

Groundwater Sampling Report

Spring 2008

**Bedford Village Wells
Hunting Ridge Mall
Site 3-60-009**

**Work Assignment No.
D004445-12**

Prepared for:



**SUPERFUND STANDBY PROGRAM
New York State
Department of Environmental Conservation
625 Broadway
Albany, New York 12233**

Prepared by:

**Earth Tech Northeast, Inc.
40 British American Boulevard
Latham, New York**

June 13, 2008

Mr. George Momberger
NYSDEC Division of Environmental Remediation
Remedial Bureau E, 12th Floor
625 Broadway
Albany, New York 12233-7017

Re: Bedford Village Wells – Hunting Ridge Mall - Site #3-60-009
Quarterly Sampling Report – Spring 2008

Dear Mr. Momberger:

This quarterly letter report describes the fifth of six groundwater sampling events to be conducted at the Bedford Village Wells – Hunting Ridge Mall Site, under New York State Department of Environmental Conservation (NYSDEC) Work Assignment # D004445-12. The sampling was once again conducted by Earth Tech's subcontractor, GeoLogic NY, Inc (GeoLogic), Homer, New York, in accordance with GeoLogic's Health and Safety Plan. Groundwater samples were submitted to Chemtech, Inc. under routine chain-of-custody protocol.

This report presents the field observation logs, chain-of-custody records and analytical summary table for the groundwater sampling event that took place on April 21 and 22, 2008. Fifteen wells were sampled during this event (per NYSDEC request, a greater number of wells were sampled in some of the earlier events).

Table 1 summarizes the analytical data for groundwater samples collected during the current and prior sampling events. Only detected compounds are presented. A map is attached showing the location of the site monitoring wells. Attachment 1 presents GeoLogic's field observation logs and the chain-of-custody records. The laboratory report is not included but will be forwarded to the NYSDEC on request.

A review of the April 2008 analytical data indicates little to no change in the concentrations of VOCs in most of the monitoring wells at the site. The concentration of methyl tert-butyl ether (MTBE) in monitoring well MW-1S continues to show decrease from 41 ug/L in January 2008 to 4.4 ug/L in the April 2008 sampling event. This well is located directly southwest of a small gas station. Trace amounts of cis-1,2-dichloroethene and trichloroethene (TCE) (0.3 J ug/L of each) were noted in well MW-6S for the first time since 2005. The contaminant levels in MW-3M remain high but consistent with earlier sampling events, though TCE has shown regular decreases in concentration for the past three quarters. This well is the only sampled monitoring well that exceeded groundwater standards for any compounds during the April 2008 sampling event.

Please feel free to contact me at (518) 951-2353 if you have any questions or comments regarding this report.



A **tyco** International Ltd. Company

Sincerely,
Earth Tech Northeast

A handwritten signature in black ink that reads "Lori A. Hoose".

Lori A. Hoose
Project Geologist

Attachments

Cc: Carl Hoffman
 Stephen Choiniere
 Stefan Goreau

Table 1
Bedford Village Wells
Hunting Ridge Mall Site
Bedford Village, New York
Groundwater Analytical Results
Volatile Organic Compounds
Date Sampled: April 21 and 22, 2008

		Analyte	Methyl tert-butyl Ether	cis-1,2-dichloroethene	Tetrachloroethene	Methylene Chloride	Trichloroethene	Acetone	1,2-Dichlorobenzene
AWQS+GV*		10 (GV)	5	5	5	5	60 (GV)	3	
MW-8S	May-05	0.3J	0.6J	4	1.1	0.5J	U	U	
	Nov-05	0.2J	U	2.3	U	0.5JB	U	U	
	Nov-06	U	U	1.7	U	U	U	U	
	Mar-07	U	U	1.7	U	U	U	U	
	Jul-07	U	U	1.9	U	U	U	U	
	Oct-07	U	U	1.2	U	U	U	U	
	Jan-08	U	U	1.2	U	U	U	U	
	Apr-08	U	0.3 J	2.4	U	0.3 J	U	U	
MW-6M	May-05	0.3J	0.6J	2.9	1J	0.4J	U	U	
	Nov-05	U	U	2.7	0.5 JB	0.3J	U	U	
	Nov-06	U	U	2.2	U	U	U	U	
	Mar-07	U	U	1.9	0.3 JB	U	U	U	
	Jul-07	U	U	2.4	U	U	U	U	
	Oct-07	U	U	2.1	U	U	U	U	
	Jan-08	U	U	1.2	U	U	U	U	
	Apr-08	U	U	2.3	U	U	U	U	
MW-6D	May-05	5.5	U	U	U	U	U	U	
	Nov-05	6.3	U	U	U	U	U	U	
	Nov-06	1.2	U	U	U	U	U	U	
	Mar-07	1	U	U	U	U	U	U	
	Jul-07	U	U	U	U	U	U	U	
	Oct-07	1.1	U	U	U	U	2.6 J	U	
	Jan-08	0.8 J/0.8 J #	U	U	U	U	U	U	
	Apr-08	3.2	U	U	U	U	U	U	
MW-8M	Nov-05	1.1J	U	U	U	U	24J	U	
	Nov-06	1.2	U	U	U	U	U	2.1	
	Jul-07	2.2	U	U	0.4 J	U	U	2.4	
	Oct-08	1.9	U	U	U	U	U	2	
	Jan-08	1.2	U	U	U	U	U	1.9	
	Apr-08 ***	1.6	U	U	U	U	U	2.5	
MW-8B	Nov-05	1.1J	U	U	U	U	U	U	
	Nov-06	0.9 J	U	0.4 J	U	U	U	1.9	
	Mar-07	0.4 J	U	U	1.6 B	U	U	0.9	
	Jul-07	1.2	U	0.5 J	0.4 J	U	U	1.5	
	Oct-07	1.4	U	0.3 J	U	U	U	2.4	
	Jan-08	1.0 J	U	U	U	U	U	1.5	
	Apr-08 **	1.1/1.1 #	U	0.4 J/0.4 J#	U	U	U	1.9/1.9 #	
MW-10M	Nov-06	U	U	U	U	U	U	U	
	Mar-07	U	U	U	1.6 B	U	U	U	
	Jul-07	U	U	U	0.4 J	U	U	U	
	Oct-07	U	U	U	U	U	U	U	
	Jan-08	U	U	U	U	U	U	U	
	Apr-08	U	U	U	U	U	U	U	
MW-10B	Nov-06	U	U	U	U	U	U	U	
	Mar-07	U	U	U	U	U	U	U	
	Jul-07	U	U	U	U	U	61	U	
	Oct-07	U	U	U	U	U	27	U	
	Jan-08	U	U	U	U	U	13	U	
	Apr-08	U	U	U	U	U	38	U	
MW-U5	Nov-05	U	U	U	U	U	U	1.4 J	
MW-U6	Nov-05	U	U	U	U	U	U	U	
	Nov-06	U	U	U	U	U	U	U	
	Mar-07	U	U	U	U	U	U	U	
	Jul-07	U	U	U	U	U	U	U	
	Oct-07	U	U	U	U	U	U	U	
	Jan-08	U	U	U	U	U	U	U	
	Apr-08	U	U	U	U	U	U	U	

All data presented in micrograms per Liter (ug/L).

All Volatile Organic Analyses were conducted by US EPA Method 624 or 524.2.

- duplicate

* New York State Ambient Water Quality Standards (TOGs 1.1.1) GV - guidance value.

** Additional compound detected in this sample was 0.5 J/0.4 J* chloroform.

*** Additional compound detected in the sample was 0.3 J ug/L chloroform.

U - Compound not detected at or above the instrument detection limit (IDL).

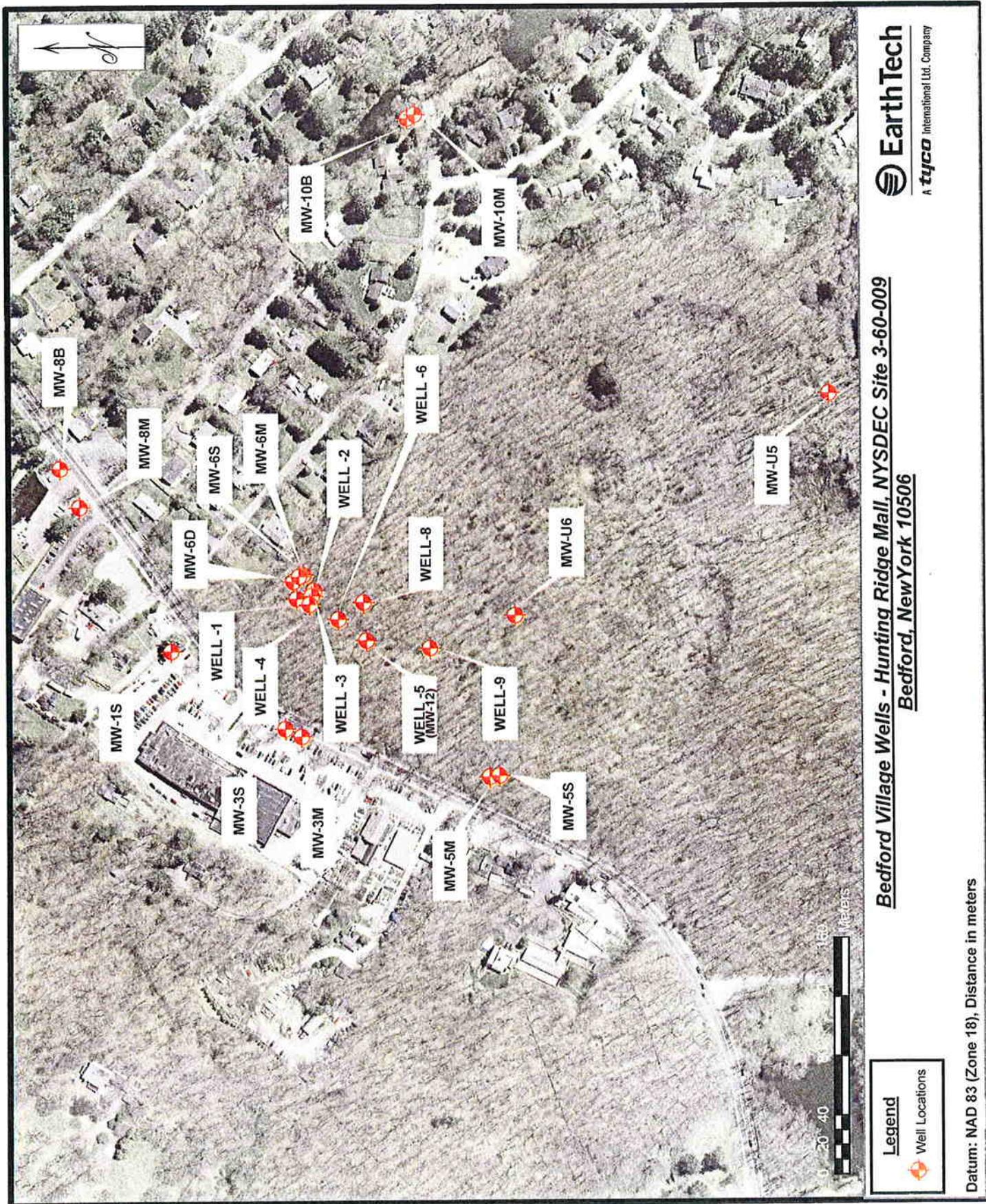
J - Estimated concentration above the IDL but less than the contract required detection limits (CRDL).

B - Analyte found in associated Method Blank

D - Results from a subsequent dilution of the original sample due to original sample results being outside the linear range.

NA indicates sample was not analyzed for indicated compound.

BOLD font in shaded cell indicates exceedances of AWQS+GV.



ATTACHMENT 1

FIELD OBSERVATION LOG - GROUNDWATER SAMPLING RECORD

(3 of 3)

SITE: Bedford Huntington DATE: 4-21-08
 NAME: Ridge Mall 4-22-08 SAMPLER(S): Josh Oliver

SITE: 360009 ADDRESS: Bedford, NY
 NUMBER:

Weather: Sunny, 70° Time of Arrival: 9/21/08 Time of Departure: 4/22/08
8:30 Am 11:40 AM

	MW-1S	MW-3M	MW-3S			
Well Depth (ft) MEASURED	20' 20'	25' 25'	18.6' 18.6'			
Well Diameter	2"	2"	2"			
Well Construction PVC Stain Steel	PVC	PVC	PVC			
Well Condition Good, Fair, Poor	Poor	Poor	Poor			
Depth to Water	10.72'	14.82'	13.46'			
Volume to Purge	4.5 gal	~29 gal	~2.5 gal			
Volume Purged	4.5 gal	30 gal	2.5 gal			
Sampling Depth to Water	10.72'	15.45'	13.46'			
Color	clear	clear	clear			
Odor	none	none	none			
Temperature	12.1 °C	13.8 °C	11.4 °C			
Conductivity	1085 µS/cm	462 µS/cm	221 µS/cm			
pH	2.1	7.9	7.0			
Turbidity	.40	.13	.42			
Date & Time	4/22/08 9:05	4/22/08 8:55	4/22/08 8:15			
Purging Method: Submersible or Peristaltic Pump	Per Pump	Sub	Sub			
GPS Comments	well is covered & can't use bailey/sub	"hot" VUA 624 well				
Photo's Taken	3	3				

of Bottles

FIELD OBSERVATION LOG - GROUNDWATER SAMPLING RECORD

(2 of 1)

SITE: Bedford Huntington DATE: 4-21-08
 NAME: Ridge Mall DATE: 4-22-08 SAMPLER(S): Josh Oliver
 SITE: 360009 ADDRESS: Bedford, NY
 NUMBER:
 Weather: Sunny, 70° Time of Arrival: 4/21/08 8:30 AM Time of Departure: 4/22/08 11:40 AM

	MW-5M	MW-5S	MW-U6	WELL-9	WELL-5	MW-6M
Well Depth (ft) MEASURED	70	42	40	40	62	60.5
Well Diameter	2"	2"	2"	2"	2"	2"
Well Construction PVC Stain Steel	PVC	PVC	PVC	PVC	PVC	PVC
Well Condition Good, Fair, Poor	Fair	Fair	Fair	Poor	Poor	Fair
Depth to Water	27.6'	26.81'	25.9'	30.1'	30.79'	30.49'
Volume to Purge	~21 gal	~8 gal	~7 gal	~5.5 gal	~15 gal	~14.5 gal
Volume Purged	21 gal	9 gal	8 gal	5.5 gal	15 gal	15 gal
Sampling Depth to Water	27.8'	26.95'	25.9'	30.1'	30.8'	30.5'
Color	clear	clear	clear	clear	clear	clear
Odor	none	none	none	none	none	none
Temperature	11.6 °C	12.3 °C	11.9 °C	12.7 °C	12.5 °C	12.0 °C
Conductivity	570 $\mu\text{S}/\text{cm}$	390 $\mu\text{S}/\text{cm}$	235 $\mu\text{S}/\text{cm}$	480 $\mu\text{S}/\text{cm}$	534 $\mu\text{S}/\text{cm}$	816 $\mu\text{S}/\text{cm}$
pH	7.5	7.5	7.4	7.6	7.8	7.5
Turbidity	.67	.34	.55	.39	.47	.11
Date & Time	4/21/08 1:20	4/21/08 1:00	4/21/08 11:35	4/21/08 10:40	4/21/08 10:45	4/21/08 9:45
Purging Method: Submersible or Peristaltic Pump	Sub	Sub	Sub	Sub	Sub	Sub
GPS Comments						
Photo's Taken	3	3	3	3	3	3

~~10 bottles~~

FIELD OBSERVATION LOG - GROUNDWATER SAMPLING RECORD

(1 of 1)

SITE: Bedford Huntington DATE: 4/21/08 - SAMPLER(S): Josh Oliver
 NAME: Ridge Mall 4/21/08
 SITE: 360009 ADDRESS: Bedford, NY
 NUMBER: 4/21/08 4/22/08
 Weather: sunny, 70° Time of Arrival: 8:30 Am Time of Departure: 11:40 Am

	MW-6S	MW-6D	MW-8M	MW-8B	MW-10M	MW-10B
Well Depth (ft) MEASURED	44.8	>131	38	68	>50	>50
Well Diameter	2"	4"	2"	4"	2"	4"
Well Construction	PVC	PVC	PVC	PVC	PVC	PVC
PVC Stain Steel						
Well Condition Good, Fair, Poor	Fair	Fair	Poor	Poor	Fair	Fair
Depth to Water	31.1'	29.77'	8.51'	10.02'	1.38'	.99'
Volume to Purge	~7 gal	~195 gal	~9.5 gal	~28 gal	~24 gal	~97 gal
Volume Purged	9 gal	~85 gal	10 gal	28 gal	25 gal	~45 gal
Sampling Depth to Water	31.1'	32.34'	17.59'	33.1'	2.1'	43.98'
Color	clear	clear	clear	clear	clear	clear
Odor	none	none	none	none	none	none
Temperature	12.0 °C	13.5 °C	14.4 °C	15.1 °C	12.5 °C	13.5 °C
Conductivity	6.99 $\mu\text{S}/\text{cm}$	372 $\mu\text{S}/\text{cm}$	1043 $\mu\text{S}/\text{cm}$	1367 $\mu\text{S}/\text{cm}$	339 $\mu\text{S}/\text{cm}$	304 $\mu\text{S}/\text{cm}$
pH	7.8	8.2	7.4	7.4	8.0	10.5
Turbidity	.05	.52	9.25	.40	.99	2.25
Date & Time	4/21/08 9:30	4/22/08 10:20	4/22/08 11:00	4/22/08 11:25	4/21/08 3:05	4/22/08 10:00
Purging Method: Submersible or Peristaltic Pump	sub	sub	sub	sub	sub	sub
GDS Comments		~50 gal 4/21/08 ~35 gal 4/22/08 Dry	MS/MSD well	MW-8Q is Blind Duplicate		~Purge 35 gal ~Purge 10 gal Ran Dry
Photo's Taken	3	3	3 : 2 each for MS/MSD	3 : 4 for blind	3	3

of Bottles

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
 (908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
 QUOTE NO.

COC Number

070977

CLIENT INFORMATION		PROJECT INFORMATION		CLIENT BILLING INFORMATION	
COMPANY: <u>Earthtech</u>	REPORT TO BE SENT TO:	PROJECT NAME: <u>Bethel-Huntington Ridge Mall</u>	BILL TO:	PO#:	
ADDRESS: <u>40 British American Blvd.</u>		PROJECT NO.: <u>360009</u>	LOCATION: <u>Bethel, NY</u>	ADDRESS:	
CITY: <u>Latham</u>	STATE: <u>NY</u>	PROJECT MANAGER:		CITY:	STATE: ZIP:
ATTENTION: <u>Lori Hoose</u>	ZIP:	e-mail:		ATTENTION:	PHONE:
PHONE: <u>(518) 295-5691</u>	FAX:	PHONE:	FAX:		
DATA TURNAROUND INFORMATION					
FAX:	_____ DAYS	<input type="checkbox"/> RESULTS ONLY	<input type="checkbox"/> USEPA CLP	COMMENTS ← Specify Preservatives A - HCl B - HNO ₃ C - H ₂ SO ₄ D - NaOH E - ICE F - Other	
HARD COPY:	_____ DAYS	<input type="checkbox"/> RESULTS + QC	<input type="checkbox"/> New York State ASP "B"		
EDD:	_____ DAYS	<input type="checkbox"/> NEW JERSEY REDUCED	<input type="checkbox"/> New York State ASP "A"		
PREAPPROVED TAT: <input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> NEW JERSEY CLP	<input type="checkbox"/> Other _____		
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS					
DATA DELIVERABLE INFORMATION					
PROJECT SAMPLE IDENTIFICATION		SAMPLE COLLECTION		PRESERVATIVES	
CHEMTECH SAMPLE ID		SAMPLE MATRIX	TYPE	DATE	TIME
1.	MW-65	W	A	4/21/08	9:30 AM
2.	MW-6 D		A	4/21/08	10:20 AM
3.	MW-8 M		A	4/21/08	11:00 AM
4.	MW-8M MS		A	4/21/08	11:00 AM
5.	MW-8M MSD		A	4/21/08	11:00 AM
6.	MW-8 B		A	4/21/08	11:25 AM
7.	MW-8 Q (MW-88 Blnd Dsp)		A	4/21/08	11:25 AM
8.	MW-10 M		A	4/21/08	3:05 PM
9.	MW-10 B		A	4/21/08	10:00 AM
10.	MW-5 M		A	4/21/08	1:20 PM
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY					
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt: MeOH extraction requires an additional 4 oz jar for percent solid.		
1.	4/23/08 10:50	1.	<input type="checkbox"/> Compliant	<input type="checkbox"/> Non Compliant	Cooler Temp. _____
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	Comments: _____		
2.		2.			
3.	DATE/TIME:	RECEIVED FOR LAB BY:	SHIPPED VIA:	CLIENT: <input type="checkbox"/> HAND DELIVERED <input type="checkbox"/> OVERNIGHT	SHIPMENT COMPLETE: <input type="checkbox"/> YES <input type="checkbox"/> NO
		3.	Page _____ of _____	CHEMTECH: <input type="checkbox"/> PICKED UP <input type="checkbox"/> OVERNIGHT	
WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY					

CHAIN OF CUSTODY RECORD

CHEMTECH PROJECT NO.
 QUOTE NO.

COC Number **070976**

CLIENT INFORMATION		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION	
COMPANY: <i>Earthtech</i>	REPORT TO BE SENT TO:	PROJECT NAME: <i>Belford- Huntington River Mtn</i>	BILL TO:	PO#:	
ADDRESS: <i>40 British American Blvd.</i>		PROJECT NO.: <i>360009</i>	LOCATION: <i>Belford, NJ</i>	ADDRESS:	
CITY: <i>Belford</i>	STATE: <i>NJ</i> ZIP:	PROJECT MANAGER:		CITY:	STATE: ZIP:
ATTENTION: <i>Lor, Hoose</i>	e-mail:	PHONE:	FAX:	ATTENTION:	PHONE:
PHONE: <i>(518) 275-5691</i>	FAX:	ANALYSIS			
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION			
DAY:	DAY*	RESULTS ONLY	USEPA CLP	COMMENTS	
HARD COPY:	DAY*	RESULTS + QC	New York State ASP 'B'	Specify Preservatives A - HCl B - HNO ₃ C - H ₂ SO ₄ D - NaOH E - ICE F - Other	
EDD:	DAY*	New Jersey REDUCED	New York State ASP 'A'		
PREAPPROVED TAT: <input type="checkbox"/> YES	<input type="checkbox"/> NO	New Jersey CLP	Other _____		
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS					
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	PRESERVATIVES			
		SAMPLE MATRIX	SAMPLE TYPE	SAMPLE COLLECTION DATE	TIME
1. MW-55	W	X	4/21/08 1:00 PM	3	X
2. MW-66		X	4/21/08 1:35 AM	3	X
3. MW-9		X	4/21/08 10:40 AM	3	X
4. MW-5		X	4/21/08 10:45 AM	3	X
5. MW-6M		X	4/21/08 9:45 AM	3	X
6. MW-15		X	4/21/08 9:05 AM	3	X
7. MW-3M		X	4/21/08 8:55 AM	3	X
8. MW-3S		X	4/21/08 8:15 AM	3	X
9. Top Blanks					
10.					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY					
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt: MeOH extraction requires an additional 4 oz jar for percent solid.		
1. <i>[Signature]</i>	4/25/08 10:30	1.	<input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant Comments:		
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	Cooler Temp. _____ Ice in Cooler?: _____		
2. <i>[Signature]</i>		2.			
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:	Shipment Complete: <input type="checkbox"/> YES <input type="checkbox"/> NO		
3. <i>[Signature]</i>		3.			
SHIPPED VIA: CLIENT: <input type="checkbox"/> HAND DELIVERED <input type="checkbox"/> OVERNIGHT		CHEMTECH: <input type="checkbox"/> PICKED UP <input type="checkbox"/> OVERNIGHT		PINK - SAMPLER COPY	
Page _____ of _____		Page _____ of _____		WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY	