNITS	PQL	US EPA Method	**6/22/2009**	**6/23/2009**	**7/13/2009**	**7/7/2009**	**8/25/2009**	**8/25/2009**	**8/29/2009**	**9/8/2009**
1,2,3-Trichlorobenzene	ug/L	5	SW846 8260B								6.5
1,2,4-Trichlorobenzene	ug/L	5	SW846 8260B								
1,2,4-Trimethylbenzene	ug/L	5	SW846 8260B		8.1			11	33		
1,3,5-Trimethylbenzene	ug/L	5	SW846 8260B						13		
2-Butanone	ug/L	5	SW846 8260B		8.1						
Acetone	ug/L	20	SW846 8260B	25	100	30	42			1300	31
Acrolein	ug/L	100	SW846 8260B								
Acrylonitrile	ug/L	100	SW846 8260B								
Benzene	ug/L	5	SW846 8260B								
Bromoform	ug/L	5	SW846 8260B								
Bromomethane	ug/L	5	SW846 8260B								
Carbon disulfide	ug/L	5	SW846 8260B								
Chloroform	ug/L	5	SW846 8260B								
Chloromethane	ug/L	5	SW846 8260B		150						
Ethylbenzene	ug/L	5	SW846 8260B								
Isopropylbenzene	ug/L	5	SW846 8260B								
Methylene chloride	ug/L	5	SW846 8260B								
Naphthalene	ug/L	5	SW846 8260B		14						
n-Butylbenzene	ug/L	5	SW846 8260B								
n-Propylbenzene	ug/L	5	SW846 8260B								
p-Isopropyltoluene	ug/L	5	SW846 8260B							28 J	
sec-Butylbenzene	ug/L	5	SW846 8260B								
Tetrachloroethene	ug/L	5	SW846 8260B								
Toluene	ug/L	5	SW846 8260B								
Xylenes (total)	ug/L	15	SW846 8260B						16		

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