

**Groundwater Sampling Report  
Winter 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**

March 28, 2008

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

**Re: Bedford Village Wells – Hunting Ridge Mall - Site #3-60-009  
Quarterly Sampling Report – Winter 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 January 14 – 16, 2008. Fifteen wells were sampled during the event (per NYSDEC request, a greater number of wells were sampled in prior 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 January 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, which had increased 14-fold in comparison to all past results in the October 2007 sampling event, decreased from 110 ug/L to 41 ug/L in January 2008. This well is located directly southwest of a small gas station. The contaminant levels in MW-3M remain high but consistent with earlier sampling events. This well and MW-1S are the only sampled monitoring wells that exceeded groundwater standards for any compounds during the January 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 blue 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: January 14 - 16, 2008**

AWQS+GV		Analyte	Methyl tert-butyl Ether	cis-1,2-dichloroethane	Tetrachloroethene	Methylene Chloride	Trichloroethene	Acetone	1,2-Dichlorobenzene
		10 (GV)	5	5	5	5	60 (GV)	3	
WELL - 1	May-05	U	U	2.8J	U	U	U	U	
	Nov-05	U	U	1.9J	U	U	U	U	
WELL - 2	May-05	U	3.2J	4.7J	U	U	U	U	
	Nov-05	U	U	3.6J	U	U	U	U	
WELL - 3	May-05	U	2.3J	4.2J	U	U	U	U	
	Nov-05	U	U	3.0J	U	U	U	U	
WELL - 4	May-05	U	U	4.3J	U	U	U	U	
	Nov-05	U	U	2.2J	U	U	U	U	
WELL - 5	May-05	U	U	2.2J	U	U	U	U	
	Nov-05	U	U	1.8J	U	U	U	U	
	Nov-06	U	U	2.4	U	U	U	U	
	Mar-07	U	U	1.8	U	U	U	U	
	Jul-07	U	U	1.8	U	U	U	U	
	Oct-07	U	U	2.3	U	U	U	U	
WELL - 6	May-05	2.1J	U	1.6J	U	U	U	U	
	Nov-05	U	3.4J	6.2	U	1.8J	U	U	
WELL - 8	May-05	U	U	U	U	U	U	U	
	Nov-05	U	U	0.84J	U	U	U	U	
WELL - 9	May-05	U	U	U	U	U	U	U	
	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	0.3 J	U	U	U	
	Oct-07	U	U	U	U	U	U	U	
MW-1S	Jan-08	U	U	U	U	U	U	U	
	May-05	4.1	U	U	1.2	U	U	U	
	Nov-05	7.8	U	U	0.6JB	U	U	U	
	Nov-06	3.1	U	U	U	U	U	U	
	Mar-07	2.4	U	U	0.3 JB	U	U	U	
	Jul-07	2.7/2.7 #	U/U #	U/U #	U/U #	U/U #	U/U #	U/U #	
	Oct-07	110 D	U	U	U	U	U	U	
Jan-08	41 D	U	U	U	U	U	U		
MW - 3S	May-05	U	U	0.98J	U	U	U	U	
	Nov-05	U	U	0.79J	U	U	U	U	
	Nov-06	U	U	2.6	U	U	U	U	
	Mar-07	U	U	1.2	U	U	U	U	
	Jul-07	U	U	1.6	U	U	U	U	
	Oct-07	U	U	1.9	U	U	U	U	
MW-3M	Jan-08	U	U	2.5	U	U	3.0 J	U	
	May-05	U	8.5	45	U	U	U	U	
	Nov-05	U	34	22	U	5.4	U	U	
	Nov-07	0.3 J	59 D	420 D	U	32	U	U	
	Mar-07	U	53 D	240 D	U	27	U	U	
	Jul-07	U	75 D	360 D	U	34 D	U	U	
	Oct-07	U	81	280 D	U	38	U	U	
Jan-08 **	U	67	280 D	U	28	U	U		
MW-5M	Nov-05	U	U	U	U	U	U	U	
	Nov-06	U	U	U	U	U	U	U	
	Mar-07	U	U	U	0.3 JB	U	U	U	
	Jul-07	U	U	U	U	U	U	U	
	Oct-07	U	U	U	U	U	U	U	
MW-5S	Jan-08	U	U	U	U	U	U	U	
	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	
MW-5S	Oct-07	U	U	U	U	U	U	U	
	Jan-08	U	U	U	U	U	U	U	

**Table 1**  
**Bedford Village Wells**  
**Hunting Ridge Mall Site**  
**Bedford Village, New York**  
**Groundwater Analytical Results**  
**Volatile Organic Compounds**  
**Date Sampled: January 14 - 16, 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-6S	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	
MW-6M	Jan-08	U	U	1.2	U	U	U	U	
	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	
MW-6D	Oct-07	U	U	2.1	U	U	U	U	
	Jan-08	U	U	1.2	U	U	U	U	
	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	
MW-8M	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	
	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	
MW-8B	Oct-08	1.9	U	U	U	U	U	2	
	Jan-08 ***	1.2	U	U	U	U	U	1.9	
	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	
MW-10M	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	
	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	
MW-10B	Oct-07	U	U	U	U	U	U	U	
	Jan-08	U	U	U	U	U	13	U	
	Nov-06	U	U	U	U	U	U	U	
	Mar-07	U	U	U	U	U	U	U	
MW-U5	Jul-07	U	U	U	U	U	<b>61</b>	U	
	Oct-07	U	U	U	U	U	27	U	
	Jan-08	U	U	U	U	U	U	U	
	Nov-05	U	U	U	U	U	U	1.4 J	
	Nov-06	U	U	U	U	U	U	U	
MW-U6	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	
	Nov-05	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 2.0 J vinyl chloride.

\*\*\* Additional compound detected in the sample was 0.5 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.





**Legend**  
 Well Locations

Datum: NAD 83 (Zone 18), Distance in meters

**Bedford Village Wells - Hunting Ridge Mall, NYSDEC Site 3-60-009**  
**Bedford, New York 10506**

## **ATTACHMENT 1**



**FIELD OBSERVATION LOG - GROUNDWATER SAMPLING RECORD**

(1 of 3)

SITE NAME: Bedford Huntingt Ridge Mall  
 DATE: 1/14/08 - 1/16/08  
 SAMPLER(S): J. Oliver & J. Winks

SITE NUMBER: 360009  
 ADDRESS: Bedford, NY

Weather: Snowy 32°  
 Time of Arrival: 1:30 pm 1/14/08  
 Time of Departure: 10:45 am 1/16/08

	MW-6S	MW-6D	MW-8M	MW-8B	MW-10M	MW-10B
Well Depth MEASURED	44.8'	>131'	38'	68'	>50'	>50'
Well Diameter	2"	4"	2"	4"	2"	2"
Well Construction PVC Stain Steel	Pvc	Pvc	Pvc	Pvc	Pvc	Pvc
Well Condition Good, Fair, Poor	Fair	Fair	Poor	Poor	Fair	Fair
Depth to Water	33.90'	32.57'	11.14'	12.2'	3.77'	3.57'
Volume to Purge	5.3 gal	~11 gal	13 gal	27 gal	22 gal	22 gal
Volume Purged	6 gal	~50 gal	15 gal	30 gal	23 gal	23 gal
Sampling Depth to Water	33.90'	47.66'	14.94'	31.57'	3.77'	39.38'
Color	yellow/brown	clear	clear	clear	clear	clear
Odor	none	none	none	none	none	none
Temperature	9.8°C	9.7°C	13.4°C	13.5°C	10.8°C	10.2°C
Conductivity	1016 $\mu$ S	—	—	—	—	—
pH	7.4	6.7	7.4	7.8	8.0	11.1
Turbidity	—	—	—	—	—	—
Date & Time	2:42 1/14/08	10:45 1/15/08	3:10 1/15/08	2:35 1/15/08	10:45 1/15/08	1:15 1/15/08
Purging Method: Submersible or Peristaltic Pump	Bailor	sub pump	sub pump	sub pump	sub pump	sub pump
Comments		↓ 62 Blind 54				
# of bottles sampled	3	3	3	3	3	3

↓ only ~50 gals well went dry



FIELD OBSERVATION LOG - GROUNDWATER SAMPLING RECORD

SITE NAME: Bedford Hunting Ridge Mall  
 DATE: 1/14/08 - SAMPLER(S): J. Oliver & J. Winks  
 SITE NUMBER: 360009 ADDRESS: Bedford, NY  
 Weather: Snowy 30° Time of Arrival: 1:30 PM 1/14/08 Time of Departure: 10:45 AM 1/16/08

	MW-5M	MW-5S	MW-U6	WELL-9	WELL-5	MW-6M
Well Depth 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	Fair	Fair
Depth to Water	30.84'	30.13'	28.65'	32.85'	33.73'	33.31'
Volume to Purge	18.8 gal	5.7 gal	5.4 gal	~4 gal	13.5 gal	13 gal
Volume Purged	20 gal	6 gal	6 gal	5 gal	14 gal	13 gal
Sampling Depth to Water	30.82'	30.13'	28.65'	32.82'	33.63'	33.30'
Color	clear	brown	clear	clear	clear	clear
Odor	none	none	none	none	none	none
Temperature	9.5°C	9.7°C	10.2°C	10.8°C	10.8°C	8.2°C
Conductivity	520 µS	—	959 µS	—	—	819 µS
pH	6.1	7.0	6.9	6.7	7.9	7.4
Turbidity	—	—	—	—	—	—
Date & Time	5:04 1/14/08	5:20 1/14/08	4:11 1/14/08	11:13 1/15/08	9:15 1/15/08	3:13 1/14/08
Purging Method: Submersible or Peristaltic Pump	sub pump	bailer	sub pump	sub pump	sub pump	Bailer
Comments	# of bottles sampled				MS/MSD also bottles each	
	3	3	3	3	3	3

FIELD OBSERVATION LOG - GROUNDWATER SAMPLING RECORD

SITE NAME: Bedford Huntington Ridge Mall  
 DATE: 1/14/08 - 1/16/08  
 SAMPLER(S): J. Oliver & J. Winks  
 SITE NUMBER: 360009  
 ADDRESS: Bedford, NY  
 Weather: Snowy, 32°  
 Time of Arrival: 1:30 pm. 1/14/08  
 Time of Departure: 10:45 AM 1/16/08

	MW-1S	MW-3M	MW-3S			
Well Depth	20'	75'	18.6'			
MEASURED						
Well Diameter	2"	2"	2"			
Well Construction PVC Stain Steel	PVC	PVC	PVC			
Well Condition Good, Fair, Poor	Very Poor	poor	Very Poor			
Depth to Water	13.61'	17.74'	16.44'			
Volume to Purge	~3 gal	28 gal	~1 gal			
Volume Purged	3 gal	30 gal	3 gal			
Sampling Depth to Water	13.63'	19.00'	16.44'			
Color	clear	clear	discolored			
Odor	none	none	none			
Temperature	12.4°C	12.7°C	11.7°C			
Conductivity	—	—	—			
pH	7.2	8.1	6.9			
Turbidity	—	—	—			
Date & Time	10:35 1/16/08	8:46 1/16/08	9:10 1/16/08			
Purging Method: Submersible or Peristaltic Pump	Per. pump	sub pump	baiter			
Comments		624 Analysis "hot well"				
	3	3	3			

No turbidity readings.  
 Only a few conductivity readings because meter was dropped into bucket of water & "shorted out."



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

CHEMTECH PROJECT NO.  
 QUOTE NO.  
 COC Number 069318

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION	
COMPANY: Earth Tech	REPORT TO BE SENT TO:	PROJECT NAME: Bedford - Huntington Ridge	LOCATION: Bedford, NJ	BILL TO:	PO#:
ADDRESS: 40 British American Blvd.	STATE: NY	PROJECT NO: 360009	PROJECT MANAGER:	ADDRESS:	
CITY: Latham	ZIP:		e-mail:	CITY:	STATE: ZIP:
ATTENTION: Lon House	PHONE: 518 789-5691		PHONE:	ATTENTION:	PHONE:
	FAX:		FAX:		
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS	
FAX: _____	DAYS: _____	<input type="checkbox"/> RESULTS ONLY	<input type="checkbox"/> USEPA CLP	/ /	
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		<input type="checkbox"/> EDD FORMAT		/ /	
PROJECT IDENTIFICATION		SAMPLE COLLECTION		PRESERVATIVES	
CHEMTECH SAMPLE ID	SAMPLE MATRIX	SAMPLE TYPE	DATE	TIME	COMMENTS
1. MW-15	W	X	1/16/08	AM	A
2. MW-3M			1/16/08	8:40 PM	2
3. MW-3S			1/16/08	9:10 PM	3
4. MW-6S			1/16/08	2:59 PM	4
5. MW-6D			1/15/08	10:45 AM	5
6. MW-8M			1/15/08	3:10 PM	6
7. MW-8B			1/15/08	3:35 PM	7
8. MW-10M			1/15/08	10:45 PM	8
9. MW-10B			1/15/08	10:55 PM	9
10. MW-5M			1/16/08	5:07 PM	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY					
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	DATE/TIME:	CONDITIONS OF BOTTLES OR COOLERS AT RECEIPT:	COOLER TEMP.:
1. Lon House	1/16/08			<input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant	
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:	MeOH extraction requires an additional 4 oz jar for percent solid.	Ice in Cooler?:
2.				Comments:	
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:	DATE/TIME:		
3.					
SHIPPED VIA: CLIENT: <input type="checkbox"/> HAND DELIVERED <input type="checkbox"/> OVERNIGHT		Page 1 of 2		Shipment Complete: <input type="checkbox"/> YES <input type="checkbox"/> NO	





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

CHEMTECH PROJECT NO.  
 QUOTE NO.  
 COC Number 069316

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Earthtech  
 ADDRESS: 40 British American Blvd  
 CITY: Latham STATE NY ZIP:  
 ATTENTION: Lori Hoese  
 PHONE: (518) 275-5671 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Bedford - Huntington Ridge Mill  
 PROJECT NO.: 360009 LOCATION: Bedford  
 PROJECT MANAGER:  
 e-mail:  
 PHONE: - FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:  
 ADDRESS:  
 CITY: STATE: ZIP:  
 ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: \_\_\_\_\_ DAYS:  
 HARD COPY: \_\_\_\_\_ DAYS:  
 EDD: \_\_\_\_\_ DAYS:  
 PRE-APPROVED TAT:  YES  NO  
 STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

RESULTS ONLY  USEPA CLP  
 RESULTS + OC  New York State ASP "B"  
 New Jersey REDUCED  New York State ASP "A"  
 New Jersey CLP  Other  
 EDD FORMAT

CHEMTECH SAMPLE ID PROJECT IDENTIFICATION

1.	MW-55
2.	MW-U6
3.	WELL-9
4.	WELL-5
5.	WELL-5 MS
6.	WELL-5 MSD
7.	MW-6M
8.	MW-6Z (MW-6D blind)
9.	Trip Blank
10.	

PRESERVATIVES

SAMPLE MATRIX	SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS								
	DATE	TIME		1	2	3	4	5	6	7	8	9									
W	1/14/08	5:20 PM	3	A																	
	1/14/08	9:11 PM	3	X																	
	1/15/08	11:43 AM	3	X																	
	1/15/08	9:45 AM	3	X																	
	1/15/08	1:15 PM	3	X																	
	1/15/08	4:15 AM	2	X																	
	1/14/08	5:15 PM	3	X																	
	1/15/08	10:45 AM	4	X																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [Signature]	1/16/08	1. [Signature]
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt:  Compliant  Non Compliant  
 MeOH extraction requires an additional 4 oz. jar for percent solid.  
 Comments:

SHIPPED VIA: CLIENT:  HAND DELIVERED  OVERNIGHT  
 CHEMTECH:  PICKED UP  OVERNIGHT  
 Page 2 of 2  
 Shipment Complete:  YES  NO