Semi-Annual Water Quality Monitoring Report with Corrective Action Update

Prepared for

Greene County Active C&D over Closed MSW Landfill
Walstonburg, North Carolina

March 2012

Permit Number: 40-02
MESCO Project Number: G12010.0

Submittal: October 8, 2012

P.O. Box 97
Garner, NC 27529
License No. C-0281

Municipal Services Garner, NC
Engineering Company, P.A. Boone, NC
Municipal Engineering Services Company, P.A.
Garner and Boone, North Carolina

DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Municipal Engineering Services Co., PA

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Jonathan Pfohl Phone: (919)772-5393

E-mail: jpfohl@mesco.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Greene County Active C&D and Closed MSWLF	105 Landfill Road Walstonburg, NC 27888	40-02	.1600	March 19, 2012

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☒ Detection Monitoring ☒ Assessment Monitoring ☒ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☒ Corrective action data (specify) MNA Paramaters MW-1R & MW-4
☐ Other(specify)

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

D. Mark Durway, L.G. Geologist (919) 772-5393

Facility Representative Name (Print) Title (Area Code) Telephone Number

D. Mark Durway 10.8.12

Signature Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 0875 GEOLOGIST D. MARK DURWAY

P.O. Box 97, Garner, NC 27529

Facility Representative Address

C-0281

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

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License No. C-0281

CIVIL/SANITARY/ENVIRONMENTAL ENGINEERS

SOLID WASTE MANAGEMENT

Municipal Services Engineering Company, P.A.

SITE PLANNING/SUBDIVISIONS

SUBSURFACE UTILITY ENGINEERING (SUE)

October 8, 2012

Jaclynne Drummond
Solid Waste Section (SWS)
NCDENR Division of Waste Management
217 West Jones Street
Raleigh, NC 27603

Subject: **Semi-Annual Water Quality Monitoring Report with Corrective Action Update**
Greene County Active C&D and Closed MSWLF
Event Date: March 19, 2012
Permit No. 40-02
MESCO Project No. G12010.0

Dear Ms. Drummond:

Introduction

On behalf of Greene County, Municipal Engineering Services Company, P.A. (MESCO) is pleased to present this *Semi-Annual Water Quality Report with Corrective Action Update* for the spring 2012 at the Active Construction and Demolition (C&D) Landfill and Closed Unlined Sanitary Municipal Solid Waste Landfill (MSWLF). NCDENR Solid Waste Rules 15ANCAC13B.1630 through .1637 requires that Greene County provide this report to the SWS on a semi-annual basis. This report documents the quality of the ground and surface waters during this monitoring event performed on March 19, 2012. A brief corrective action update and qualitative evaluation comparing current and historical data is also presented. During this event the only constituents detected above North Carolina Groundwater Standards (2L) was benzene and vinyl chloride from MW-4 which is located within the relevant compliance boundary.

Background

The Greene County Active Construction and Demolition (C&D) Landfill and Closed Unlined Sanitary Municipal Solid Waste Landfill (MSWLF) is located off Fire Tower Road (SR 1239), Walstonburg, Greene County, North Carolina and operates under permit #40-02. A topographic map showing the facility location is included as **Figure 1**.

Prior to operating as a C&D landfill, the site operated as an approximate 13-acre Municipal Solid Waste (MSW) unlined sanitary landfill. The MSW unit stopped receiving waste by January 1, 1998 in accordance with the *Greene County Transition Plan.* The C&D landfill is operating on a portion of the top of the MSW unit which are monitored together.

Water quality has been monitored at this facility on at least a semi-annual basis since 1994. MESCO submitted an *Assessment and Corrective Action* (*ACM*) [DIN 8776] report dated August 30, 2007. MESCO then developed a *Corrective Action Plan* (*CAP*) which was revised on February 12, 2010 *(CAP-Rev. 5)* [DIN 9670] and subsequently approved on February 16, 2010 [DIN 9671]. Groundwater remediation using monitored natural attenuation (MNA) was initiated on March 30, 2010 and has continued on a semi-annual basis since. Since four MNA baseline monitoring events have been completed a *Corrective Action Evaluation Report* (*CAER*) is planned to be submitted.

As specified within rule 15A NCAC 13B.1632(i) and the SWS Environmental Monitoring Report Form, this report contains sampling procedures, field and laboratory results, corrective action update, groundwater and surface water characterization, and findings. Detections compared to Standards tables, hydrogeologic properties table, MNA parameters table, histograms of historical detections, Biochlor MNA screening models, potentiometric map, field parameters, and laboratory analytical reports with chains-of-custody (C-O-C) and quality assurance/quality control data.

PO Box 97, Garner, North Carolina 27529 (919) 772-5393 PO Box 349, Boone, NC 28607 (828) 262-1767

Sampling Procedures

Environment 1 (E1) of Greenville, NC, reportedly performed this monitoring event utilizing portable monitoring methodology in accordance with the approved Sampling & Analysis Plan (SAP) contained in the *CAP-Rev.5*. E1 reportedly collected groundwater samples from five downgradient groundwater monitoring wells (MW-4, MW-5, MW-6, MW-7 and MW-8), one background well (MW-1R), and one downstream surface water sampling point (Downstream). Surface water point Upstream was reported as dry. Quality control measures included submittal and analysis of an equipment blank (EB) and field blank (FB). Surface water and groundwater monitoring locations are depicted on **Figure 1** and **Figure 2** respectively.

Static water levels in each well were measured electronically prior to purging. Samples were transported under C-O-C protocol and analyzed within the hold times specified for each method.

Field Parameter Data

E1 quantified the field parameters pH, specific conductance, temperature, turbidity, oxidation reduction potential (ORP) and dissolved oxygen (DO) which is presented in the laboratory analysis report in **Appendix A**.

Laboratory Results

E1 reported laboratory analysis for Appendix I and the few Appendix II exclusive constituents (defined in this report as constituents not also listed in Appendix I) detected during the previous September 28, 2011 semi-annual sampling event. Additionally, MW-4 and the background well (MW-1R) were analyzed for the SWS recommended MNA performance parameters for the fifth consecutive semi-annual event as part of corrective action. Microseeps Inc. of Pittburgh, PA performed specialty analysis of the MNA parameters including volatile fatty acids, methane/ethene/ethane and dissolved hydrogen. A sampling and analysis table summarizing the locations, constituents, and methods is presented on **Table 1**. Laboratory results and C-O-Cs are contained in **Appendix A**.

Water samples were analyzed to the laboratory-established Method Detection Limits (MDL), which are at or below current Solid Waste Section Limits (SWSL). **Table 2** summarizes constituents detected in groundwater and surface water samples above the current SWSL, Groundwater Protection Standards (GWP), North Carolina Groundwater Standards (2L) or the applicable Class C North Carolina Surface Water Standards (2B). **Table 3** summarizes Appendix II detections (defined in this report as not also listed in Appendix I) above the MDL.

Quality Control Samples

Six of the seventeen (35%) targeted metals, including the Appendix II constituents mercury and tin, were detected in low non-quantifiable ("j" qualified) concentrations in the FB and EB. The detections of mercury (EB) and tin (FB) indicates that field and or laboratory induced artifact contamination may have attributed to false positives or high bias concentrations of tin and mercury as detected in four groundwater samples.

Groundwater Samples

Total metals were not detected in quantifiable concentrations (>SWSL) above 2L or GWP Standards.

The VOCs benzene and vinyl chloride were detected in concentrations above their respective 2L Standards in samples collected from MW-4. All constituents detected during this event have previously been reported in concentrations within their historically identified range. VOCs remain absent from samples collected from MW-7 and MW-8 located east of MW-4.

Targeted Appendix II exclusive parameters were not detected in levels above the SWSL nor established applicable Standards.

A site map spatially depicting the constituents detected in excess of the 2L Standard during this event is presented on **Figure 2**.

Surface Water Samples

Constituents were not detected above the SWSL or the applicable 2B Standard in the surface water sample collected downstream of the facility along an unnamed tributary of Sandy Run.

Groundwater Characterization

A single-day potentiometric map of the uppermost aquifer is presented on **Figure 2**, using ground water elevation data reported by E1 for this event. Groundwater flow direction and rates were calculated based on reported data and are included in **Table 4**. Estimated flow direction was easterly with flow rates, quantified through modified Darcy's equation, ranging from approximately 12 ft./yr. (MW-1R) to 681 ft./yr. (MW-8) for an average of approximately 145 ft./yr.

Corrective Action Update

Groundwater remediation measures utilizing MNA per *CAP-Rev. 5* continues to be implemented at the facility. Performance MNA parameters are presented in **Table 5**. Natural attenuation screening protocol scoring matrix shown in **Appendix B** indicates adequate to strong evidence of biodegredation of chlorinated organics.

Remediation by natural attenuation was simulated using EPA's BIOCHLOR screening models which are presented in **Appendix B**. Modeling was performed on cis-1,2-dichloroethene, vinyl chloride and ethene from the easternmost landfill edge along the flow path through MW-4 and MW-7 using simulation times of 35 and 50 years. Model inputs included data for advection, dispersion, adsorption, plume dimensions and assumed contaminant source concentrations. Models indicate that cis-1,2-dichloroethene and it's common biodegredation byproduct vinyl chloride will not migrate beyond the eastern compliance boundary in concentrations above the 2L Standard by year 2017 or 2032. Biochlor model results also indicate a balance between source loading and plume attenuation capacity.

Findings

The laboratory results suggest the surficial aquifer in close proximity to MW-4 is impacted by low level dissolved phase Appendix I VOCs (benzene and vinyl chloride) in concentrations above the 2L Standard. Quantitative evaluation indicates that concentrations of VOCs detected during this event are within their own respective historically identified range and an increasing trend is not evident (**Figure 3**). Total VOCs and benzene concentrations reported during this event decreased by 50% and 7% compared to their respective baseline averages established during the initial four corrective action events (**Figure 4**). Vinyl chloride, a common biodegredation byproduct, increased in concentrations by 21% compared to it's own respective baseline average. The horizontal plume extent beyond MW-4 is likely defined within the compliance boundary as evidenced by the lack of detections in sentinel wells MW-7 and MW-8. Interpretation of the MNA data and screening models continues to indicate that biotransformation has and is expected to continue to occur near MW-4.

The detections of the Appendix II exclusive target constituents tin and mercury is likely not an indication of a leachate release since non-quantifiable concentrations were also found in background MW-1 and the quality control blanks.

Closing

Semi-annual water quality and MNA monitoring continued at the facility on September 6, 2012. Please contact us by phone at (919) 772-5393 or by email at jpfohl@mesco.com or mdurway@mesco.com should you have any questions regarding this report.

Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., P.A.

Jonathan Pfohl
Environmental Specialist

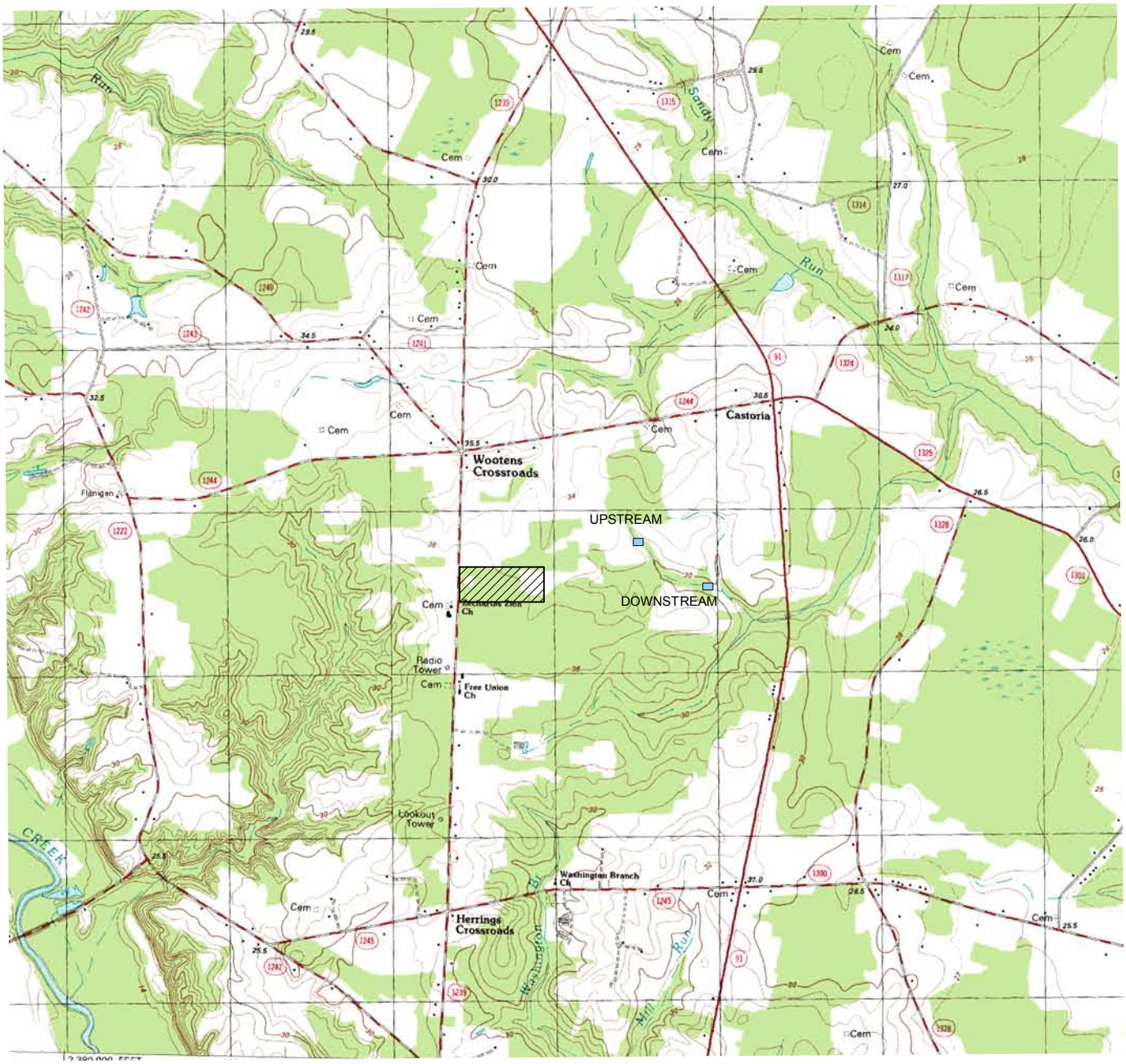
D. Mark Durway, L.G.
Geologist

NORTH CAROLINA LICENSED SEAL 0875 GEOLOGIST D. MARK DURWAY

Enclosures
cc: Mr. David Jones

Figures

Topographic Map with Site Location
Greene County Active C&D over Closed MSWLF



105 Landfill Road (SR1257)
Walstonburg, NC
Lat:35-31-29.7520
Long:-77-41-49.4325
Northing:648520.2533
Easting:2387660.4409

0 ——— 3,334'

QUADRANGLE LEGEND

ROAD CLASSIFICATION

Primary highway, hard surface

Light-duty road, hard or improved surface

Secondary highway, hard surface

Unimproved road

Interstate Route

U. S. Route

State Route

NOTE: Topographical map assembled from corresponding USGS 7.5-min. quadrangles of the subject region.

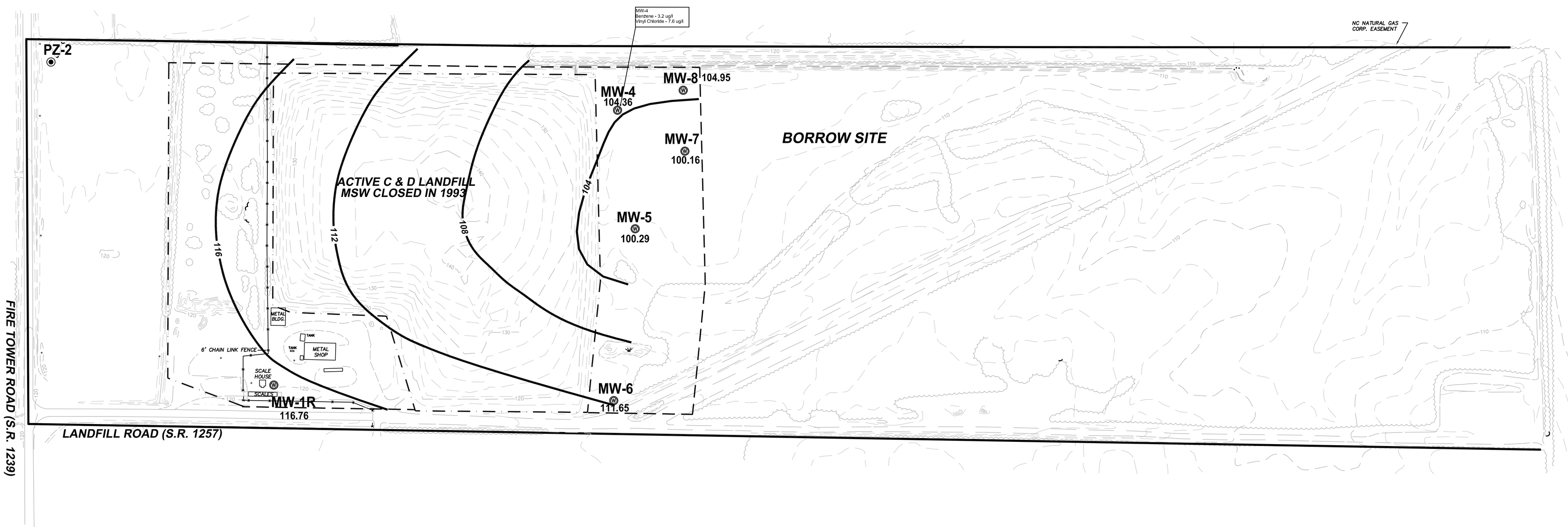
FIGURE 1

LEGEND

- RELEVANT COMPLIANCE BOUNDARY (250' FROM WASTE OR 50' FROM PROPERTY LINE)
- EXISTING EROSION CONTROL DIVERSION DITCH
- 120 EXISTING TOPOGRAPHIC CONTOURS
- PROPERTY LINE
- WASTE LIMIT OF UNLINED MSWLF
- MW-1R MONITORING WELL
- PZ-2 PIEZOMETER
- 94.29 GROUNDWATER POTENTIOMETRIC ELEVATION
- 112 GROUNDWATER CONTOUR

NOTES

THIS MAP WAS GENERATED FROM AERIAL PHOTOS FLOWN ON 2-22-94 BY TRIANGLE AERIAL MAPPING, SUPPLEMENTED WITH SURVEYS BY MUNICIPAL ENGINEERING SERVICES CO., PA.



Groundwater Levels & Detections Above 2L Standards
March 19, 2012

WELL #	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUNDWATER POTENTIOMETRIC ELEVATION	BENZENE	VCM
	(ftamsl)	(ftbtoc)	(ftamsl)	(ug/l)	(ug/l)
15A NCAC 2L Groundwater Quality Standard				1.0	0.03
MW-1R	121.78	5.02	116.76		
MW-4	117.89	13.53	104.36	3.2	7.6
MW-5	115.76	15.47	100.29		
MW-6	117.41	5.76	111.65		
MW-7	110.48	10.32	100.16		
MW-8	111.36	6.41	104.95		

GRAPHIC SCALE
120 0 60 120 240 480
(IN FEET)
1 inch = 120 ft.

FIGURE 2

Municipal Engineering Services Company, P.A.
P.O. BOX 97 GARNER, N.C. 27529 (919) 772-5393
P.O. BOX 349 BOONE, N.C. 28607 (828) 262-1767
LICENSE NUMBER: C-0281

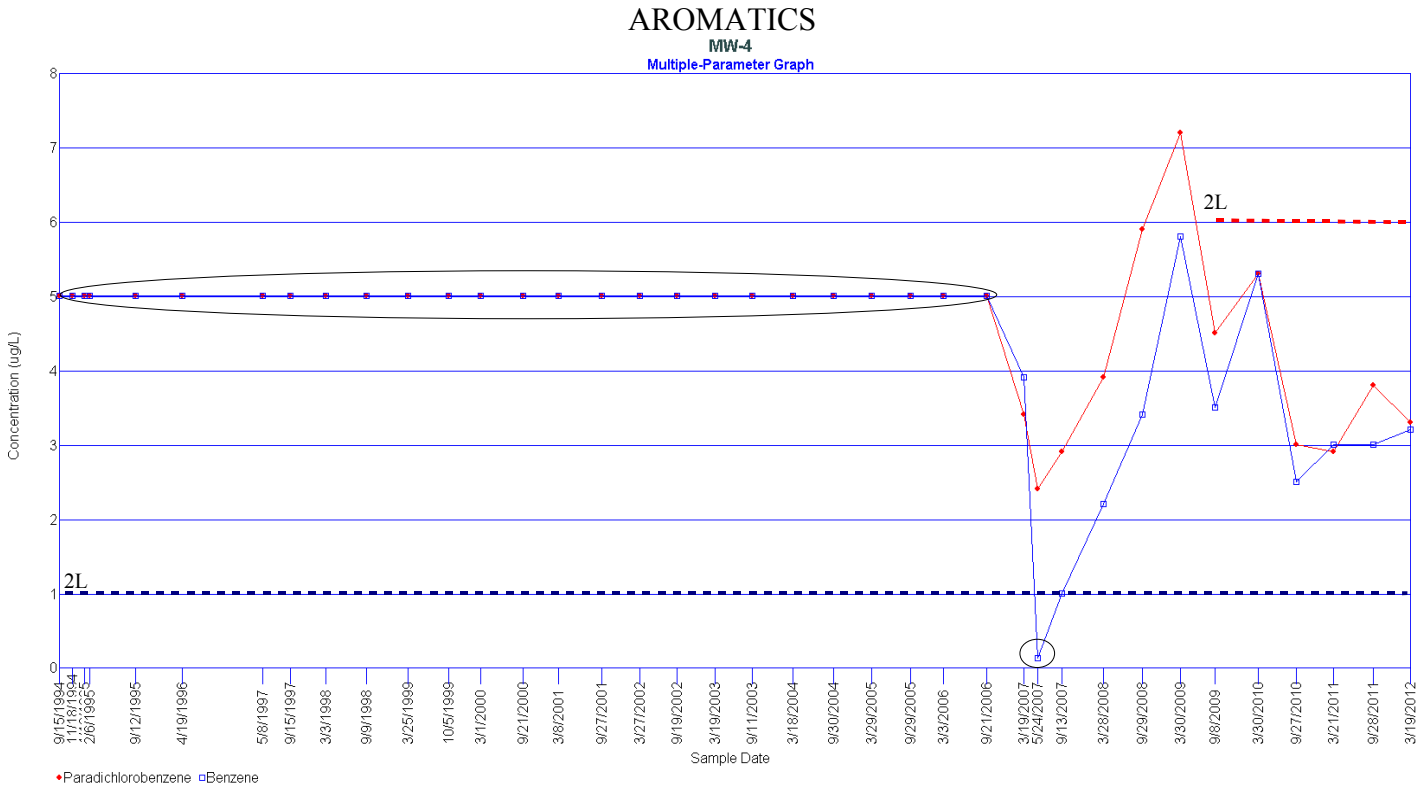
ACTIVE C&D OVER CLOSED MSW LANDFILL FACILITY
GREENE COUNTY
NORTH CAROLINA

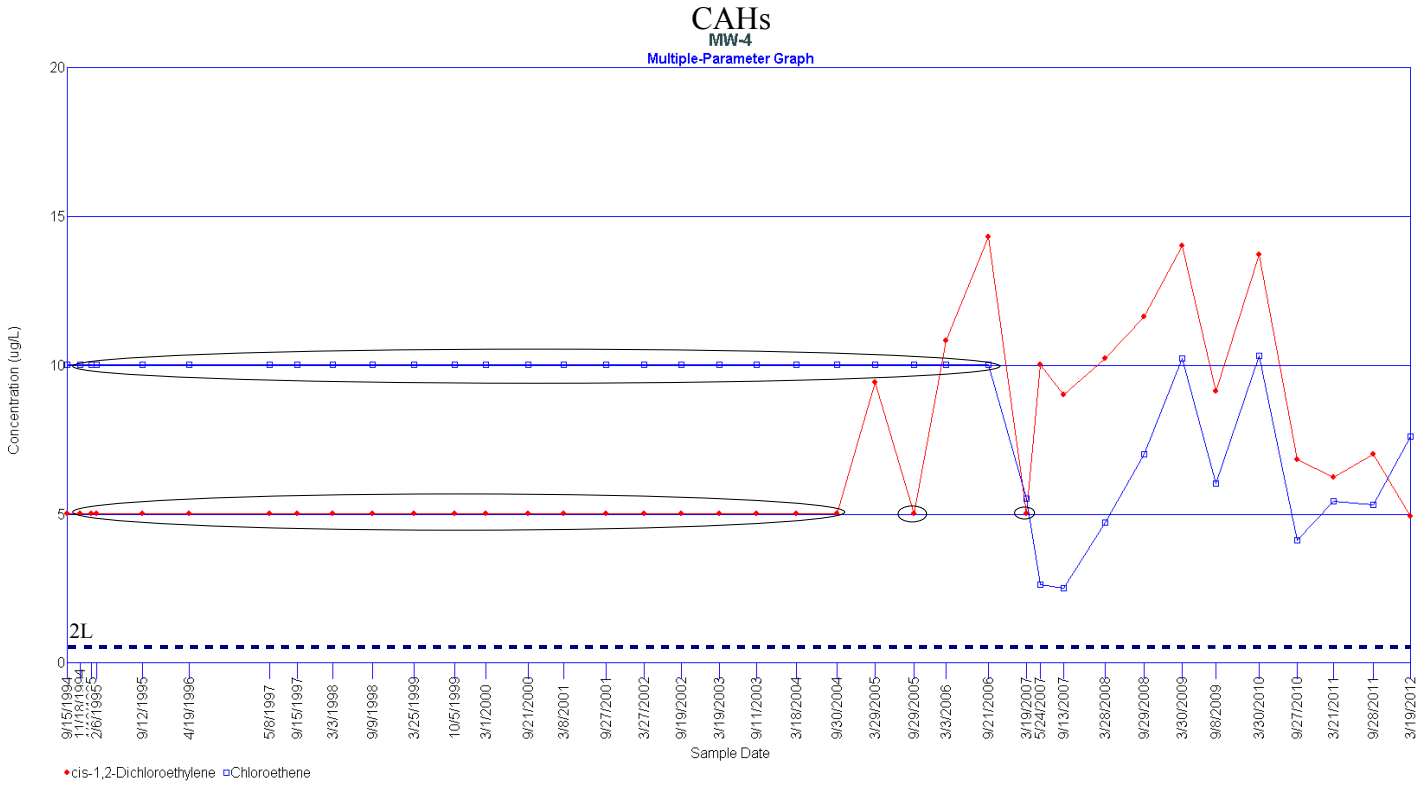
DATE	BY	REV.	DESCRIPTION

POTENTIOMETRIC MAP OF UPPERMOST AQUIFER WITH DETECTIONS ABOVE 2L STANDARDS

SCALE: 1" = 120'
DATE: 9/19/12
DRWN. BY: M. DURWAY
CHKD. BY: M. DURWAY
PROJECT NUMBER G12010.0
DRAWING NO. FIGURE 2
SHEET NO. 1 OF 1

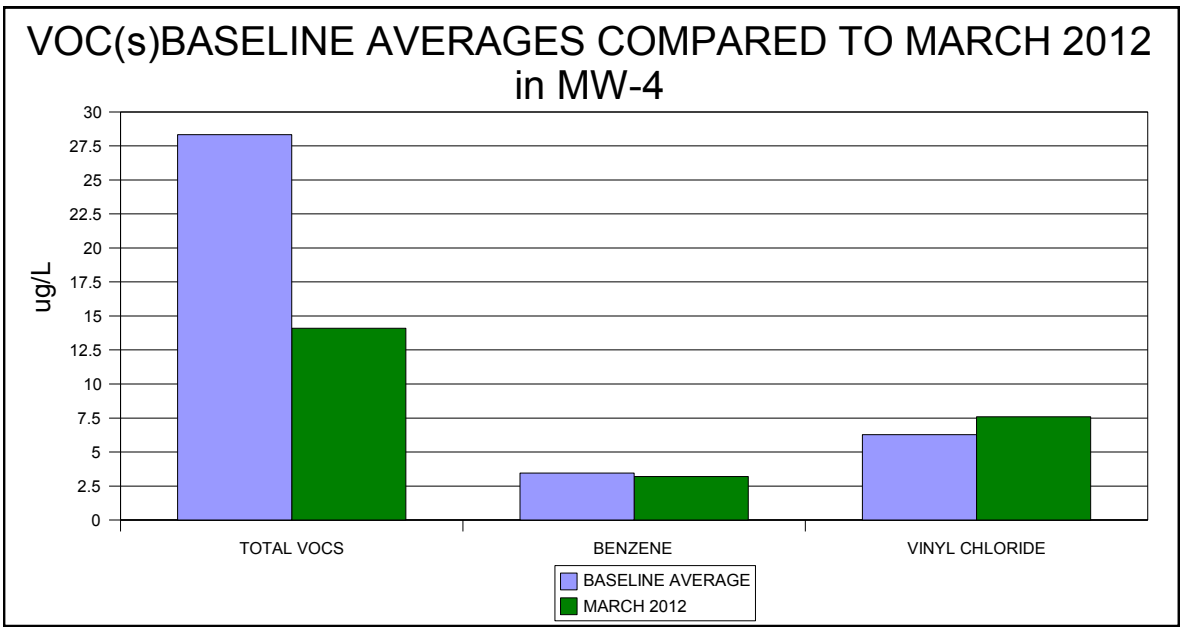
Figure 3
Time-Series Graphs of Select Constituents
March 19, 2012





= Non-Detect But Shown at Detection Limit

Figure 4
Histograms of VOC Concentrations in MW-4
(March 30,2010-September 28, 2011) Compared to March 19, 2012



BASELINE	TOTAL VOCS (ug/l)	BENZENE (ug/l)	VINYL CHLORIDE (ug/l)
MARCH 2010	59.30	5.30	10.30
SEPT. 2010	17.40	2.50	4.10
MARCH 2011	17.50	3.00	5.40
SEPT. 2011	19.10	3.00	5.30
BASELINE AVERAGE	28.33	3.45	6.28

CURRENT	TOTAL VOCS (ug/l)	BENZENE (ug/l)	VINYL CHLORIDE (ug/l)
MARCH 2012	14.10	3.20	7.60

COMPARISON	TOTAL VOCS (ug/l)	BENZENE (ug/l)	VINYL CHLORIDE (ug/l)
DIFFERENCE (ug/l)	-14.23	-0.25	1.33
DIFFERRENCE (%)	-50	-7	+21

Tables

Table 1
Sampling and Analysis Summary
March 19, 2012

		App. I		App. II		MNA														Field Parameter				
	Reason Not Sampled	VOCs	Total Metals	Tin	Mercury	VFA	Hydrogen	Methane/Ethene/Ethane	Dissolved CO2	Alkalinity	Sulfate	Sulfide	Chloride	TOC	COD	BOD	Iron	Nitrate	Turbidity	Dissolved Oxygen (DO)	Oxidation Reduction Potential (ORP)	Temperature	Conductivity	pH
		Lab EPA 8260B	Lab EPA200.8	Lab EPA200.8	Lab EPA 7470	Lab AM23G	Lab AM20GAX	Lab AM20GAX	Lab SM4500CO2C	Lab SM2320B	Lab SM426C	Lab SM18 4500-S2D	Lab SM4500-CLB	Lab SM 5310C	Lab HACH8000	Lab SM5210B	Lab SM3111B	Lab EPA353.2	Lab SM2130B	Field Meter	Field Meter	Field Meter	Field Meter	Field Meter
MW-1R		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MW-4		x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MW-5		x	x	x	x														x	x	x	x	x	x
MW-6		x	x	x															x	x	x	x	x	x
MW-7		x	x																x	x	x	x	x	x
MW-8		x	x	x															x	x	x	x	x	x
Downstream		x	x	x															x	x	x	x	x	x
Upstream		x	x	x																				
EB		x	x		x																			
FB		x	x		x																			

App I & II = Appendix Lists from current 40 CFR 258

Table 2
Detections in Water Samples Above SWSL, GWP, 2L, or 2B (Appendix I)
March 19, 2012

Sample ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	2B [5]	GWP [6]	Exceedance	Preliminary Cause [7]
MW-1R	Barium	03/19/2012	120	ug/l	0.02	100	700				
MW-4	1,4-Dichlorobenzene	03/19/2012	3.3	ug/l	0.39	1	6				
MW-4	**Vinyl Chloride**	**03/19/2012**	**7.6**	**ug/l**	**0.63**	**1**	**0.03**			**7.57**	**L & LFG**
MW-4	**Benzene**	**03/19/2012**	**3.2**	**ug/l**	**0.24**	**1**	**1**			**2.2**	**L & LFG**
MW-6	Vanadium	03/19/2012	6.4 j	ug/l	0.14	25	NE		3.5	2.9	
MW-6	Thallium	03/19/2012	0.33 j	ug/l	0.02	5.5	NE		0.28	0.05	
MW-7	Vanadium	03/19/2012	10.3 j	ug/l	0.14	25	NE		3.5	6.8	
MW-8	Vanadium	03/19/2012	17.1 j	ug/l	0.14	25	NE		3.5	13.6	
MW-8	Lead	03/19/2012	12	ug/l	0.02	10	15				

[1] MDL = Method Detection Limit
[2] SWSL = Solid Waste Section Reporting Limit
[3] 2L = North Carolina 15A NCAC 2L Groundwater Quality Standard
4 2B = North Carolina 15 NCAC 2B Surface Water Quality Standard for the Applicable Stream Classification
[5] GWP = Groundwater Protection Standard
[7] Preliminary Cause = Refers to a preliminary analysis of the cause and/or source of a detection over the respective 2L/2B Standard.
A definitive source of the detection was not determined as part of this report.
j =Defined by laboratory as Between MDL and SWSL
L = Leachate
LFG = Landfill Gas
NE = Not Established
BOLD = Concentration > 2L, or 2B Standard

Table 3
Detections in Water Samples Above MDL (Appendix II Exclusive)
March 19, 2012

Sample ID	Parameter Name	Sample Date	Result	Unit	MDL [1]	SWSL [2]	2L [3]	GWP [4]	Exceedance	Preliminary Cause
MW-1R	Mercury	3/19/12	0.07 j	ug/l	0.05	0.2	1.1			
MW-5	Mercury	3/19/12	0.18 j	ug/l	0.05	0.2	1.05			
MW-6	Tin	3/19/12	0.23 j	ug/l	0.16	100	NE	NE		
MW-8	Tin	3/19/12	0.57 j	ug/l	0.16	100	NE	NE		
EB	Mercury	3/19/12	0.05 j	ug/l	0.05	0.2	1.05			
FB	Mercury	3/19/12	0.08 j	ug/l	0.05	0.2	1.05			
FB	Tin	3/19/12	0.48 j	ug/l	0.16	100	NE	NE		

[1] MDL = Method Detection Limit
[2] SWSL = Solid Waste Section Reporting Limit
[3] 2L = North Carolina 15A NCAC 2L Groundwater Quality Standard
[4] GWP = Groundwater Protection Standard
j =Defined by laboratory as Between MDL and SWSL
BOLD = Concentration >2L, or 2B Standard

Table 4
Hydrologic Properties at Monitoring Well Locations
March 19, 2012

Monitoring Well	Hydraulic Conductivity (cm/sec)	Effective Porosity (%)	Hydraulic Gradient (ft/ft)	Linear Velocity (ft/yr)	Flow Direction	Depth to Groundwater (ft btoc)	Groundwater Potentiometric Elevation (ft amsl)
MW-1R	1.20E-04	15	0.015	12	N27E	5.02	116.76
MW-4	1.10E-04	15	0.020	15	S44E	13.53	104.36
MW-5	1.40E-04	15	0.027	27	S83E	15.47	100.29
MW-6	1.90E-04	15	0.029	38	N11E	5.76	111.65
MW-7	1.98E-04	7	0.033	97	S09E	10.32	100.16
MW-8	1.14E-03	7	0.040	681	S07E	6.41	104.95
Minimum	1.10E-04	7	0.015	12	-	5.02	100.16
Average	3.16E-04	12	0.027	145	-	9.42	106.36
Maximum	1.14E-03	15	0.040	681	-	15.47	116.76

NOTE: Data for hydraulic conductivities for wells except MW-7 & MW-8 obtained from GAI Consultants' *Water Quality Modifications* (October, 1994)

Data for hydraulic conductivities for MW-7 & MW-8 obtained from slug tests performed by MESCO (June, 2007)

Hydrologic gradient from water level elevations on March 19, 2012

Flow rate (Q) is defined by modified Darcy's equation:

where

$$Q = -\frac{K}{n_e} \cdot \frac{dh}{dl}$$

K= hydraulic conductivity
n_e = effective porosity
dh= head difference
dl= horizontal distance

Table 5
MNA Parameters at Monitoring Well Locations Summary
March 19, 2012

Parameters	Method	mdl*	Units	MW-1R	MW-4
				03/19/12	03/19/12
VFA – Acetic Acid	AM23G	6	ug/l	<6	<6
VFA – Butyric Acid	AM23G	4	ug/l	<4	<4
VFA – Hexanoic Acid	AM23G	6	ug/l	<6	<6
VFA – i-Hexanoic Acid	AM23G	6	ug/l	<6	<6
VFA – i-Pentanoic Acid	AM23G	44	ug/l	<44	<44
VFA – Lactic Acid	AM23G	10	ug/l	<10	<10
VFA – Pentaonic Acid	AM23G	12	ug/l	<12	<12
VFA – Propionic Acid	AM23G	7	ug/l	<7	<7
VFA – Pyruvic Acid	AM23G	33	ug/l	<33	<33
Hydrogen	AM20GAX	0.25	nM	0.69	1
Methane	AM20GAX	0.003	ug/l	490	5400
Ethene	AM20GAX	0.002	ug/l	0.01	0.15
Ethane	AM20GAX	0.001	ug/l	<0.001	0.02
CO2-Dissolved	SM4500CO2C	1000	ug/l	95000	755000
Alkalinity	SM2320B	1000	ug/l	7000	183000
Sulfate	SM426C	5000	ug/l	15200	8100
Sulfide	SM4500-S2D	100	ug/l	<100	614
Chloride	SM4500-CLB	5000	ug/l	105000	7000
TOC	SM5310C	300	ug/l	8980	1600
COD	HACH8000	20000	ug/l	<20000	36000
BOD	SM5210B	2000	ug/l	<2000	16000
Iron, Total	SM3111B	15.9	ug/l	499	72975
Nitrate	EPA353.2	30	ug/l	1410	<30
Temperature	SM2550B	0.10	C	14.66	16.21
ORP	SM2580B	0.0	mV	4.8	11
DO	SM4500OG	100	ug/l	300	1410
pH	SM4500HB	0.10	SU	4.97	5.55
Specific Conductance	SM2510B	1	ug/l	444	371
Turbidity	SM2130B	0.0	NTU	11.0	4.8

Notes:

VFA = Volatile Fatty Acids

mdl* = Lowest Method Detection Limit for Lab Parameters or Lowest Field Measurement Possible

Appendix B
Laboratory Analysis Reports
Chains of Custody
Field Data Reports

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6005

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL ,NC 28580

DATE COLLECTED: 03/19/12
DATE REPORTED : 04/09/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Upstream	Downstream	Well #4	Well #5	Well #6	Analysis Date	Analyst	Method Code
PH (field measurement), Units			Missing	6.20	5.55	4.38	4.85	03/19/12	RJH	SM4500HB
BOD, mg/l	2.0	2.0			16			03/19/12	TRB	SM5210B
COD, mg/l	20.0	20.0			36			03/22/12	TRB	HACH8000
Nitrate Nitrogen as N, mg/l	0.03	10.0			--- U			03/21/12	BJC	EPA353.2
Total Organic Carbon, mg/l	0.30	1.0			1.60			03/23/12	SEJ	SM5310C
Total Alkalinity, mg/l	1.0	1.0			183			03/19/12	TRB	SM2320B
Chloride, mg/l	5.0	5.0			7			03/22/12	HLB	SM4500-CLB
Sulfate, mg/l	5.0	250.0			8.1 J			03/23/12	TRB	SM426C
Antimony, ug/l	0.14	6.0	Missing	--- U	--- U	0.22 J	--- U	03/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	Missing	2.1 J	2.4 J	4.7 J	1.2 J	03/23/12	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	Missing	37.7 J	35.2 J	34.1 J	45.8 J	03/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	Missing	--- U	--- U	0.16 J	0.30 J	03/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	Missing	0.04 J	0.05 J	0.12 J	0.14 J	03/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	Missing	0.87 J	1.6 J	0.53 J	0.72 J	03/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	Missing	2.3 J	0.24 J	1.8 J	1.3 J	03/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	Missing	1.6 J	0.28 J	0.42 J	5.2 J	03/23/12	LFJ	EPA200.8
Iron, ug/l	15.9	300.0			72975			03/29/12	ADD	SM3111B
Lead, ug/l	0.02	10.0	Missing	2.1 J	0.22 J	2.3 J	5.2 J	03/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20				0.18 J		03/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	Missing	0.95 J	2.7 J	0.73 J	1.2 J	03/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	Missing	--- U	0.41 J	--- U	--- U	03/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	Missing	--- U	--- U	0.06 J	0.05 J	03/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	Missing	--- U	0.05 J	0.04 J	0.33 J	03/23/12	LFJ	EPA200.8
Tin, ug/l	0.16	100.0	Missing	0.18 J	--- U	--- U	0.23 J	03/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	Missing	3.4 J	1.7 J	0.92 J	6.4 J	03/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	Missing	6.4 J	0.98 J	4.6 J	8.3 J	03/23/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	Missing	28.9	4.80	37.3	361	03/19/12	RJH	SM2130B
Sulfide, ug/l	100	1000			614 J			03/23/12	LFJ	SM4500-S2D
Conductivity (at 25c), uMhos/cm	1.0	1.0	Missing	211	371	67	43	03/19/12	RJH	SM2510B
Dissolved Oxygen, mg/l	0.1	0.1	Missing	2.02	1.41	0.93	1.56	03/19/12	RJH	SM4500OG
Temperature, °C			Missing	14.27	16.21	17.43	15.10	03/19/12	RJH	SM2550B
Static Water Level, feet					13.53	15.47	5.76	03/19/12	RJH	
Well Depth, feet					26.16	28.34	26.87	03/19/12	RJH	
Carbon Dioxide, mg/l	1.0	1.0			755			03/19/12	TRB	SM4500CO2C
ORP, mv			Missing	28.9	4.80	37.3	361	03/19/12	RJH	SM2580B

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6005

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL ,NC 28580

DATE COLLECTED: 03/19/12
DATE REPORTED : 04/09/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Well #7	Well #8	Well #1R	Piezometer #2	Equipment Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.42	4.64	4.97			03/19/12	RJH	SM4500HB
BOD, mg/l	2.0	2.0			--- U			03/19/12	TRB	SM5210B
COD, mg/l	20.0	20.0			--- U			03/22/12	TRB	HACH8000
Nitrate Nitrogen as N, mg/l	0.03	10.0			1.41 J			03/21/12	BJC	EPA353.2
Total Organic Carbon, mg/l	0.30	1.0			8.98			03/23/12	SEJ	SM5310C
Total Alkalinity, mg/l	1.0	1.0			7			03/19/12	TRB	SM2320B
Chloride, mg/l	5.0	5.0			105			03/22/12	HLB	SM4500-CLB
Sulfate, mg/l	5.0	250.0			15.2 J			03/23/12	TRB	SM426C
Antimony, ug/l	0.14	6.0	--- U	--- U	--- U		--- U	03/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	2.5 J	1.5 J	0.55 J		--- U	03/23/12	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	51.4 J	49.2 J	120		8.0 J	03/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.34 J	0.37 J	0.08 J		--- U	03/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.06 J	0.27 J	0.10 J		--- U	03/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.91 J	0.62 J	0.43 J		0.10 J	03/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	2.3 J	2.0 J	3.0 J		0.83 J	03/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	8.5 J	6.9 J	0.38 J		--- U	03/23/12	LFJ	EPA200.8
Iron, ug/l	15.9	300.0			499			03/29/12	ADD	SM3111B
Lead, ug/l	0.02	10.0	3.7 J	12	0.69 J		--- U	03/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20			0.07		0.05 J	03/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	1.6 J	1.2 J	1.3 J		0.29 J	03/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	0.32 J	--- U	0.76 J		--- U	03/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U		--- U	03/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	0.15 J	0.10 J	0.17 J		--- U	03/23/12	LFJ	EPA200.8
Tin, ug/l	0.16	100.0		0.57 J	--- U		--- U	03/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	10.3 J	17.1 J	--- U		--- U	03/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	7.0 J	6.3 J	6.2 J		0.61 J	03/23/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	776	270	11.0			03/19/12	RJH	SM2130B
Sulfide, ug/l	100	1000			--- U			03/23/12	LFJ	SM4500-S2D
Conductivity (at 25c), uMhos/cm	1.0	1.0	47	32	444			03/19/12	RJH	SM2510B
Dissolved Oxygen, mg/l	0.1	0.1	4.74	6.76	0.30			03/19/12	RJH	SM45000G
Temperature, °C			16.76	16.49	14.66			03/19/12	RJH	SM2550B
Static Water Level, feet			10.32	6.41	5.02	10.45		03/19/12	RJH	
Well Depth, feet			21.38	20.24	19.51			03/19/12	RJH	
Carbon Dioxide, mg/l	1.0	1.0			95			03/19/12	TRB	SM4500CO2C
ORP, mv			776	270	11.0			03/19/12	RJH	SM2580B

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6005

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL ,NC 28580

DATE COLLECTED: 03/19/12
DATE REPORTED : 04/09/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Trip Blank	Field Blank	Analysis Date	Analyst	Method Code
Antimony, ug/l	0.14	6.0		--- U	03/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0		--- U	03/23/12	LFJ	EPA200.8
Barium, ug/l	0.02	100.0		0.08 J	03/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0		--- U	03/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0		--- U	03/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0		0.08 J	03/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0		0.32 J	03/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0		--- U	03/23/12	LFJ	EPA200.8
Lead, ug/l	0.02	10.0		--- U	03/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20		0.08 J	03/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0		0.17 J	03/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0		--- U	03/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0		--- U	03/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5		--- U	03/23/12	LFJ	EPA200.8
Tin, ug/l	0.16	100.0		0.48 J	03/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0		--- U	03/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0		--- U	03/23/12	LFJ	EPA200.8

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL, NC 28580

CLIENT ID: 6005

ANALYST: MAO
DATE COLLECTED: 03/19/12
DATE REPORTED: 04/09/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 03/28/12 Downstream	03/28/12 Well #4	03/28/12 Well #5	03/29/12 Well #6	03/29/12 Well #7
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	7.60	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	9.70 J	0.60 J	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	0.60 J	0.30 J	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	4.90 J	2.40 J	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	3.20	0.50 J	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	0.50 J	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	1.10 J	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	0.30 J	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	3.30	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL, NC 28580

CLIENT ID: 6005

ANALYST: MAO
DATE COLLECTED: 03/19/12
DATE REPORTED: 04/09/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 03/29/12 Well #8	03/24/12 Well #1R	03/29/12 Equipment Blank	03/29/12 Trip Blank	03/29/12 Field Blank
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6005 **Week:** 13

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL NC 28580

( ) 747-5720

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION																				
pH CHECK (LAB)			<2		<2				12	9					12					
CONTAINER TYPE, P/G	P	P	P	P	P	P	P	P	P	P	P	P	P	P	G					
CHEMICAL PRESERVATION	A	A	C	A	C	A	A	A	A	A	F D	A	A	A	E					
SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	BOD	COD	Nitrate	TOC	Alkalinity	Chloride	Sulfate	Metals	Turbidity	Sulfide	Conductivity	DO	Temperature	Field Parameter	EPA 8260B
Upstream					4	G								G	G		G	G	G		G
Downstream	03 19 12	1220		14.27	4	G								G	G		G	G	G		G
Well #4	03 19 12	1310		16.21	13	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Well #5	03 19 12	1020		17.43	4	G								G	G		G	G	G	G	G
Well #6	03 19 12	1030		15.70	4	G								G	G		G	G	G	G	G
Well #7	03 19 12	1000		16.76	4	G								G	G		G	G	G	G	G
Well #8	03 19 12	0935		16.49	4	G								G	G		G	G	G	G	G
Well #1R	03 19 12	1350		14.66	14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Piezometer #2	03 19 12				1															G	
Equipment Blank	03 19 12	0930			3									G							G
Trip Blank					2																

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) [illegible]

SAMPLES RECEIVED IN LAB AT 0.2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hagge 03	19 12	[illegible]	3/19 1243
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS: UPSTREAM - DRY

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 239354

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6005 **Week:** 13

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL NC 28580

( ) 747-5720

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION																						
pH CHECK (LAB)			<2		<2				22		>9					2						
CONTAINER TYPE, P/G			P	P	P	P	P	P	P	P	P	P	P	P	P		G					
CHEMICAL PRESERVATION			A	A	C	A	C	A	A	A	A	A	F D	A	A	A		E				
SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	BOD	COD	Nitrate	TOC	Alkalinity	Chloride	Sulfate	Metals	Turbidity	Sulfide	Conductivity	DO	Temperature	Field Parameter	EPA 8260B	PARAMETERS
Field Blank 03	19 12	0930			3									G							G	

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY:
(Please Print)
Bob Hope

SAMPLES RECEIVED IN LAB AT 0 2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hope 03	19 12	[illegible]	3/19 2 43
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 239353

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Greenville, NC 27858

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CHAIN OF CUSTODY RECORD

CLIENT: 6005 **Week:** 13

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL NC 28580

( ) 747-5720

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	8260 Dup. 1	8260 Dup. 2	CO2	ORP
CHLORINE NEUTRALIZED AT COLLECTION									
pH CHECK (LAB)						12	12		
CONTAINER TYPE, P/G						G	G	P	P
CHEMICAL PRESERVATION						E	E	A	A
Upstream					4				
Downstream	03 19 12	1220		14.27	4	G			G
Well #4	03 19 12	1310		16.21	13	G		G	G
Well #5	03 19 12	1020		17.83	4	G			G
Well #6	03 19 12	1030		15.10	4	G			G
Well #7	03 19 12	1000		16.76	4	G			G
Well #8	03 19 12	0935		16.49	4	G			G
Well #1R	03 19 12	1350		14.66	14	G	G	G	G
Piezometer #2					1				
Equipment Blank	03 19 12	0938			3	G			
Trip Blank					2				

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: Y N

SAMPLES COLLECTED BY: (Please Print) H Page

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Page	03 19 12	B	3/19/2013
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS: UPSTREAM - DRY

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 239352

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CHAIN OF CUSTODY RECORD

CLIENT: 6005 **Week: 13**

GREENE CO. LANDFILL
DAVID JONES
P.O. BOX 543
SNOW HILL NC 28580

( ) 747-5720

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB): 02

CONTAINER TYPE, P/G: G G P P

CHEMICAL PRESERVATION: E E A A

PARAMETERS: A - NONE; B - HNO_3; C - H_2SO_4; D - NAOH; E - HCL; F - ZINC ACETATE; G - NA THIOSULFATE

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	8260 Dup. 1	8260 Dup. 2	CO2	ORP
Field Blank 03	19 12	1930			3	C			

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) H Rose

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Rose 03	19 12	B	3/19 1243
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 239351

Microseeps, Inc
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

March 30, 2012

Steve Jones
Environment 1, Inc.
PO Box 7085
114 Oakmont Drive
Greenville, NC 27835

RE: **GREENE CO. (6005)**
Microseeps Workorder: 4559

Dear Steve Jones:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, March 20, 2012. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Julianne C. Sproull

Julianne Sproull 03/30/2012
jsproull@microseeps.com

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages 11

CERTIFICATE OF ANALYSIS

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Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	NELAP: State of Florida, Department of Health, Bureau of Laboratories
Accreditation ID:	E87832
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: State of Louisiana, Department of Environmental Quality
Accreditation ID:	04104
Scope:	Solid and Chemical Materials; Non-Potable Water
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 4559 GREENE CO. (6005)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
45590001	WL1R	Water	3/19/2012 13:50	3/20/2012 15:06
45590002	WL1R	Bubble Strip	3/19/2012 13:50	3/20/2012 15:06
45590003	WEL4	Water	3/19/2012 13:10	3/20/2012 15:06
45590004	WEL4	Bubble Strip	3/19/2012 13:10	3/20/2012 15:06

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Pittsburgh, PA 15238
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Fax: (412) 826-3433

PROJECT SUMMARY

Workorder: 4559 GREENE CO. (6005)

Batch Comments

Batch: EDON/1334 - Low Level Volatile Fatty Acids

The percent recovery for the laboratory control sample was below laboratory control limits. Analytes: Hexanoic acid. Results associated to the analytes in samples may be bias low.

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3004.1.0.0

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Pittsburgh, PA 15238
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Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 4559 GREENE CO. (6005)

Lab ID: 45590001 Date Received: 3/20/2012 16:06 Matrix: Water
Sample ID: WL1R Date Collected: 3/19/2012 13:50

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM23G			Analytical Method: AM23G							
Lactic Acid	<0.10	mg/l	0.10	0.010	1			3/28/2012 00:54	KB	
Acetic Acid	<0.070	mg/l	0.070	0.0060	1			3/28/2012 00:54	KB	
Propionic Acid	<0.050	mg/l	0.050	0.0070	1			3/28/2012 00:54	KB	
Butyric Acid	<0.050	mg/l	0.050	0.0040	1			3/28/2012 00:54	KB	
Pyruvic Acid	<0.15	mg/l	0.15	0.033	1			3/28/2012 00:54	KB	
i-Pentanoic Acid	<0.15	mg/l	0.15	0.044	1			3/28/2012 00:54	KB	
Pentanoic Acid	<0.070	mg/l	0.070	0.012	1			3/28/2012 00:54	KB	
i-Hexanoic Acid	<0.050	mg/l	0.050	0.0060	1			3/28/2012 00:54	KB	
Hexanoic Acid	<0.050	mg/l	0.050	0.0060	1			3/28/2012 00:54	KB	

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ANALYTICAL RESULTS

Workorder: 4559 GREENE CO. (6005)

Lab ID: 45590002 Date Received: 3/20/2012 15:06 Matrix: Bubble Strip
Sample ID: WL1R Date Collected: 3/19/2012 13:50

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	490	ug/l	0.015	0.0030	1			3/23/2012 09:41	GT	
Ethane	<0.010	ug/l	0.010	0.0010	1			3/23/2012 09:41	GT	
Ethene	0.014	ug/l	0.010	0.0020	1			3/23/2012 09:41	GT	
Hydrogen	0.69	nM	0.60	0.25	1			3/23/2012 09:41	GT	

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ANALYTICAL RESULTS

Workorder: 4559 GREENE CO. (6005)

Lab ID: 45590003 Date Received: 3/20/2012 15:06 Matrix: Water
Sample ID: WEL4 Date Collected: 3/19/2012 13:10

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM23G			Analytical Method: AM23G							
Lactic Acid	<0.10	mg/l	0.10	0.010	1			3/28/2012 01:36	KB	
Acetic Acid	<0.070	mg/l	0.070	0.0060	1			3/28/2012 01:36	KB	
Propionic Acid	<0.050	mg/l	0.050	0.0070	1			3/28/2012 01:36	KB	
Butyric Acid	<0.050	mg/l	0.050	0.0040	1			3/28/2012 01:36	KB	
Pyruvic Acid	<0.15	mg/l	0.15	0.033	1			3/28/2012 01:36	KB	
i-Pentanoic Acid	<0.15	mg/l	0.15	0.044	1			3/28/2012 01:36	KB	
Pentanoic Acid	<0.070	mg/l	0.070	0.012	1			3/28/2012 01:36	KB	
i-Hexanoic Acid	<0.050	mg/l	0.050	0.0060	1			3/28/2012 01:36	KB	
Hexanoic Acid	<0.050	mg/l	0.050	0.0060	1			3/28/2012 01:36	KB	

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ANALYTICAL RESULTS

Workorder: 4559 GREENE CO. (6005)

Lab ID: 45590004 Date Received: 3/20/2012 15:06 Matrix: Bubble Strip
Sample ID: WEL4 Date Collected: 3/19/2012 13:10

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	5400	ug/l	0.015	0.0030	1			3/23/2012 09:59	GT	
Ethane	0.015	ug/l	0.010	0.0010	1			3/23/2012 09:59	GT	
Ethene	0.15	ug/l	0.010	0.0020	1			3/23/2012 09:59	GT	
Hydrogen	1.0	nM	0.60	0.25	1			3/23/2012 09:59	GT	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 4559 GREENE CO. (6005)

PARAMETER QUALIFIERS

U Indicates the compound was analyzed for, but not detected.

J Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (RDL).

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Microseeps Lab. Proj. # 4559

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company : ENVIRONMENT 1, INC

Co. Address : 114 OAKMONT DR, GREENVILLE, NC 27858

Phone # : 252-756-6208 Fax # : 252-756-0633

Proj. Manager : STEVE JONES

Proj. Name/Number : GRESNE CO. (6005)

Sampler's signature : [signature]

Cooler Temp. 3.2°C

Results to : SAME

Invoice to : SAME

Sample ID	Sample Description	Sample Type Water	Vapor	Solid	Date	Time	# Bottles	Parameters Requested: AVAPORGEN	MOTSANE/ETHANE/ETHENE	LLUFA	Remarks :
WL1R	WEL #1R	✓		✓	3/12/12	1:50pm	5	✓	✓	✓	
WEL 4	WEL #4	✓		✓	3/12/12	1:15pm	5	✓	✓	✓	
											FACILITY ID
											# 4002

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
[signature]	ENVIRONMENT 1	3/13/12	3:45P	[signature]	MS	3/20/12	1130
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

Cooler Receipt Form

Client Name: Environment Project: Greene Co (6005) Lab Work Order: 4559

A. Shipping/Container Information (circle appropriate response)

Courier: FedEx (UPS) USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 12 203 7050 1 6569 4710

Custody Seal on Cooler/Box Present: Yes (No) Seals Intact: Yes No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 3.2°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
Microseeps containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by: HLY Date: 3/20/12

Project Manager Review: JS Date: 3/20/12

Appendix B
MNA Screening Models

Natural Attenuation Screening Protocol

The following is taken from the USEPA protocol (USEPA, 1998). The results of this scoring process have no regulatory significance.

Interpretation	Score
Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5
Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14
Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20
Strong evidence for anaerobic biodegradation* of chlorinated organics	>20

* reductive dechlorination

Score: 20

Scroll to End of Table

Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	○	◉	0
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	○	◉	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	◉	○	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	◉	○	2
Sulfide*	>1 mg/L	Reductive pathway possible	○	◉	0
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	◉	○	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	◉	○	1
	<-100mV	Reductive pathway likely	○	○	
pH*	5 < pH < 9	Optimal range for reductive pathway	◉	○	0
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	○	◉	0
Temperature*	>20°C	At T >20°C biochemical process is accelerated	○	◉	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	◉	○	1
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	◉	○	1
Chloride*	>2x background	Daughter product of organic chlorine	○	◉	0
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	◉	○	3
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	○	◉	0
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	○	◉	0
PCE*		Material released	○	◉	0
TCE*		Daughter product of PCE [a/]	○	◉	0
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE[a/]; 1,1-DCE can be a chem. reaction product of TCA	◉	○	2
VC*		Daughter product of DCE[a/]	◉	○	2
1,1,1-Trichloroethane*		Material released	○	◉	0
DCA		Daughter product of TCA under reducing conditions	○	◉	0
Carbon Tetrachloride		Material released	○	◉	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	○	◉	0
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	○	◉	0
	>0.1 mg/L	Daughter product of VC/ethene	○	◉	0
Chloroform		Daughter product of Carbon Tetrachloride	○	◉	0
Dichloromethane		Daughter product of Chloroform	○	◉	0

* required analysis.
a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

SCORE

Reset

End of Form

BIOCHLOR INPUT DATA

Dichloromethane, Vinyl Chloride & Ethene

Input Category

General	Facility				Greene Co CDLF	
	Constituent				Vinyl Chloride	
	Source Type				Continous	
	Centerline Direction				S58E (MW-4 through MW-7)	
	Monitoring Event				March 19, 2012	
	Modeled By & Date				M. Durway & J.Pfohl 10/8/12	
		Parameter	**Units**	**Default**	**MW4**	**Comments/Assumption Details**
1. Hydrogeologic Data	seepage velocity	Vs	ft/yr	varies	16.7*	
	hydraulic conductivity	k	cm/sec	varies	1.10E-04	MW-4 Slug Test Reported by GAI Oct 1994
	hydraulic gradient	i	ft/ft	varies	0.022	gradient between MW-4 and MW-7 on 3/19/12
	effective porosity	ne	unitless	.1 - .3	0.15	MW-4 From GAI (Oct 1994)
2. Dispersivity	longitudinal dispersivity	alpha x	ft	.1 (Lp)	20*	
	transverse dispersivity	alpha y	ft	.1 (alpha x)	0.1*	
	vertical dispersivity	alpha z	ft	.05 (alpha x)	1E-99*	
3. Adsorption Data	common retardation factor	R	unitless	1 - 6	1.00*	Calclulated by Biochlor
	aquifer bulk density	Aquif rho bulk	kg/L	1.7	1.7	Standard Published Value
	fraction organic carbon	Foc	unitless	0.001	1.00E-03	Standard Published Value
	organic carbon partition coef	Koc	L/kg	see p. 11	2.42,1.34	DCE, VC
4. Biotransformation Data	first order decay coef	lambda	1/yr	see p. 12	3.3*, 2.567*	Calclulated by Biochlor
	dissolved solvent half-life	t 1/2	yr	see p. 13	0.27,0.21	DCM, VC low half-lifes from values in User's Manual
	abiotic first order rate coef	Abiotic	1/yr	see p. 13	---	applies to Zone 2/modeled one zone only due to limited contamination
	byproduct yield	Yield	unitless	see p. 14	---	applies to Zone 2/modeled one zone only due to limited contamination
5. General Data	model area length and width	Model W x L	ft	varies	100 x 500	
	simulation time	Simul t	yr	1 - 1000	25,50	For future prediction following known source residence time
	zone 1 & zone 2 length	Z1 & Z2 L	ft	see p. 15	500	From edge of waste to beyond the compliance boundary. (3712' is closest discharge)
6. Source Data	source area concentrations	Source	mg/l	see p. 16	.014,.01,.00015	Maximum observed DCM,VCM, ethene concentrations identified sitewide (All in MW-4)
	source width	Source W	ft	varies	100	100' width is based on well control showing contamination limits
	source thickness	Source Z	ft	varies	10	value used by MESCO when site was previously modeled
7. Field Data for Comparison	concentration in well (MW-4)	Field conc	mg/l	varies	0,0.0103, 0.00015	DCM, VC, ethene concentrations in MW-4 (3/19/12)
	well distance from source (MW-4)	Distance	ft	varies	53	distance from directly upgradient edge of landfill (source) to MW-4
	concentration in well (MW-7)	Field conc	mg/l	varies	0,0,0	DCM, VC,ethene concentrations in MW-7 (3/19/12)
	well distance from source	Distance	ft	varies	250	distance from directly upgradient edge of landfill (source) to MW-7

* = means that output was provided by model

Default values are from Biochlor User's Manual Versions 1.0 and 2.2

GROUNDWATER SCREENING MODELS

BIOCHLOR Modeling

BIOCHLOR was run to predict the fate of chlorinated contaminants migrating easterly from the landfill. Evidence that contamination is migrating from the landfill can be seen in well MW-4, located approximately 53 ft downgradient from the eastern edge of the landfill. To date, chlorinated contaminant levels in MW-4 have been reported as high as follows.

Chloroethane	18.6 ug/l
1,1-Dichloroethane	2 ug/l
Dichloromethane	1.1 ug/l
Trichloroethene	0.5 ug/l
Vinyl Chloride	10.3 ug/l
Cis-1,2-Dichlorothene	14.3 ug/l
Ethene	0.15 ug/l
Total	46.95 ug/l = .047 mg/l

BIOCHLOR inputs consisted of data from past studies and monitoring events and default values provided in the BIOSCREEN Version 1.0 User's Manual.

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Greene CDLF
3/19/2012 | LOW
Run Name

TYPE OF CHLORINATED SOLVENT: Ethenes ◉ Ethanes ○

1. ADVECTION

Seepage Velocity*	Vs	16.7	(ft/yr)
or			
Hydraulic Conductivity	K	1.1E-04	(cm/sec)
Hydraulic Gradient	i	0.022	(ft/ft)
Effective Porosity	n	0.15	(-)

2. DISPERSION

Alpha x*	20	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	1.E-99	(-)

Calc. Alpha x

3. ADSORPTION

Retardation Factor* → R

or

Soil Bulk Density, rho	1.7	(kg/L)		
FractionOrganicCarbon, foc	1.0E-3	(-)		
Partition Coefficient	Koc			
PCE		(L/kg)	1.00	(-)
TCE		(L/kg)	1.00	(-)
DCE	125	(L/kg)	2.42	(-)
VC	30	(L/kg)	1.34	(-)
ETH		(L/kg)	1.00	(-)
Common R (used in model)* =			**1.00**	

4. BIOTRANSFORMATION

-1st Order Decay Coefficient*

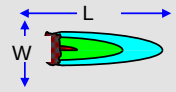
Zone 1	λ (1/yr)	half-life (yrs)	Yield
PCE → TCE	0.000		0.79
TCE → DCE	0.000		0.74
DCE → VC	3.300	0.21	0.64
VC → ETH	2.567	0.27	0.45

Zone 2	λ (1/yr)	half-life (yrs)
PCE → TCE	0.000	
TCE → DCE	0.000	
DCE → VC	0.000	
VC → ETH	0.000	

λ HELP

5. GENERAL

Simulation Time*	35	(yr)
Modeled Area Width*	100	(ft)
Modeled Area Length*	500	(ft)
Zone 1 Length*	500	(ft)
Zone 2 Length*	0	(ft)



Zone 2= L - Zone 1

6. SOURCE DATA

TYPE: Continuous Single Planar

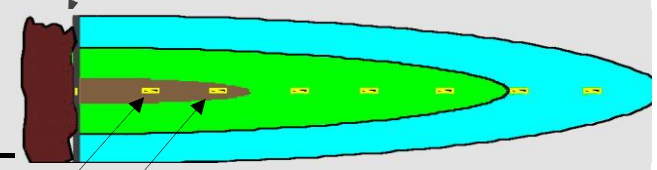
Source Options

Source Thickness in Sat. Zone* 10 (ft)

Width* (ft) Y1 100

Conc. (mg/L)*	C1	k_s* (1/yr)
PCE		0
TCE		0
DCE	1.40E-02	0
VC	1.00E-02	0
ETH	1.50E-04	0

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

PCE Conc. (mg/L)	0.0E+00	0.E+00									
TCE Conc. (mg/L)	0.0E+00	0.E+00									
DCE Conc. (mg/L)	0.0E+00	0.E+00									
VC Conc. (mg/L)	7.6E-03	0.E+00									
ETH Conc. (mg/L)	1.5E-04	0.E+00									
Distance from Source (ft)	50	250									
Date Data Collected	3/19/12										

Data Input Instructions:

115 → 1. Enter value directly....or
↑ *or* 0.02 → 2. Calculate by filling in gray cells. Press Enter, then C

(To restore formulas, hit "Restore Formulas" button)

Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | *Help* | Restore Formulas | RESET | *SEE OUTPUT* | Paste Example

Greene Active CDLF over Closed MSWLF
(March 19, 2012)

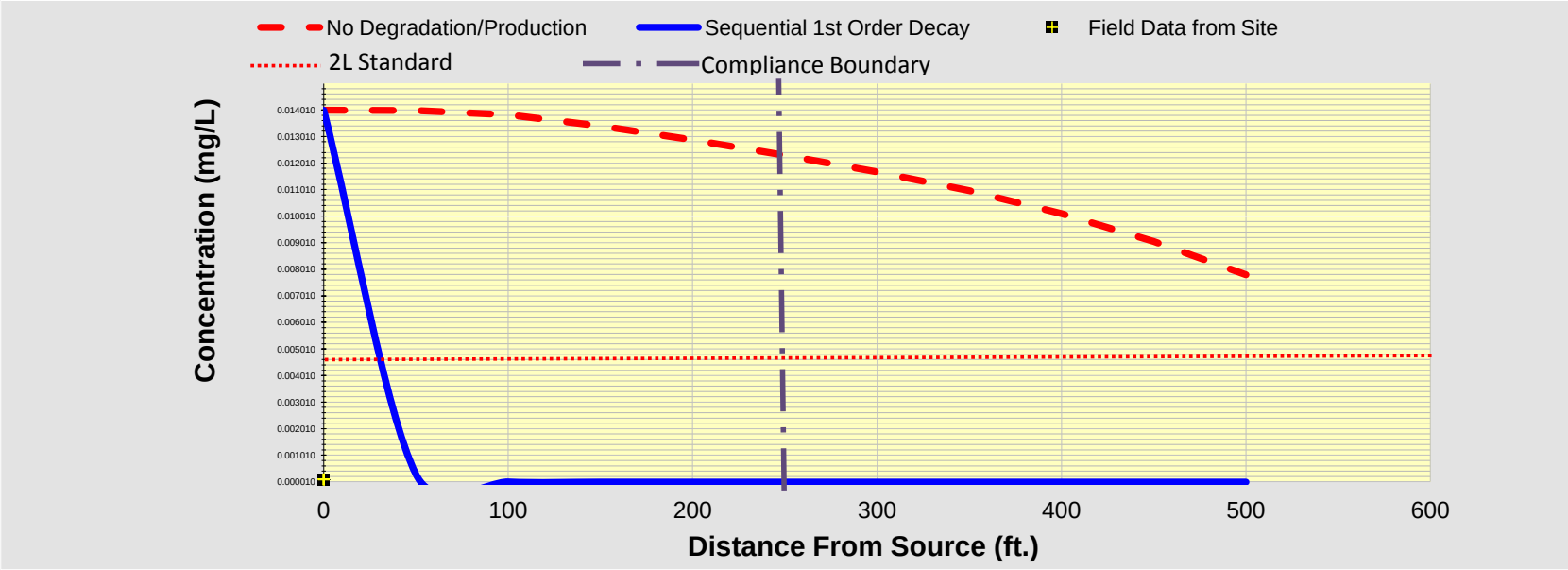
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	50	100	150	200	250	300	350	400	450	500
No Degradation	1.400E-02	1.399E-02	1.382E-02	1.341E-02	1.288E-02	1.231E-02	1.168E-02	1.097E-02	1.011E-02	9.054E-03	7.801E-03
Biotransformation	1.400E-02	2.902E-04	5.945E-06	1.197E-07	2.389E-09	4.757E-11	9.473E-13	1.889E-14	3.775E-16	7.557E-18	1.516E-19

Monitoring Well Locations (ft)

	50	250									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:
35.0 Years
Log ⇔ Linear

Return to Input

To All

To Array

Start Here →

- ○ PCE
- ○ TCE
- ◉ DCE
- ○ VC
- ○ ETH

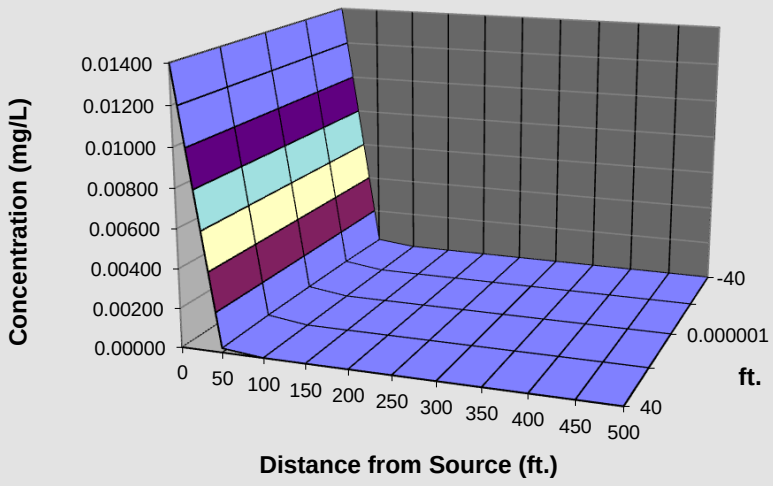
DISSOLVED SOLVENT CONCENTRATIONS IN PLUME

Transverse Distance (ft) ↓	Distance from Source (ft) 0	50	100	150	200	250	300	350	400	450	500
40	1.400E-02	2.207E-04	4.163E-06	8.218E-08	1.650E-09	3.338E-11	6.777E-13	1.379E-14	2.807E-16	5.719E-18	1.166E-19
20	1.400E-02	2.854E-04	5.616E-06	1.108E-07	2.197E-09	4.376E-11	8.739E-13	1.749E-14	3.510E-16	7.054E-18	1.420E-19
0	1.400E-02	2.902E-04	5.945E-06	1.197E-07	2.389E-09	4.757E-11	9.473E-13	1.889E-14	3.775E-16	7.557E-18	1.516E-19
-20	1.400E-02	2.854E-04	5.616E-06	1.108E-07	2.197E-09	4.376E-11	8.739E-13	1.749E-14	3.510E-16	7.054E-18	1.420E-19
-40	1.400E-02	2.207E-04	4.163E-06	8.218E-08	1.650E-09	3.338E-11	6.777E-13	1.379E-14	2.807E-16	5.719E-18	1.166E-19
MASS RATE (mg/day)	2.7E+0	5.1E-2	9.9E-4	2.0E-5	3.9E-7	7.8E-9	1.6E-10	3.2E-12	6.4E-14	1.3E-15	2.6E-17

Show No Degradation

Show Biotransformation

Time: 35 yr Target Level: 0.070 mg/L Displayed Model: Biotransformation Displayed Compound: DCE



Plume Mass (Order-of-Magnitude Accuracy)

See Gallons

Plume Mass If No Degradation	2.274E-02	(Kg)
- Plume Mass If Biotransformation/Production	1.542E-03	(Kg)
Mass Removed	2.119E-02	(Kg)
% Biotransformed =	+93.2%	
% Change in Mass Rate =	100.0 %	(source to edge)

If "Can't Calc.", make model area longer

See acre-ft

Current Volume of Ground Water in Plume	5.610E-02	MGal
Flow Rate of Water Through Source Area	5.131E-05	MGD

Compare to Pump and Treat

Pumping Rate		(gpm)
# Pore Volumes Removed Per Yr.	0.00	
# Pore Volumes to Clean-Up		
Clean-Up Time		(yr)

Plot All Data Plot Data > Target Mass HELP To Centerline Return to Input

Greene Active CDLF over Closed MSWLF
(March 19, 2012)

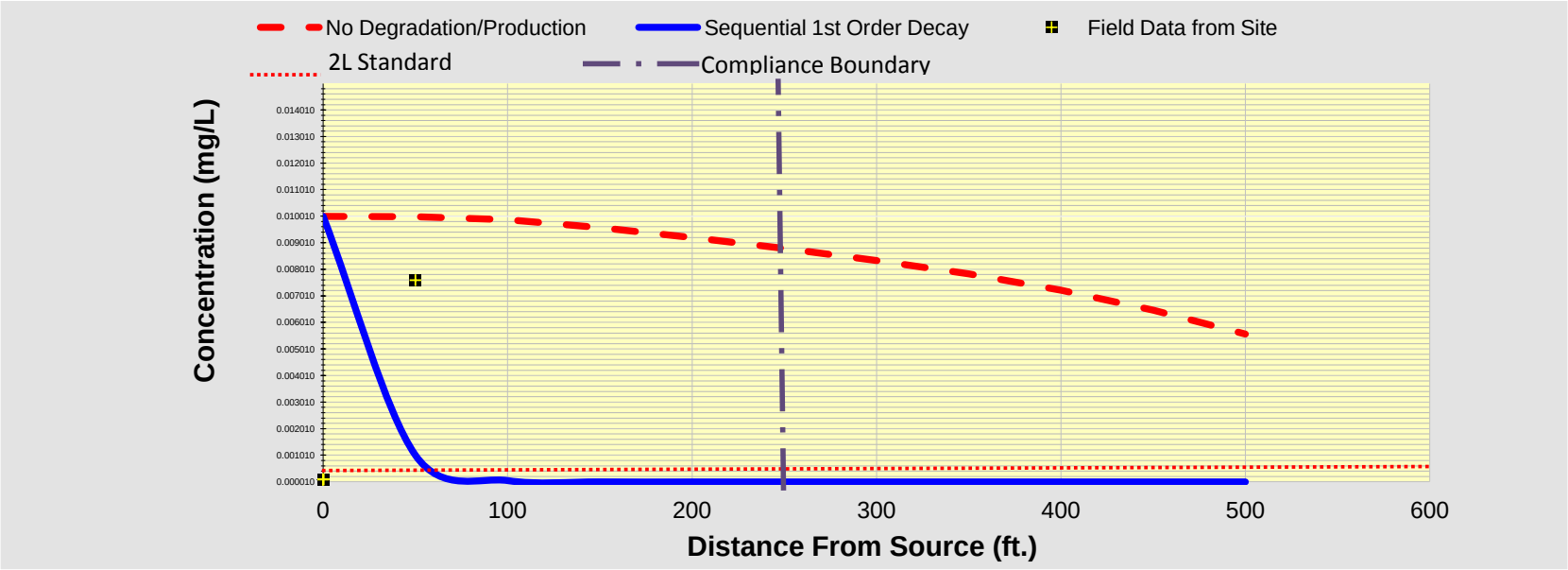
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	50	100	150	200	250	300	350	400	450	500
No Degradation	1.000E-02	9.996E-03	9.874E-03	9.580E-03	9.203E-03	8.792E-03	8.344E-03	7.833E-03	7.218E-03	6.467E-03	5.572E-03
Biotransformation	1.000E-02	1.008E-03	4.958E-05	2.025E-06	7.654E-08	2.792E-09	1.001E-10	3.563E-12	1.263E-13	4.476E-15	1.586E-16

Monitoring Well Locations (ft)

	50	250									
Field Data from Site	0.008	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:
35.0 Years
Log ⟺ Linear

Return to Input

To All

To Array

Greene CDLF over Closed MSWLF
(March 19, 2012)

Start Here → ○ PCE ○ TCE ○ DCE ◉ VC ○ ETH

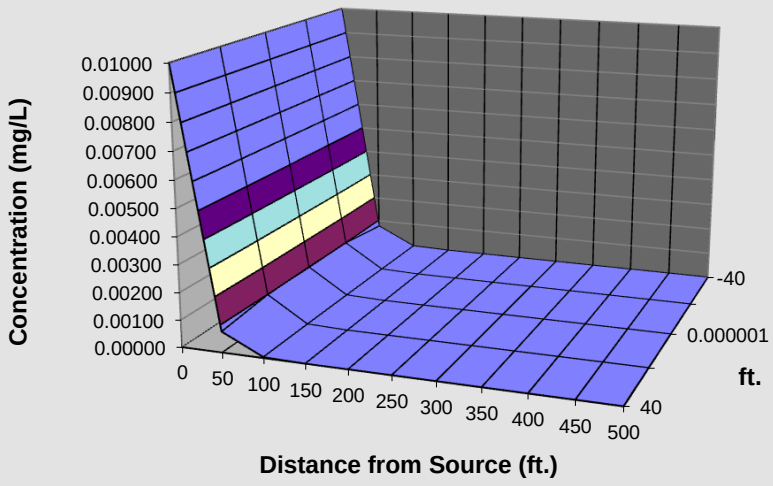
DISSOLVED SOLVENT CONCENTRATIONS IN PLUME

Transverse Distance (ft) ↓	*Distance from Source (ft)* 0	50	100	150	200	250	300	350	400	450	500
40	1.000E-02	7.667E-04	3.471E-05	1.390E-06	5.287E-08	1.960E-09	7.164E-11	2.600E-12	9.395E-14	3.387E-15	1.220E-16
20	1.000E-02	9.914E-04	4.684E-05	1.874E-06	7.041E-08	2.569E-09	9.238E-11	3.299E-12	1.175E-13	4.178E-15	1.486E-16
0	1.000E-02	1.008E-03	4.958E-05	2.025E-06	7.654E-08	2.792E-09	1.001E-10	3.563E-12	1.263E-13	4.476E-15	1.586E-16
-20	1.000E-02	9.914E-04	4.684E-05	1.874E-06	7.041E-08	2.569E-09	9.238E-11	3.299E-12	1.175E-13	4.178E-15	1.486E-16
-40	1.000E-02	7.667E-04	3.471E-05	1.390E-06	5.287E-08	1.960E-09	7.164E-11	2.600E-12	9.395E-14	3.387E-15	1.220E-16
MASS RATE (mg/day)	1.9E+0	1.8E-1	8.3E-3	3.3E-4	1.3E-5	4.6E-7	1.7E-8	6.0E-10	2.1E-11	7.6E-13	2.7E-14

Show No Degradation

Show Biotransformation

Time: 35 yr Target Level: **0.002** mg/L Displayed Model: **Biotransformation** Displayed Compound: **VC**



Plume Mass (Order-of-Magnitude Accuracy)

See Gallons

Plume Mass If No Degradation	1.624E-02	*(Kg)*
- Plume Mass If Biotransformation/Production	1.263E-03	*(Kg)*
Mass Removed	1.498E-02	*(Kg)*
% Biotransformed =	**+92.2%**	
% Change in Mass Rate =	**100.0 %**	(source to edge)

If "Can't Calc.", make model area longer

See acre-ft

Current Volume of Ground Water in Plume	5.610E-02	*MGal*
Flow Rate of Water Through Source Area	5.131E-05	*MGD*

Compare to Pump and Treat

Pumping Rate		*(gpm)*
# Pore Volumes Removed Per Yr.	0.00	
# Pore Volumes to Clean-Up		
Clean-Up Time		*(yr)*

Plot All Data Plot Data > Target

Mass HELP **To Centerline** **Return to Input**

Greene Active CDLF over Closed MSWLF
(March 19, 2012)

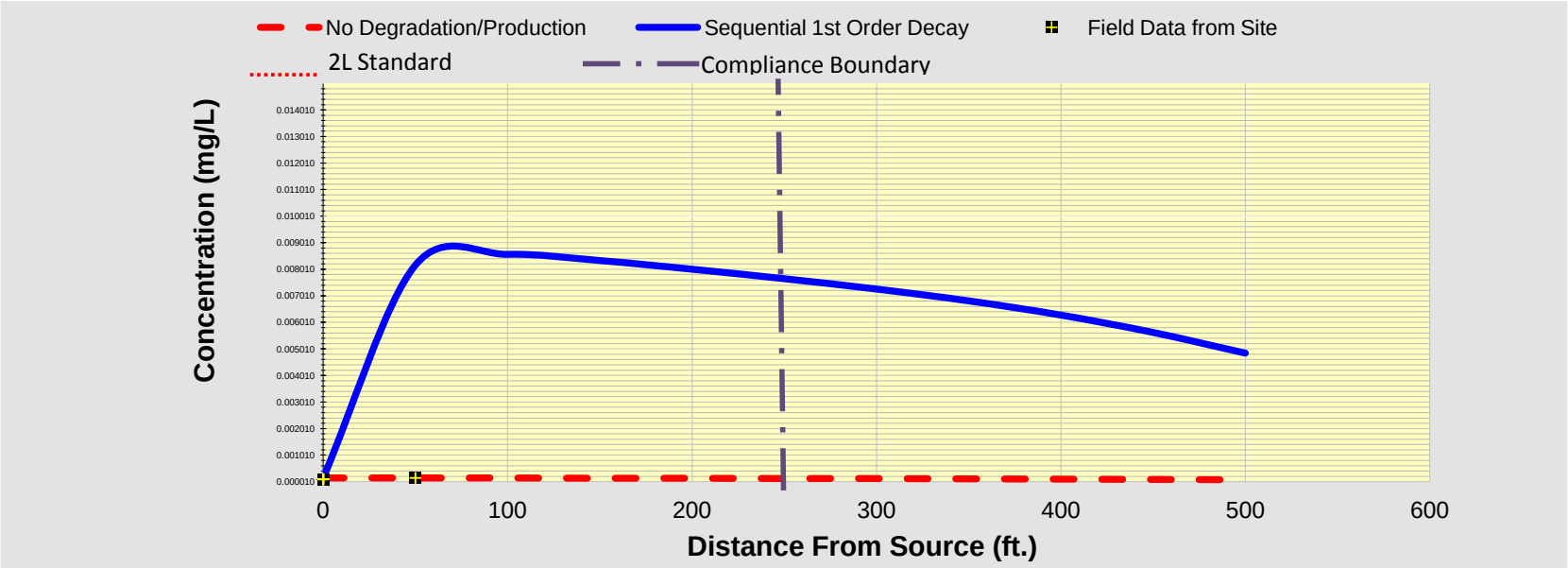
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

ETH	0	50	100	150	200	250	300	350	400	450	500
No Degradation	1.500E-04	1.499E-04	1.481E-04	1.437E-04	1.380E-04	1.319E-04	1.252E-04	1.175E-04	1.083E-04	9.700E-05	8.358E-05
Biotransformation	1.500E-04	8.165E-03	8.572E-03	8.339E-03	8.012E-03	7.654E-03	7.264E-03	6.819E-03	6.284E-03	5.630E-03	4.851E-03

Monitoring Well Locations (ft)

	50	250									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:
35.0 Years
Log ⇔ Linear

Return to Input

To All

To Array

Greene CDLF over Closed MSWLF
(March 19, 2012)

Start Here → ○ PCE ○ TCE ○ DCE ○ VC ◉ ETH

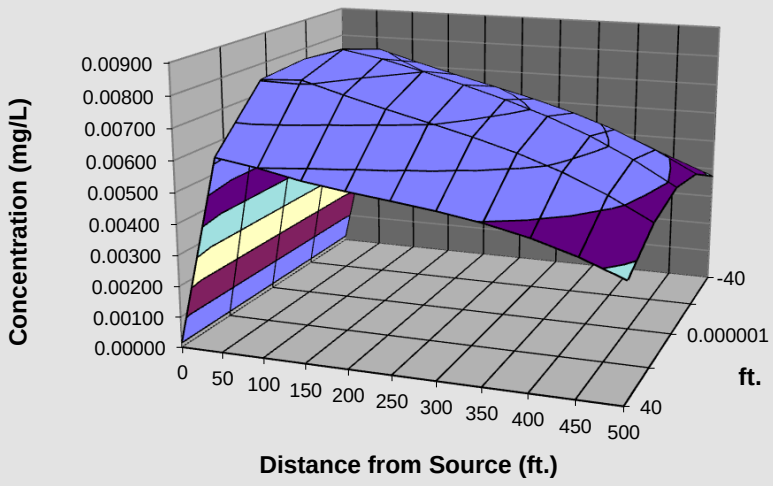
DISSOLVED SOLVENT CONCENTRATIONS IN PLUME

Transverse Distance (ft) ↓	*Distance from Source (ft)* 0	50	100	150	200	250	300	350	400	450	500
40	1.500E-04	6.210E-03	6.002E-03	5.726E-03	5.534E-03	5.371E-03	5.197E-03	4.976E-03	4.673E-03	4.261E-03	3.731E-03
20	1.500E-04	8.030E-03	8.098E-03	7.719E-03	7.370E-03	7.041E-03	6.701E-03	6.315E-03	5.843E-03	5.256E-03	4.545E-03
0	1.500E-04	8.165E-03	8.572E-03	8.339E-03	8.012E-03	7.654E-03	7.264E-03	6.819E-03	6.284E-03	5.630E-03	4.851E-03
-20	1.500E-04	8.030E-03	8.098E-03	7.719E-03	7.370E-03	7.041E-03	6.701E-03	6.315E-03	5.843E-03	5.256E-03	4.545E-03
-40	1.500E-04	6.210E-03	6.002E-03	5.726E-03	5.534E-03	5.371E-03	5.197E-03	4.976E-03	4.673E-03	4.261E-03	3.731E-03
MASS RATE (mg/day)	2.9E-2	1.4E+0	1.4E+0	1.4E+0	1.3E+0	1.3E+0	1.2E+0	1.1E+0	1.1E+0	9.6E-1	8.3E-1

Show No Degradation

Show Biotransformation

Time: 35 yr Target Level: mg/L Displayed Model: **Biotransformation** Displayed Compound: **ETH**



Plume Mass (Order-of-Magnitude Accuracy)

See Gallons

Plume Mass If No Degradation	2.436E-04	*(Kg)*
- Plume Mass If Biotransformation/Production	1.312E-02	*(Kg)*
Mass Removed	-1.288E-02	*(Kg)*

If "Can't Calc.", make model area longer

% Biotransformed = -5287.3 %

% Change in Mass Rate = -2753.6 % (source to edge)

See acre-ft

Current Volume of Ground Water in Plume	4.376E-01	*MGal*
Flow Rate of Water Through Source Area	5.131E-05	*MGD*

Compare to Pump and Treat

Pumping Rate		*(gpm)*
# Pore Volumes Removed Per Yr.	0.00	
# Pore Volumes to Clean-Up		
Clean-Up Time		*(yr)*

Plot All Data Plot Data > Target

Mass HELP **To Centerline** **Return to Input**

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Greene CDLF
3/19/2012
Run Name

TYPE OF CHLORINATED SOLVENT: Ethenes ◉ Ethanes ○

1. ADVECTION

Seepage Velocity*	Vs	16.7	(ft/yr)
or			
Hydraulic Conductivity	K	1.1E-04	(cm/sec)
Hydraulic Gradient	i	0.022	(ft/ft)
Effective Porosity	n	0.15	(-)

2. DISPERSION

Alpha x*	20	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	1.E-99	(-)

Calc. Alpha x

3. ADSORPTION

Retardation Factor* → R

or

Soil Bulk Density, rho	1.7	(kg/L)		
FractionOrganicCarbon, foc	1.0E-3	(-)		
Partition Coefficient	Koc			
PCE		(L/kg)	1.00	(-)
TCE		(L/kg)	1.00	(-)
DCE	125	(L/kg)	2.42	(-)
VC	30	(L/kg)	1.34	(-)
ETH		(L/kg)	1.00	(-)
Common R (used in model)* =			**1.00**	

4. BIOTRANSFORMATION

-1st Order Decay Coefficient*

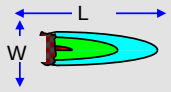
Zone 1	λ (1/yr)	half-life (yrs)	Yield
PCE → TCE	0.000		0.79
TCE → DCE	0.000		0.74
DCE → VC	3.300	0.21	0.64
VC → ETH	2.567	0.27	0.45

Zone 2	λ (1/yr)	half-life (yrs)
PCE → TCE	0.000	
TCE → DCE	0.000	
DCE → VC	0.000	
VC → ETH	0.000	

λ HELP

5. GENERAL

Simulation Time*	50	(yr)
Modeled Area Width*	100	(ft)
Modeled Area Length*	500	(ft)
Zone 1 Length*	500	(ft)
Zone 2 Length*	0	(ft)



Zone 2= L - Zone 1

6. SOURCE DATA

TYPE: Continuous Single Planar

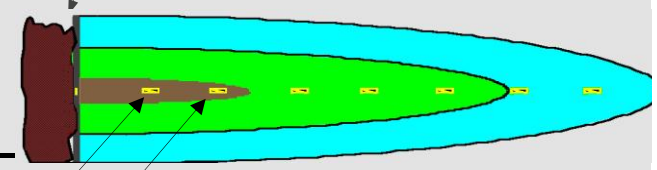
Source Options

Source Thickness in Sat. Zone* 10 (ft)

Width* (ft) Y1 100

Conc. (mg/L)*	C1	k_s* (1/yr)
PCE		0
TCE		0
DCE	1.40E-02	0
VC	1.00E-02	0
ETH	1.50E-04	0

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

PCE Conc. (mg/L)	0.0E+00	0.E+00									
TCE Conc. (mg/L)	0.0E+00	0.E+00									
DCE Conc. (mg/L)	0.0E+00	0.E+00									
VC Conc. (mg/L)	7.6E-03	0.E+00									
ETH Conc. (mg/L)	1.5E-04	0.E+00									
Distance from Source (ft)	50	250									
Date Data Collected	3/19/12										

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | Help | Restore Formulas | RESET | SEE OUTPUT | Paste Example

Data Input Instructions:

115 → 1. Enter value directly....or
↑ or
0.02 → 2. Calculate by filling in gray cells. Press Enter, then C

(To restore formulas, hit "Restore Formulas" button)

Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

Greene Active CDLF over Closed MSWLF
(March 19, 2012)

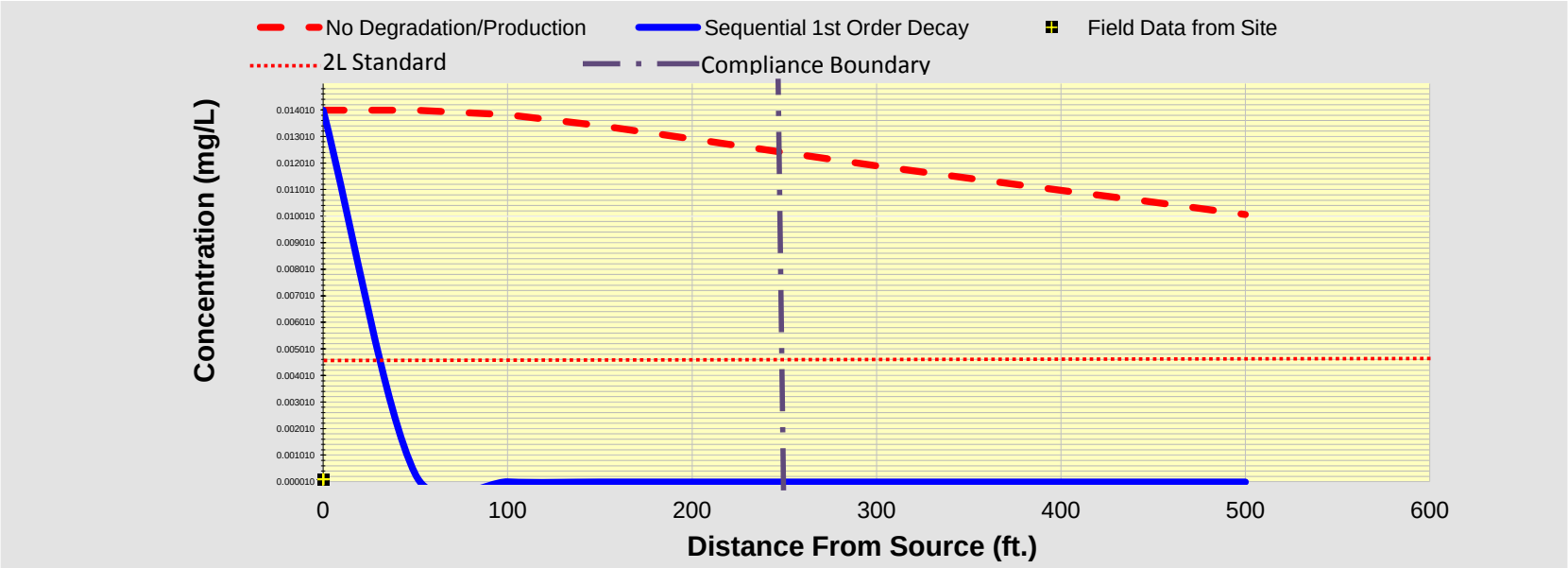
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

DCE	0	50	100	150	200	250	300	350	400	450	500
No Degradation	1.400E-02	1.399E-02	1.383E-02	1.342E-02	1.292E-02	1.240E-02	1.191E-02	1.143E-02	1.098E-02	1.054E-02	1.007E-02
Biotransformation	1.400E-02	2.902E-04	5.945E-06	1.197E-07	2.389E-09	4.757E-11	9.473E-13	1.889E-14	3.775E-16	7.557E-18	1.516E-19

Monitoring Well Locations (ft)

	50	250									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:
50.0 Years
Log ⟺ Linear

Return to Input

To All

To Array

Greene CDLF over Closed MSWLF
(March 19, 2012)

Start Here → ○ PCE ○ TCE ◉ DCE ○ VC ○ ETH

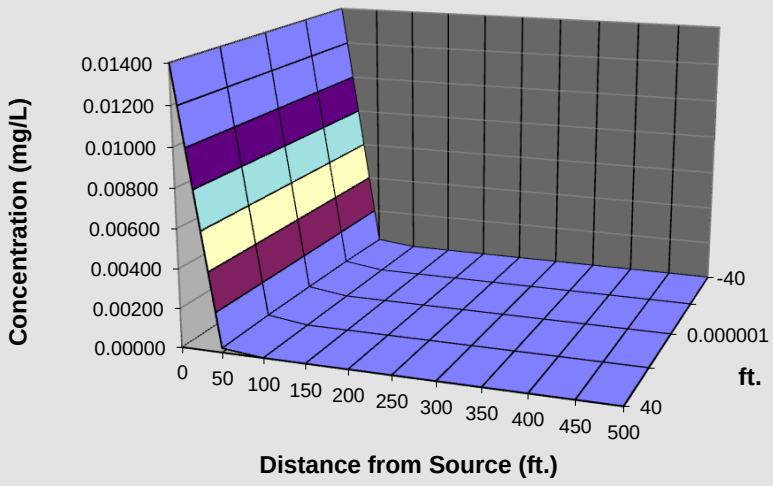
DISSOLVED SOLVENT CONCENTRATIONS IN PLUME

Transverse Distance (ft) ↓	*Distance from Source (ft)* 0	50	100	150	200	250	300	350	400	450	500
40	1.400E-02	2.207E-04	4.163E-06	8.218E-08	1.650E-09	3.338E-11	6.777E-13	1.379E-14	2.807E-16	5.719E-18	1.166E-19
20	1.400E-02	2.854E-04	5.616E-06	1.108E-07	2.197E-09	4.376E-11	8.739E-13	1.749E-14	3.510E-16	7.054E-18	1.420E-19
0	1.400E-02	2.902E-04	5.945E-06	1.197E-07	2.389E-09	4.757E-11	9.473E-13	1.889E-14	3.775E-16	7.557E-18	1.516E-19
-20	1.400E-02	2.854E-04	5.616E-06	1.108E-07	2.197E-09	4.376E-11	8.739E-13	1.749E-14	3.510E-16	7.054E-18	1.420E-19
-40	1.400E-02	2.207E-04	4.163E-06	8.218E-08	1.650E-09	3.338E-11	6.777E-13	1.379E-14	2.807E-16	5.719E-18	1.166E-19
MASS RATE (mg/day)	2.7E+0	5.1E-2	9.9E-4	2.0E-5	3.9E-7	7.8E-9	1.6E-10	3.2E-12	6.4E-14	1.3E-15	2.6E-17

Show No Degradation

Show Biotransformation

Time: 50 yr Target Level: **0.070** mg/L Displayed Model: **Biotransformation** Displayed Compound: **DCE**



Plume Mass (Order-of-Magnitude Accuracy)

See Gallons

Plume Mass If No Degradation	2.375E-02	*(Kg)*
- Plume Mass If Biotransformation/Production	1.542E-03	*(Kg)*
Mass Removed	2.221E-02	*(Kg)*
% Biotransformed =	**+93.5%**	
% Change in Mass Rate =	**100.0 %**	(source to edge)

If "Can't Calc.", make model area longer

See acre-ft

Current Volume of Ground Water in Plume	5.610E-02	*MGal*
Flow Rate of Water Through Source Area	5.131E-05	*MGD*

Compare to Pump and Treat

Pumping Rate		*(gpm)*
# Pore Volumes Removed Per Yr.	0.00	
# Pore Volumes to Clean-Up		
Clean-Up Time		*(yr)*

Plot All Data Plot Data > Target

Mass HELP **To Centerline** **Return to Input**

Greene Active CDLF over Closed MSWLF
(March 19, 2012)

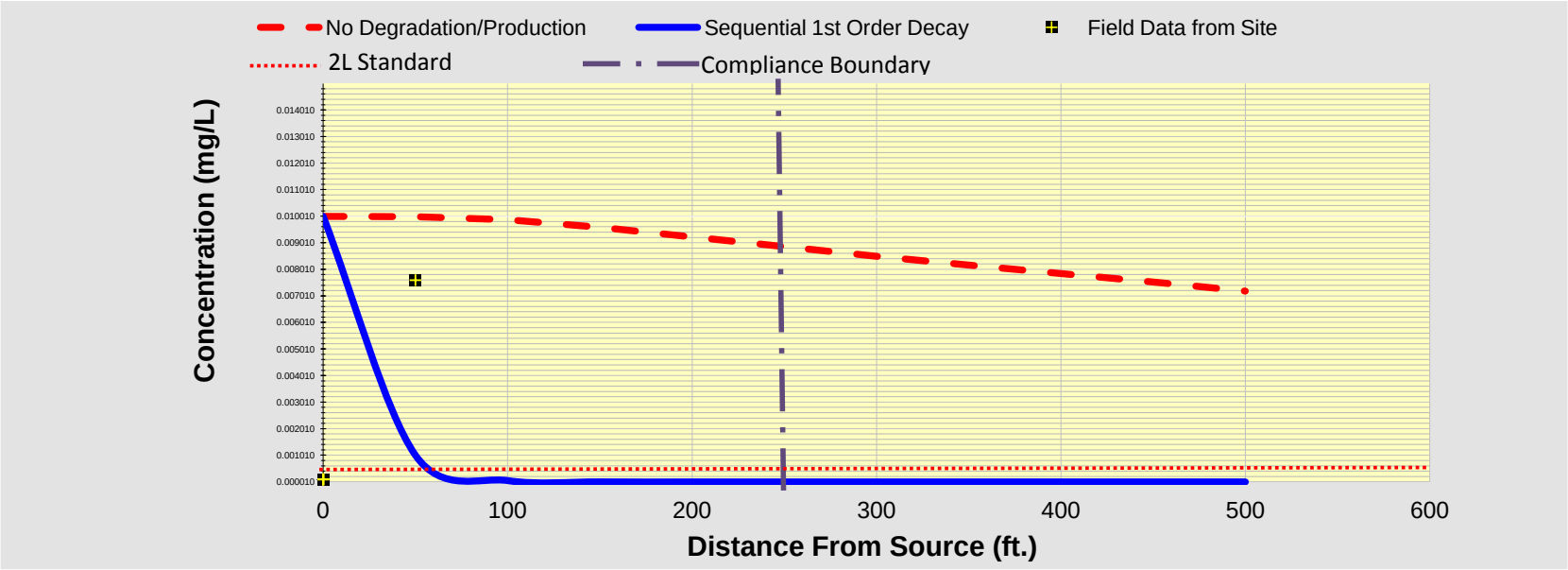
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

VC	0	50	100	150	200	250	300	350	400	450	500
No Degradation	1.000E-02	9.996E-03	9.876E-03	9.587E-03	9.228E-03	8.859E-03	8.504E-03	8.167E-03	7.845E-03	7.526E-03	7.191E-03
Biotransformation	1.000E-02	1.008E-03	4.958E-05	2.025E-06	7.654E-08	2.792E-09	1.001E-10	3.563E-12	1.263E-13	4.476E-15	1.586E-16

Monitoring Well Locations (ft)

	50	250									
Field Data from Site	0.008	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:
50.0 Years
Log ⟺ Linear

Return to Input

To All

To Array

Greene CDLF over Closed MSWLF
(March 19, 2012)

Start Here → ○ PCE ○ TCE ○ DCE ◉ VC ○ ETH

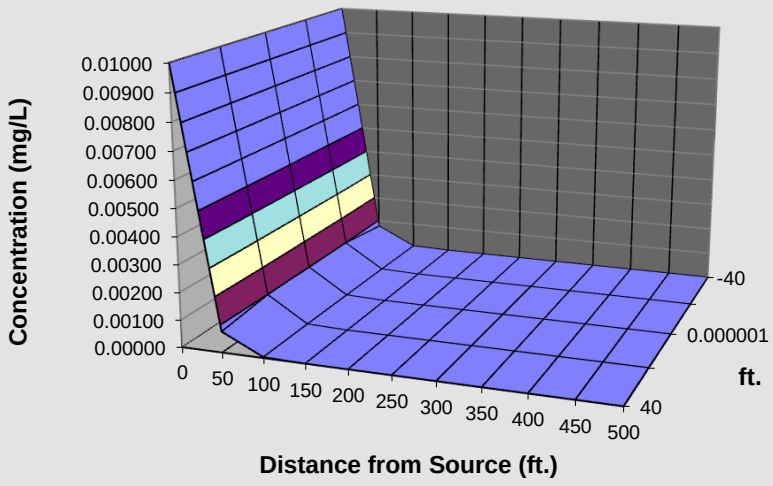
DISSOLVED SOLVENT CONCENTRATIONS IN PLUME

Transverse Distance (ft) ↓	*Distance from Source (ft)* 0	50	100	150	200	250	300	350	400	450	500
40	1.000E-02	7.667E-04	3.471E-05	1.390E-06	5.287E-08	1.960E-09	7.164E-11	2.600E-12	9.395E-14	3.387E-15	1.220E-16
20	1.000E-02	9.914E-04	4.684E-05	1.874E-06	7.041E-08	2.569E-09	9.238E-11	3.299E-12	1.175E-13	4.178E-15	1.486E-16
0	1.000E-02	1.008E-03	4.958E-05	2.025E-06	7.654E-08	2.792E-09	1.001E-10	3.563E-12	1.263E-13	4.476E-15	1.586E-16
-20	1.000E-02	9.914E-04	4.684E-05	1.874E-06	7.041E-08	2.569E-09	9.238E-11	3.299E-12	1.175E-13	4.178E-15	1.486E-16
-40	1.000E-02	7.667E-04	3.471E-05	1.390E-06	5.287E-08	1.960E-09	7.164E-11	2.600E-12	9.395E-14	3.387E-15	1.220E-16
MASS RATE (mg/day)	1.9E+0	1.8E-1	8.3E-3	3.3E-4	1.3E-5	4.6E-7	1.7E-8	6.0E-10	2.1E-11	7.6E-13	2.7E-14

Show No Degradation

Show Biotransformation

Time: 50 yr Target Level: 0.002 mg/L Displayed Model: Biotransformation Displayed Compound: VC



Plume Mass (Order-of-Magnitude Accuracy)

See Gallons

Plume Mass If No Degradation	1.696E-02	*(Kg)*
- Plume Mass If Biotransformation/Production	1.263E-03	*(Kg)*
Mass Removed	1.570E-02	*(Kg)*
% Biotransformed =	**+92.6%**	
% Change in Mass Rate =	**100.0 %**	(source to edge)

If "Can't Calc.", make model area longer

See acre-ft

Current Volume of Ground Water in Plume	5.610E-02	*MGal*
Flow Rate of Water Through Source Area	5.131E-05	*MGD*

Compare to Pump and Treat

Pumping Rate		*(gpm)*
# Pore Volumes Removed Per Yr.	0.00	
# Pore Volumes to Clean-Up		
Clean-Up Time		*(yr)*

Plot All Data Plot Data > Target Mass HELP To Centerline Return to Input

Greene Active CDLF over Closed MSWLF
(March 19, 2012)

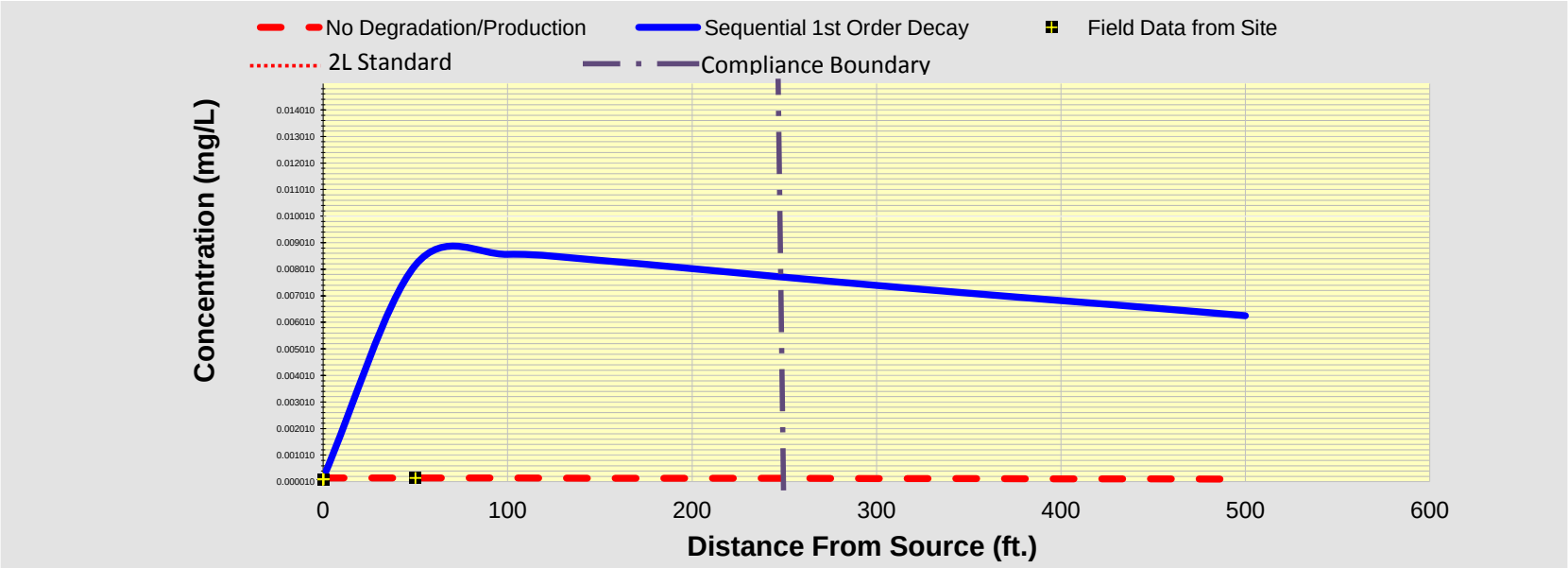
DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

ETH	0	50	100	150	200	250	300	350	400	450	500
No Degradation	1.500E-04	1.499E-04	1.481E-04	1.438E-04	1.384E-04	1.329E-04	1.276E-04	1.225E-04	1.177E-04	1.129E-04	1.079E-04
Biotransformation	1.500E-04	8.165E-03	8.574E-03	8.346E-03	8.034E-03	7.712E-03	7.403E-03	7.110E-03	6.830E-03	6.552E-03	6.261E-03

Monitoring Well Locations (ft)

	50	250									
Field Data from Site	0.000	0.000									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:
50.0 Years
Log ⟺ Linear

Return to Input

To All

To Array

Greene CDLF over Closed MSWLF
(March 19, 2012)

Start Here → ○ PCE ○ TCE ○ DCE ○ VC ◉ ETH

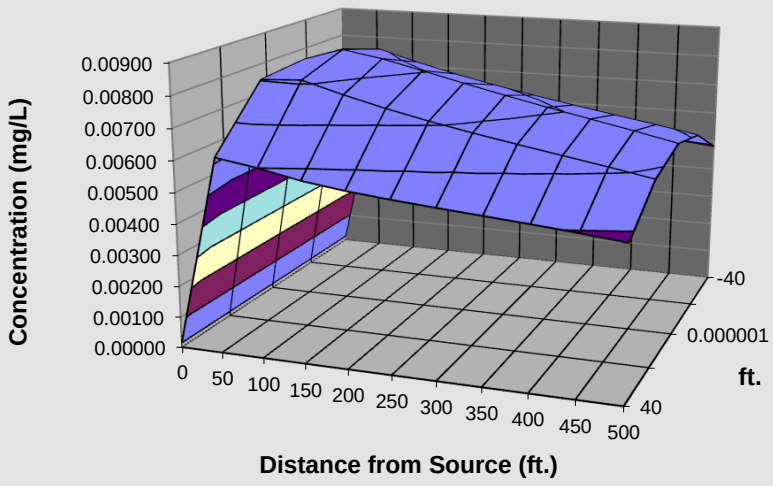
DISSOLVED SOLVENT CONCENTRATIONS IN PLUME

Transverse Distance (ft) ↓	*Distance from Source (ft)* 0	50	100	150	200	250	300	350	400	450	500
40	1.500E-04	6.210E-03	6.003E-03	5.731E-03	5.549E-03	5.412E-03	5.296E-03	5.188E-03	5.079E-03	4.958E-03	4.815E-03
20	1.500E-04	8.030E-03	8.099E-03	7.726E-03	7.390E-03	7.095E-03	6.829E-03	6.584E-03	6.350E-03	6.116E-03	5.866E-03
0	1.500E-04	8.165E-03	8.574E-03	8.346E-03	8.034E-03	7.712E-03	7.403E-03	7.110E-03	6.830E-03	6.552E-03	6.261E-03
-20	1.500E-04	8.030E-03	8.099E-03	7.726E-03	7.390E-03	7.095E-03	6.829E-03	6.584E-03	6.350E-03	6.116E-03	5.866E-03
-40	1.500E-04	6.210E-03	6.003E-03	5.731E-03	5.549E-03	5.412E-03	5.296E-03	5.188E-03	5.079E-03	4.958E-03	4.815E-03
MASS RATE (mg/day)	2.9E-2	1.4E+0	1.4E+0	1.4E+0	1.3E+0	1.3E+0	1.2E+0	1.2E+0	1.2E+0	1.1E+0	1.1E+0

Show No Degradation

Show Biotransformation

Time: 50 yr Target Level: mg/L Displayed Model: **Biotransformation** Displayed Compound: **ETH**



Plume Mass (Order-of-Magnitude Accuracy)

See Gallons

Plume Mass If No Degradation	2.545E-04	*(Kg)*
- Plume Mass If Biotransformation/Production	1.375E-02	*(Kg)*
Mass Removed	-1.350E-02	*(Kg)*
% Biotransformed =	**-5305.1 %**	
% Change in Mass Rate =	**-3583.1 %** (source to edge)	

If "Can't Calc.", make model area longer

See acre-ft

Current Volume of Ground Water in Plume	Can't Calc.	*MGal*
Flow Rate of Water Through Source Area	5.131E-05	*MGD*

Compare to Pump and Treat

Pumping Rate		*(gpm)*
# Pore Volumes Removed Per Yr.		
# Pore Volumes to Clean-Up		
Clean-Up Time		*(yr)*

Plot All Data Plot Data > Target Mass HELP To Centerline Return to Input

FACILITY PE	WELL ID	CAS NUMB	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER
4002	4002-MW5	75-34-3	75	1,1-Dichloroethane	0.3	ug/l	J
4002	4002-MW4	75-34-3	75	1,1-Dichloroethane	0.6	ug/l	J
4002	4002-MW5	7440-36-0	13	Antimony	0.22	ug/l	J
4002	4002-MW1R	7440-38-2	14	Arsenic	0.55	ug/l	J
4002	4002-MW6	7440-38-2	14	Arsenic	1.2	ug/l	J
4002	4002-MW8	7440-38-2	14	Arsenic	1.5	ug/l	J
4002	4002-Downstrea	7440-38-2	14	Arsenic	2.1	ug/l	J
4002	4002-MW4	7440-38-2	14	Arsenic	2.4	ug/l	J
4002	4002-MW7	7440-38-2	14	Arsenic	2.5	ug/l	J
4002	4002-MW5	7440-38-2	14	Arsenic	4.7	ug/l	J
4002	4002-FB	7440-39-3	15	Barium	0.08	ug/l	J
4002	4002-EB	7440-39-3	15	Barium	8	ug/l	J
4002	4002-MW5	7440-39-3	15	Barium	34.1	ug/l	J
4002	4002-MW4	7440-39-3	15	Barium	35.2	ug/l	J
4002	4002-Downstrea	7440-39-3	15	Barium	37.7	ug/l	J
4002	4002-MW6	7440-39-3	15	Barium	45.8	ug/l	J
4002	4002-MW8	7440-39-3	15	Barium	49.2	ug/l	J
4002	4002-MW7	7440-39-3	15	Barium	51.4	ug/l	J
4002	4002-MW5	71-43-2	16	Benzene	0.5	ug/l	J
4002	4002-MW1R	7440-41-7	23	Beryllium	0.08	ug/l	J
4002	4002-MW5	7440-41-7	23	Beryllium	0.16	ug/l	J
4002	4002-MW6	7440-41-7	23	Beryllium	0.3	ug/l	J
4002	4002-MW7	7440-41-7	23	Beryllium	0.34	ug/l	J
4002	4002-MW8	7440-41-7	23	Beryllium	0.37	ug/l	J
4002	4002-Downstrea	7440-43-9	34	Cadmium	0.04	ug/l	J
4002	4002-MW4	7440-43-9	34	Cadmium	0.05	ug/l	J
4002	4002-MW7	7440-43-9	34	Cadmium	0.06	ug/l	J
4002	4002-MW1R	7440-43-9	34	Cadmium	0.1	ug/l	J
4002	4002-MW5	7440-43-9	34	Cadmium	0.12	ug/l	J
4002	4002-MW6	7440-43-9	34	Cadmium	0.14	ug/l	J
4002	4002-MW8	7440-43-9	34	Cadmium	0.27	ug/l	J
4002	4002-MW4	108-90-7	39	Chlorobenzene	1.1	ug/l	J
4002	4002-MW5	75-00-3	41	Chloroethane	0.6	ug/l	J
4002	4002-MW4	75-00-3	41	Chloroethane	9.7	ug/l	J
4002	4002-MW5	156-59-2	78	Cis-1,2-Dichloroethene	2.4	ug/l	J
4002	4002-MW4	156-59-2	78	Cis-1,2-Dichloroethene	4.9	ug/l	J
4002	4002-FB	7440-48-4	53	Cobalt	0.08	ug/l	J
4002	4002-EB	7440-48-4	53	Cobalt	0.1	ug/l	J
4002	4002-MW1R	7440-48-4	53	Cobalt	0.43	ug/l	J
4002	4002-MW5	7440-48-4	53	Cobalt	0.53	ug/l	J
4002	4002-MW8	7440-48-4	53	Cobalt	0.62	ug/l	J
4002	4002-MW6	7440-48-4	53	Cobalt	0.72	ug/l	J
4002	4002-Downstrea	7440-48-4	53	Cobalt	0.87	ug/l	J
4002	4002-MW7	7440-48-4	53	Cobalt	0.91	ug/l	J
4002	4002-MW4	7440-48-4	53	Cobalt	1.6	ug/l	J
4002	4002-MW4	7440-50-8	54	Copper	0.24	ug/l	J

4002	4002-FB	7440-50-8	54	Copper	0.32	ug/l	J
4002	4002-EB	7440-50-8	54	Copper	0.83	ug/l	J
4002	4002-MW6	7440-50-8	54	Copper	1.3	ug/l	J
4002	4002-MW5	7440-50-8	54	Copper	1.8	ug/l	J
4002	4002-MW8	7440-50-8	54	Copper	2	ug/l	J
4002	4002-Downstrea	7440-50-8	54	Copper	2.3	ug/l	J
4002	4002-MW7	7440-50-8	54	Copper	2.3	ug/l	J
4002	4002-MW1R	7440-50-8	54	Copper	3	ug/l	J
4002	4002-MW4	100-41-4	110	Ethylbenzene	0.3	ug/l	J
4002	4002-MW4	7439-92-1	131	Lead	0.22	ug/l	J
4002	4002-MW1R	7439-92-1	131	Lead	0.69	ug/l	J
4002	4002-Downstrea	7439-92-1	131	Lead	2.1	ug/l	J
4002	4002-MW5	7439-92-1	131	Lead	2.3	ug/l	J
4002	4002-MW7	7439-92-1	131	Lead	3.7	ug/l	J
4002	4002-MW6	7439-92-1	131	Lead	5.2	ug/l	J
4002	4002-EB	7439-97-6	132	Mercury	0.05	ug/l	J
4002	4002-FB	7439-97-6	132	Mercury	0.08	ug/l	J
4002	4002-MW5	7439-97-6	132	Mercury	0.18	ug/l	J
4002	4002-FB	7440-02-0	152	Nickel	0.17	ug/l	J
4002	4002-EB	7440-02-0	152	Nickel	0.29	ug/l	J
4002	4002-MW5	7440-02-0	152	Nickel	0.73	ug/l	J
4002	4002-Downstrea	7440-02-0	152	Nickel	0.95	ug/l	J
4002	4002-MW6	7440-02-0	152	Nickel	1.2	ug/l	J
4002	4002-MW8	7440-02-0	152	Nickel	1.2	ug/l	J
4002	4002-MW1R	7440-02-0	152	Nickel	1.3	ug/l	J
4002	4002-MW7	7440-02-0	152	Nickel	1.6	ug/l	J
4002	4002-MW4	7440-02-0	152	Nickel	2.7	ug/l	J
4002	4002-MW1R	SW303	303	Nitrate Nitrogen as N	1410	ug/l	J
4002	4002-MW7	7782-49-2	183	Selenium	0.32	ug/l	J
4002	4002-MW4	7782-49-2	183	Selenium	0.41	ug/l	J
4002	4002-MW1R	7782-49-2	183	Selenium	0.76	ug/l	J
4002	4002-MW6	7440-22-4	184	Silver	0.05	ug/l	J
4002	4002-MW5	7440-22-4	184	Silver	0.06	ug/l	J
4002	4002-MW4	14808-79-8	315	Sulfate	8100	ug/l	J
4002	4002-MW1R	14808-79-8	315	Sulfate	15200	ug/l	J
4002	4002-MW4	18496-25-8	187	Sulfide	614	ug/l	J
4002	4002-MW5	7440-28-0	194	Thallium	0.04	ug/l	J
4002	4002-MW4	7440-28-0	194	Thallium	0.05	ug/l	J
4002	4002-MW8	7440-28-0	194	Thallium	0.1	ug/l	J
4002	4002-MW7	7440-28-0	194	Thallium	0.15	ug/l	J
4002	4002-MW1R	7440-28-0	194	Thallium	0.17	ug/l	J
4002	4002-MW6	7440-28-0	194	Thallium	0.33	ug/l	J
4002	4002-Downstrea	7440-31-5	195	Tin	0.18	ug/l	J
4002	4002-MW6	7440-31-5	195	Tin	0.23	ug/l	J
4002	4002-FB	7440-31-5	195	Tin	0.48	ug/l	J
4002	4002-MW8	7440-31-5	195	Tin	0.57	ug/l	J
4002	4002-Downstrea	108-88-3	196	Toluene	0.5	ug/l	J

4002	4002-MW4	7440-47-3	51	Total Chromium	0.28	ug/l	J
4002	4002-MW1R	7440-47-3	51	Total Chromium	0.38	ug/l	J
4002	4002-MW5	7440-47-3	51	Total Chromium	0.42	ug/l	J
4002	4002-Downstrea	7440-47-3	51	Total Chromium	1.6	ug/l	J
4002	4002-MW6	7440-47-3	51	Total Chromium	5.2	ug/l	J
4002	4002-MW8	7440-47-3	51	Total Chromium	6.9	ug/l	J
4002	4002-MW7	7440-47-3	51	Total Chromium	8.5	ug/l	J
4002	4002-MW5	7440-62-2	209	Vanadium	0.92	ug/l	J
4002	4002-MW4	7440-62-2	209	Vanadium	1.7	ug/l	J
4002	4002-Downstrea	7440-62-2	209	Vanadium	3.4	ug/l	J
4002	4002-MW6	7440-62-2	209	Vanadium	6.4	ug/l	J
4002	4002-MW7	7440-62-2	209	Vanadium	10.3	ug/l	J
4002	4002-MW8	7440-62-2	209	Vanadium	17.1	ug/l	J
4002	4002-EB	7440-66-6	213	Zinc	0.61	ug/l	J
4002	4002-MW4	7440-66-6	213	Zinc	0.98	ug/l	J
4002	4002-MW5	7440-66-6	213	Zinc	4.6	ug/l	J
4002	4002-MW1R	7440-66-6	213	Zinc	6.2	ug/l	J
4002	4002-MW8	7440-66-6	213	Zinc	6.3	ug/l	J
4002	4002-Downstrea	7440-66-6	213	Zinc	6.4	ug/l	J
4002	4002-MW7	7440-66-6	213	Zinc	7	ug/l	J
4002	4002-MW6	7440-66-6	213	Zinc	8.3	ug/l	J
4002	4002-Downstrea	7440-41-7	23	Beryllium	0.02	ug/l	U
4002	4002-MW4	7440-41-7	23	Beryllium	0.02	ug/l	U
4002	4002-Downstrea	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-MW4	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-Downstrea	7440-28-0	194	Thallium	0.02	ug/l	U
4002	4002-EB	7440-41-7	23	Beryllium	0.02	ug/l	U
4002	4002-EB	7440-43-9	34	Cadmium	0.02	ug/l	U
4002	4002-EB	7439-92-1	131	Lead	0.02	ug/l	U
4002	4002-MW7	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-MW8	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-MW1R	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-EB	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-EB	7440-28-0	194	Thallium	0.02	ug/l	U
4002	4002-FB	7440-41-7	23	Beryllium	0.02	ug/l	U
4002	4002-FB	7440-43-9	34	Cadmium	0.02	ug/l	U
4002	4002-FB	7439-92-1	131	Lead	0.02	ug/l	U
4002	4002-FB	7440-22-4	184	Silver	0.02	ug/l	U
4002	4002-FB	7440-28-0	194	Thallium	0.02	ug/l	U
4002	4002-EB	7440-47-3	51	Total Chromium	0.04	ug/l	U
4002	4002-FB	7440-47-3	51	Total Chromium	0.04	ug/l	U
4002	4002-EB	7440-38-2	14	Arsenic	0.1	ug/l	U
4002	4002-FB	7440-38-2	14	Arsenic	0.1	ug/l	U
4002	4002-Downstrea	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-MW4	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-MW6	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-MW7	7440-36-0	13	Antimony	0.14	ug/l	U

4002	4002-MW8	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-MW1R	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-EB	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-MW1R	7440-62-2	209	Vanadium	0.14	ug/l	U
4002	4002-EB	7440-62-2	209	Vanadium	0.14	ug/l	U
4002	4002-FB	7440-36-0	13	Antimony	0.14	ug/l	U
4002	4002-FB	7440-62-2	209	Vanadium	0.14	ug/l	U
4002	4002-MW4	7440-31-5	195	Tin	0.16	ug/l	U
4002	4002-MW5	7440-31-5	195	Tin	0.16	ug/l	U
4002	4002-MW1R	7440-31-5	195	Tin	0.16	ug/l	U
4002	4002-EB	7440-31-5	195	Tin	0.16	ug/l	U
4002	4002-Downstrea	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-MW4	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-MW5	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-MW6	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-MW7	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-Downstrea	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-MW4	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-MW5	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-MW6	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-MW7	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-MW8	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-MW1R	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-EB	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-TB	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-FB	75-35-4	77	1,1-Dichloroethene	0.17	ug/l	U
4002	4002-MW8	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-MW1R	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-EB	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-TB	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-FB	127-18-4	192	Tetrachloroethene	0.17	ug/l	U
4002	4002-Downstrea	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-MW4	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-MW5	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-MW6	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-MW7	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-Downstrea	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-MW4	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-MW5	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-MW6	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-MW7	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-MW8	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-MW1R	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-EB	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-TB	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-FB	71-55-6	200	1,1,1-Trichloroethane	0.19	ug/l	U
4002	4002-MW8	100-42-5	186	Styrene	0.19	ug/l	U

4002	4002-MW1R	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-EB	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-TB	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-FB	100-42-5	186	Styrene	0.19	ug/l	U
4002	4002-Downstrea	7782-49-2	183	Selenium	0.2	ug/l	U
4002	4002-MW5	7782-49-2	183	Selenium	0.2	ug/l	U
4002	4002-MW6	7782-49-2	183	Selenium	0.2	ug/l	U
4002	4002-MW8	7782-49-2	183	Selenium	0.2	ug/l	U
4002	4002-EB	7782-49-2	183	Selenium	0.2	ug/l	U
4002	4002-FB	7782-49-2	183	Selenium	0.2	ug/l	U
4002	4002-Downstrea	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-MW6	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-MW7	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-Downstrea	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-MW4	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-MW5	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-MW6	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-MW7	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-Downstrea	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-MW4	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-MW5	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-MW6	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-MW7	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-MW8	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-MW1R	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-EB	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-TB	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-FB	75-34-3	75	1,1-Dichloroethane	0.2	ug/l	U
4002	4002-MW8	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-MW1R	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-EB	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-TB	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-FB	108-05-4	210	Vinyl Acetate	0.2	ug/l	U
4002	4002-MW8	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-MW1R	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-EB	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-TB	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-FB	75-25-2	30	Bromoform	0.2	ug/l	U
4002	4002-Downstrea	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-MW4	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-MW5	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-MW6	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-MW7	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-Downstrea	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-MW4	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-MW5	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-MW6	75-27-4	29	Bromodichloromethane	0.21	ug/l	U

4002	4002-MW7	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-Downstrea	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-MW5	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-MW6	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-MW7	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-MW8	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-MW1R	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-EB	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-TB	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-FB	78-87-5	82	1,2-Dichloropropane	0.21	ug/l	U
4002	4002-MW8	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-MW1R	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-EB	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-TB	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-FB	75-27-4	29	Bromodichloromethane	0.21	ug/l	U
4002	4002-MW8	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-MW1R	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-EB	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-TB	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-FB	100-41-4	110	Ethylbenzene	0.21	ug/l	U
4002	4002-Downstrea	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-MW4	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-MW5	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-MW6	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-MW7	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-Downstrea	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-MW4	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-MW5	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-MW6	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-MW7	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-MW8	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-MW1R	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-EB	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-TB	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-FB	56-23-5	36	Carbon Tetrachloride	0.22	ug/l	U
4002	4002-MW8	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-MW1R	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-EB	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-TB	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-FB	630-20-6	190	1,1,1,2-Tetrachloroethane	0.22	ug/l	U
4002	4002-Downstrea	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-MW4	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-MW5	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-MW6	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-MW7	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-Downstrea	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-MW4	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U

4002	4002-MW5	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-MW6	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-MW7	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-Downstrea	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW4	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW5	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW6	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW7	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW4	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-MW5	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-MW6	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-MW7	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-MW8	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-MW1R	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-EB	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-TB	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-FB	75-15-0	35	Carbon Disulfide	0.23	ug/l	U
4002	4002-MW8	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-MW1R	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-EB	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-TB	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-FB	156-60-5	79	trans-1,2-Dichloroethene	0.23	ug/l	U
4002	4002-MW8	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW1R	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-EB	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-TB	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-FB	79-01-6	201	Trichloroethene	0.23	ug/l	U
4002	4002-MW8	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-MW1R	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-EB	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-TB	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-FB	108-88-3	196	Toluene	0.23	ug/l	U
4002	4002-FB	7440-66-6	213	Zinc	0.24	ug/l	U
4002	4002-Downstrea	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-MW4	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-MW5	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-MW6	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-MW7	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-Downstrea	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-MW6	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-MW7	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-Downstrea	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-MW4	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-MW5	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-MW6	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-MW7	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-Downstrea	124-48-1	66	Dibromochloromethane	0.24	ug/l	U

4002	4002-MW4	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-MW5	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-MW6	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-MW7	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-MW8	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-MW1R	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-EB	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-TB	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-FB	75-69-4	203	Trichlorofluoromethane	0.24	ug/l	U
4002	4002-MW8	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-MW1R	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-EB	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-TB	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-FB	71-43-2	16	Benzene	0.24	ug/l	U
4002	4002-MW8	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-MW1R	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-EB	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-TB	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-FB	10061-01-5	86	Cis-1,3-Dichloropropene	0.24	ug/l	U
4002	4002-MW8	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-MW1R	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-EB	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-TB	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-FB	124-48-1	66	Dibromochloromethane	0.24	ug/l	U
4002	4002-Downstrea	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-MW6	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-MW7	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-Downstrea	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-MW4	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-MW5	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-MW6	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-MW7	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-Downstrea	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-MW4	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-MW5	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-MW6	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-MW7	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-MW8	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-MW1R	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-EB	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-TB	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-FB	156-59-2	78	Cis-1,2-Dichloroethene	0.25	ug/l	U
4002	4002-MW8	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-MW1R	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-EB	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-TB	67-66-3	44	Chloroform	0.25	ug/l	U
4002	4002-FB	67-66-3	44	Chloroform	0.25	ug/l	U

4002	4002-MW8	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-MW1R	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-EB	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-TB	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-FB	79-00-5	202	1,1,2-Trichloroethane	0.25	ug/l	U
4002	4002-Downstrea	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-MW4	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-MW5	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-MW6	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-MW7	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-Downstrea	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-MW4	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-MW5	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-MW6	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-MW7	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-Downstrea	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-MW4	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-MW5	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-MW6	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-MW7	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-MW8	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-MW1R	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-EB	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-TB	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-FB	74-88-4	142	Iodomethane	0.26	ug/l	U
4002	4002-MW8	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-MW1R	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-EB	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-TB	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-FB	106-93-4	68	1,2-Dibromoethane	0.26	ug/l	U
4002	4002-MW8	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-MW1R	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-EB	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-TB	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-FB	79-34-5	191	1,1,2,2-Tetrachloroethane	0.26	ug/l	U
4002	4002-Downstrea	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-MW4	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-MW5	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-MW6	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-MW7	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-Downstrea	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-MW4	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-MW5	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-MW6	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-MW7	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-MW8	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-MW1R	74-97-5	28	Bromochloromethane	0.27	ug/l	U

4002	4002-EB	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-TB	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-FB	74-97-5	28	Bromochloromethane	0.27	ug/l	U
4002	4002-MW8	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-MW1R	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-EB	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-TB	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-FB	107-06-2	76	1,2-Dichloroethane	0.27	ug/l	U
4002	4002-Downstrea	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-MW4	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-MW5	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-MW6	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-MW7	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-Downstrea	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-MW4	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-MW5	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-MW6	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-MW7	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-MW8	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-MW1R	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-EB	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-TB	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-FB	10061-02-6	87	trans-1,3-Dichloropropene	0.28	ug/l	U
4002	4002-MW8	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-MW1R	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-EB	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-TB	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-FB	74-95-3	139	Dibromomethane	0.28	ug/l	U
4002	4002-Downstrea	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-MW5	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-MW6	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-MW7	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-MW8	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-MW1R	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-EB	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-TB	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-FB	108-90-7	39	Chlorobenzene	0.3	ug/l	U
4002	4002-Downstrea	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-MW4	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-MW5	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-MW6	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-MW7	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-MW8	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-MW1R	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-EB	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-TB	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U
4002	4002-FB	95-50-1	69	1,2-Dichlorobenzene	0.32	ug/l	U

4002	4002-Downstrea	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-MW4	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-MW5	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-MW6	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-MW7	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-MW8	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-MW1R	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-EB	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-TB	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-FB	96-12-8	67	1,2-Dibromo-3-Chloroprop	0.34	ug/l	U
4002	4002-Downstrea	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-MW5	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-MW6	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-MW7	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-MW8	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-MW1R	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-EB	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-TB	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-FB	106-46-7	71	1,4-Dichlorobenzene	0.39	ug/l	U
4002	4002-Downstrea	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-MW4	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-MW5	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-MW6	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-MW7	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-MW8	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-MW1R	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-EB	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-TB	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-FB	110-57-6	73	trans-1,4-Dichloro-2-Buten	0.42	ug/l	U
4002	4002-Downstrea	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-MW4	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-MW5	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-MW6	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-MW7	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-MW8	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-MW1R	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-EB	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-TB	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-FB	96-18-4	206	1,2,3-Trichloropropane	0.43	ug/l	U
4002	4002-Downstrea	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-MW6	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-MW7	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-MW8	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-MW1R	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-EB	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-TB	75-00-3	41	Chloroethane	0.48	ug/l	U
4002	4002-FB	75-00-3	41	Chloroethane	0.48	ug/l	U

4002	4002-Downstrea	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-MW5	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-MW6	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-MW7	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-MW8	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-MW1R	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-EB	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-TB	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-FB	75-01-4	211	Vinyl Chloride	0.63	ug/l	U
4002	4002-Downstrea	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-MW4	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-MW5	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-MW6	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-MW7	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-MW8	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-MW1R	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-EB	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-TB	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-FB	75-09-2	140	Methylene Chloride	0.64	ug/l	U
4002	4002-Downstrea	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-MW4	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-MW5	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-MW6	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-MW7	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-MW8	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-MW1R	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-EB	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-TB	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-FB	74-83-9	136	Bromomethane	0.67	ug/l	U
4002	4002-Downstrea	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-MW4	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-MW5	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-MW6	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-MW7	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-MW8	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-MW1R	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-EB	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-TB	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-FB	1330-20-7	346	Xylenes	0.68	ug/l	U
4002	4002-Downstrea	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-MW4	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-MW5	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-MW6	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-MW7	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-MW8	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-MW1R	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-EB	74-87-3	137	Chloromethane	0.77	ug/l	U

4002	4002-TB	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-FB	74-87-3	137	Chloromethane	0.77	ug/l	U
4002	4002-Downstrea	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-MW4	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-MW5	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-MW6	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-MW7	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-MW8	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-MW1R	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-EB	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-TB	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-FB	108-10-1	147	4-Methyl-2-Pentanone	1.19	ug/l	U
4002	4002-Downstrea	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-MW4	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-MW5	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-MW6	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-MW7	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-MW8	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-MW1R	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-EB	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-TB	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-FB	591-78-6	124	2-Hexanone	1.57	ug/l	U
4002	4002-Downstrea	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-MW4	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-MW5	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-MW6	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-MW7	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-MW8	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-MW1R	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-EB	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-TB	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-FB	78-93-3	141	2-Butanone	2.21	ug/l	U
4002	4002-Downstrea	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-MW4	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-MW5	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-MW6	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-MW7	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-MW8	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-MW1R	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-EB	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-TB	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-FB	107-13-1	8	Acrylonitrile	2.72	ug/l	U
4002	4002-Downstrea	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-MW4	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-MW5	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-MW6	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-MW7	67-64-1	3	Acetone	9.06	ug/l	U

4002	4002-MW8	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-MW1R	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-EB	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-TB	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-FB	67-64-1	3	Acetone	9.06	ug/l	U
4002	4002-MW4	SW303	303	Nitrate Nitrogen as N	30	ug/l	U
4002	4002-MW1R	18496-25-8	187	Sulfide	100	ug/l	U
4002	4002-MW1R	SW316	316	BOD	2000	ug/l	U
4002	4002-MW1R	SW317	317	COD	20000	ug/l	U
4002	4002-MW1R	7439-97-6	132	Mercury	0.07	ug/l	
4002	4002-MW4	71-43-2	16	Benzene	3.2	ug/l	
4002	4002-MW4	106-46-7	71	1,4-Dichlorobenzene	3.3	ug/l	
4002	4002-MW5	SW320	320	PH (field measurement)	4.38	Units	
4002	4002-MW7	SW320	320	PH (field measurement)	4.42	Units	
4002	4002-MW8	SW320	320	PH (field measurement)	4.64	Units	
4002	4002-MW4	SW330	330	Turbidity	4.8	NTU	
4002	4002-MW4	SW336	336	ORP, mv	4.8	mv	
4002	4002-MW6	SW320	320	PH (field measurement)	4.85	Units	
4002	4002-MW1R	SW320	320	PH (field measurement)	4.97	Units	
4002	4002-MW1R	SW318	318	Static Water Level	5.02	feet	
4002	4002-MW4	SW320	320	PH (field measurement)	5.55	Units	
4002	4002-MW6	SW318	318	Static Water Level	5.76	feet	
4002	4002-Downstrea	SW320	320	PH (field measurement)	6.2	Units	
4002	4002-MW8	SW318	318	Static Water Level	6.41	feet	
4002	4002-MW4	75-01-4	211	Vinyl Chloride	7.6	ug/l	
4002	4002-MW7	SW318	318	Static Water Level	10.32	feet	
4002	4002-PIZ2	SW318	318	Static Water Level	10.45	feet	
4002	4002-MW1R	SW330	330	Turbidity	11	NTU	
4002	4002-MW1R	SW336	336	ORP, mv	11	mv	
4002	4002-MW8	7439-92-1	131	Lead	12	ug/l	
4002	4002-MW4	SW318	318	Static Water Level	13.53	feet	
4002	4002-Downstrea	SW325	325	Temperature	14.27	C	
4002	4002-MW1R	SW325	325	Temperature	14.66	C	
4002	4002-MW6	SW325	325	Temperature	15.1	C	
4002	4002-MW5	SW318	318	Static Water Level	15.47	feet	
4002	4002-MW4	SW325	325	Temperature	16.21	C	
4002	4002-MW8	SW325	325	Temperature	16.49	C	
4002	4002-MW7	SW325	325	Temperature	16.76	C	
4002	4002-MW5	SW325	325	Temperature	17.43	C	
4002	4002-MW1R	SW411	411	Well Depth	19.51	feet	
4002	4002-MW8	SW411	411	Well Depth	20.24	feet	
4002	4002-MW7	SW411	411	Well Depth	21.38	feet	
4002	4002-MW4	SW411	411	Well Depth	26.16	feet	
4002	4002-MW6	SW411	411	Well Depth	26.87	feet	
4002	4002-MW5	SW411	411	Well Depth	28.34	feet	
4002	4002-Downstrea	SW330	330	Turbidity	28.9	NTU	
4002	4002-Downstrea	SW336	336	ORP, mv	28.9	mv	

4002	4002-MW8	SW323	323	Conductivity (at 25c), uMh	32	uMhos/cm	
4002	4002-MW5	SW330	330	Turbidity	37.3	NTU	
4002	4002-MW5	SW336	336	ORP, mv	37.3	mv	
4002	4002-MW6	SW323	323	Conductivity (at 25c), uMh	43	uMhos/cm	
4002	4002-MW7	SW323	323	Conductivity (at 25c), uMh	47	uMhos/cm	
4002	4002-MW5	SW323	323	Conductivity (at 25c), uMh	67	uMhos/cm	
4002	4002-MW1R	7440-39-3	15	Barium	120	ug/l	
4002	4002-Downstrea	SW323	323	Conductivity (at 25c), uMh	211	uMhos/cm	
4002	4002-MW8	SW330	330	Turbidity	270	NTU	
4002	4002-MW8	SW336	336	ORP, mv	270	ug/l	
4002	4002-MW1R	SW356	356	Dissolved Oxygen	300	ug/l	
4002	4002-MW6	SW330	330	Turbidity	361	NTU	
4002	4002-MW6	SW336	336	ORP, mv	361	ug/l	
4002	4002-MW4	SW323	323	Conductivity (at 25c), uMh	371	uMhos/cm	
4002	4002-MW1R	SW323	323	Conductivity (at 25c), uMh	444	uMhos/cm	
4002	4002-MW1R	7439-89-6	340	Iron	499	ug/l	
4002	4002-MW7	SW330	330	Turbidity	776	NTU	
4002	4002-MW7	SW336	336	ORP, mv	776	ug/l	
4002	4002-MW5	SW356	356	Dissolved Oxygen	930	ug/l	
4002	4002-MW4	SW356	356	Dissolved Oxygen	1410	ug/l	
4002	4002-MW6	SW356	356	Dissolved Oxygen	1560	ug/l	
4002	4002-MW4	E-10195	357	Total Organic Carbon	1600	ug/l	
4002	4002-Downstrea	SW356	356	Dissolved Oxygen	2020	ug/l	
4002	4002-MW7	SW356	356	Dissolved Oxygen	4740	ug/l	
4002	4002-MW8	SW356	356	Dissolved Oxygen	6760	ug/l	
4002	4002-MW4	SW301	301	Chloride	7000	ug/l	
4002	4002-MW1R	SW337	337	Total Alkalinity	7000	ug/l	
4002	4002-MW1R	E-10195	357	Total Organic Carbon	8980	ug/l	
4002	4002-MW4	SW316	316	BOD	16000	ug/l	
4002	4002-MW4	SW317	317	COD	36000	ug/l	
4002	4002-MW4	7439-89-6	340	Iron	72975	ug/l	
4002	4002-MW1R	SW413	413	Carbon Dioxide	95000	ug/l	
4002	4002-MW1R	SW301	301	Chloride	105000	ug/l	
4002	4002-MW4	SW337	337	Total Alkalinity	183000	ug/l	
4002	4002-MW4	SW413	413	Carbon Dioxide	755000	ug/l	
4002	4002-MW1R	64-19-7	416	Acetic Acid	6	ug/l	U
4002	4002-MW1R	107-92-6	418	Butyric Acid	4	ug/l	U
4002	4002-MW1R	142-62-1	485	Hexanoic Acid	6	ug/l	U
4002	4002-MW1R	50-21-5	415	Lactic Acid	10	ug/l	U
4002	4002-MW1R	109-52-4	487	Pentanoic Acid	12	ug/l	U
4002	4002-MW1R	79-09-4	417	Propionic Acid	7	ug/l	U
4002	4002-MW1R	127-17-3	414	Pyruvic Acid	33	ug/l	U
4002	4002-MW1R	646-07-1	486	i-Hexanoic Acid	6	ug/l	U
4002	4002-MW1R	503-74-2	488	i-Pentanoic Acid	44	ug/l	U
4002	4002-MW1R	74-84-0	331	Ethane	0.001	ug/l	U
4002	4002-MW4	64-19-7	416	Acetic Acid	6	ug/l	U
4002	4002-MW4	107-92-6	418	Butyric Acid	4	ug/l	U

4002	4002-MW4	142-62-1	485	Hexanoic Acid	6	ug/l	U
4002	4002-MW4	50-21-5	415	Lactic Acid	10	ug/l	U
4002	4002-MW4	109-52-4	487	Pentanoic Acid	12	ug/l	U
4002	4002-MW4	79-09-4	417	Propionic Acid	7	ug/l	U
4002	4002-MW4	127-17-3	414	Pyruvic Acid	33	ug/l	U
4002	4002-MW4	646-07-1	486	i-Hexanoic Acid	6	ug/l	U
4002	4002-MW4	503-74-2	488	i-Pentanoic Acid	44	ug/l	U
4002	4002-MW1R	74-85-1	332	Ethene	0.014	ug/l	
4002	4002-MW4	74-84-0	331	Ethane	0.015	ug/l	
4002	4002-MW4	74-85-1	332	Ethene	0.15	ug/l	
4002	4002-MW1R	1333-74-0	420	Hydrogen	0.69	nM	
4002	4002-MW4	1333-74-0	420	Hydrogen	1	nM	
4002	4002-MW1R	74-82-8	333	Methane	490	ug/l	
4002	4002-MW4	74-82-8	333	Methane	5400	ug/l	

METHOD	MDL	MRL	SWSL	DILUTION F	COLLECT DATE	EXTRACTION	ANALYSIS DATE
EPA8260B	0.2	5	5	1	3/19/2012		3/28/2012
EPA8260B	0.2	5	5	1	3/19/2012		3/28/2012
EPA200.8	0.14	3	6	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
EPA8260B	0.24	1	1	1	3/19/2012		3/28/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012		3/23/2012
EPA8260B	0.3	3	3	1	3/19/2012		3/28/2012
EPA8260B	0.48	10	10	1	3/19/2012		3/28/2012
EPA8260B	0.48	10	10	1	3/19/2012		3/28/2012
EPA8260B	0.25	5	5	1	3/19/2012		3/28/2012
EPA8260B	0.25	5	5	1	3/19/2012		3/28/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.03	10	10	1	3/19/2012		3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012		3/23/2012

EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	10	10	1	3/19/2012	3/23/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.05	0.2	0.2	1	3/19/2012	3/23/2012
EPA200.8	0.05	0.2	0.2	1	3/19/2012	3/23/2012
EPA200.8	0.05	0.2	0.2	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA200.8	0.04	10	50	1	3/19/2012	3/23/2012
EPA353.2	30	40	10000	1	3/19/2012	3/21/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
SM426C	5000	250000	250000	1	3/19/2012	3/23/2012
SM426C	5000	250000	250000	1	3/19/2012	3/23/2012
SM4500-S2	100	1000	1000	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/28/2012

EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	1	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.02	1	5.5	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.04	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.1	5	10	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012

EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.14	3	6	1	3/19/2012	3/23/2012
EPA200.8	0.14	10	25	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA200.8	0.16	100	100	1	3/19/2012	3/23/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.17	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.17	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012

EPA8260B	0.19	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.19	1	1	1	3/19/2012	3/29/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA200.8	0.2	10	10	1	3/19/2012	3/23/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/28/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/28/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/28/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/29/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/29/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.2	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/29/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/24/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/29/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/29/2012
EPA8260B	0.2	50	50	1	3/19/2012	3/29/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/24/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.2	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012

EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.21	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.22	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/28/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/28/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/28/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/28/2012

EPA8260B	0.23	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/24/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.23	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.23	1	1	1	3/19/2012	3/29/2012
EPA200.8	0.24	10	10	1	3/19/2012	3/23/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/28/2012

EPA8260B	0.24	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/24/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.24	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.25	5	5	1	3/19/2012	3/29/2012

EPA8260B	0.25	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.25	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/24/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.26	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/24/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.26	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/24/2012

EPA8260B	0.27	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.27	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/24/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.28	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/28/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/24/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.3	3	3	1	3/19/2012	3/29/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.32	5	5	1	3/19/2012	3/29/2012

EPA8260B	0.34	13	13	1	3/19/2012	3/28/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/28/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/28/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/29/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/29/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/29/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/24/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/29/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/29/2012
EPA8260B	0.34	13	13	1	3/19/2012	3/29/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/28/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/28/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/28/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/24/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.42	100	100	1	3/19/2012	3/29/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.43	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/24/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.48	10	10	1	3/19/2012	3/29/2012

EPA8260B	0.63	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.64	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/28/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/24/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.67	10	10	1	3/19/2012	3/29/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/28/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/24/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.68	5	5	1	3/19/2012	3/29/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/24/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/29/2012

EPA8260B	0.77	1	1	1	3/19/2012	3/29/2012
EPA8260B	0.77	1	1	1	3/19/2012	3/29/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/28/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/28/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/28/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/29/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/29/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/29/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/24/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/29/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/29/2012
EPA8260B	1.19	100	100	1	3/19/2012	3/29/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/28/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/28/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/28/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/29/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/29/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/29/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/24/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/29/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/29/2012
EPA8260B	1.57	50	50	1	3/19/2012	3/29/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/28/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/28/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/28/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/29/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/29/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/29/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/24/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/29/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/29/2012
EPA8260B	2.21	100	100	1	3/19/2012	3/29/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/28/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/28/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/28/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/29/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/29/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/29/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/24/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/29/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/29/2012
EPA8260B	2.72	200	200	1	3/19/2012	3/29/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/28/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/28/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/28/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/29/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/29/2012

EPA8260B	9.06	100	100	1	3/19/2012	3/29/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/24/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/29/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/29/2012
EPA8260B	9.06	100	100	1	3/19/2012	3/29/2012
EPA353.2	30	40	10000	1	3/19/2012	3/21/2012
SM4500-S2	100	1000	1000	1	3/19/2012	3/23/2012
SM5210B	2000	2000	2000	1	3/19/2012	3/19/2012
HACH8000	20000	20000	20000	1	3/19/2012	3/22/2012
EPA200.8	0.05	0.2	0.2	1	3/19/2012	3/23/2012
EPA8260B	0.24	1	1	1	3/19/2012	3/28/2012
EPA8260B	0.39	1	1	1	3/19/2012	3/28/2012
SM4500HB				1	3/19/2012	3/19/2012
SM4500HB				1	3/19/2012	3/19/2012
SM4500HB				1	3/19/2012	3/19/2012
SM2130B	1	1	1	1	3/19/2012	3/19/2012
SM2580B				1	3/19/2012	3/19/2012
SM4500HB				1	3/19/2012	3/19/2012
SM4500HB				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
SM4500HB				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
SM4500HB				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
EPA8260B	0.63	1	1	1	3/19/2012	3/28/2012
				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
SM2130B	1	1	1	1	3/19/2012	3/19/2012
SM2580B				1	3/19/2012	3/19/2012
EPA200.8	0.02	5	10	1	3/19/2012	3/23/2012
				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
SM2550B				1	3/19/2012	3/19/2012
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				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
				1	3/19/2012	3/19/2012
SM2130B	1	1	1	1	3/19/2012	3/19/2012
SM2580B				1	3/19/2012	3/19/2012

SM2510B	1	1	1	1	3/19/2012		3/19/2012
SM2130B	1	1	1	1	3/19/2012		3/19/2012
SM2580B				1	3/19/2012		3/19/2012
SM2510B	1	1	1	1	3/19/2012		3/19/2012
SM2510B	1	1	1	1	3/19/2012		3/19/2012
SM2510B	1	1	1	1	3/19/2012		3/19/2012
EPA200.8	0.02	100	100	1	3/19/2012		3/23/2012
SM2510B	1	1	1	1	3/19/2012		3/19/2012
SM2130B	1	1	1	1	3/19/2012		3/19/2012
SM2580B				1	3/19/2012		3/19/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM2130B	1	1	1	1	3/19/2012		3/19/2012
SM2580B				1	3/19/2012		3/19/2012
SM2510B	1	1	1	1	3/19/2012		3/19/2012
SM2510B	1	1	1	1	3/19/2012		3/19/2012
SM3111B	15.9	300	300	1	3/19/2012		3/29/2012
SM2130B	1	1	1	1	3/19/2012		3/19/2012
SM2580B				1	3/19/2012		3/19/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM5310C	300	1000	1000	1	3/19/2012		3/23/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM4500OG	100	100	100	1	3/19/2012		3/19/2012
SM4500-Cl	5000	5000	5000	1	3/19/2012		3/22/2012
SM2320B	1000	1000	1000	1	3/19/2012		3/19/2012
SM5310C	300	1000	1000	1	3/19/2012		3/23/2012
SM5210B	2000	2000	2000	1	3/19/2012		3/19/2012
HACH8000	20000	20000	20000	1	3/19/2012		3/22/2012
SM3111B	15.9	300	300	1	3/19/2012		3/29/2012
SM4500CO	1000	1000	1000	1	3/19/2012		3/19/2012
SM4500-Cl	5000	5000	5000	1	3/19/2012		3/22/2012
SM2320B	1000	1000	1000	1	3/19/2012		3/19/2012
SM4500CO	1000	1000	1000	1	3/19/2012		3/19/2012
AM23G	6	70		1	3/19/2012	3/28/2012	3/28/2012
AM23G	4	50		1	3/19/2012	3/28/2012	3/28/2012
AM23G	6	50		1	3/19/2012	3/28/2012	3/28/2012
AM23G	10	100		1	3/19/2012	3/28/2012	3/28/2012
AM23G	12	70		1	3/19/2012	3/28/2012	3/28/2012
AM23G	7	50		1	3/19/2012	3/28/2012	3/28/2012
AM23G	33	150		1	3/19/2012	3/28/2012	3/28/2012
AM23G	6	50		1	3/19/2012	3/28/2012	3/28/2012
AM23G	44	150		1	3/19/2012	3/28/2012	3/28/2012
AM20GAX	0.001	0.01		1	3/19/2012	3/23/2012	3/23/2012
AM23G	6	70		1	3/19/2012	3/28/2012	3/28/2012
AM23G	4	50		1	3/19/2012	3/28/2012	3/28/2012

AM23G	6	50	1	3/19/2012	3/28/2012	3/28/2012
AM23G	10	100	1	3/19/2012	3/28/2012	3/28/2012
AM23G	12	70	1	3/19/2012	3/28/2012	3/28/2012
AM23G	7	50	1	3/19/2012	3/28/2012	3/28/2012
AM23G	33	150	1	3/19/2012	3/28/2012	3/28/2012
AM23G	6	50	1	3/19/2012	3/28/2012	3/28/2012
AM23G	44	150	1	3/19/2012	3/28/2012	3/28/2012
AM20GAX	0.002	0.01	1	3/19/2012	3/23/2012	3/23/2012
AM20GAX	0.001	0.01	1	3/19/2012	3/23/2012	3/23/2012
AM20GAX	0.002	0.01	1	3/19/2012	3/23/2012	3/23/2012
AM20GAX	0.25	0.6	1	3/19/2012	3/23/2012	3/23/2012
AM20GAX	0.25	0.6	1	3/19/2012	3/23/2012	3/23/2012
AM20GAX	0.003	0.015	1	3/19/2012	3/23/2012	3/23/2012
AM20GAX	0.003	0.015	1	3/19/2012	3/23/2012	3/23/2012

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