

MASSACHUSETTS DEP/DIVISION OF WATER SUPPLY

T

TRIHALOMETHANE REPORT

I PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule to help complete this section.

1. PWS ID#: 4122000 2. City/Town: Hanover
 3. PWS Name: Hanover Water Dept. 4. PWS Class (circle one) COM NTNC
 5. Source ID# 6. Sample Location 7. Date Collected 8. Collected by
 A: 4122000-10380 640 King Street 01/04/07 T. Flynn
 B: 4122000-10383 Fire Station # 3 01/04/07 T. Flynn
 C: 4122000-10385 70 Ponderosa 01/04/07 T. Flynn
 D: _____
 9. Routine / Special (explain) 10. Notes:
 A: X or _____
 B: X or _____
 C: X or _____
 D: _____ or _____

II LABORATORY ANALYTICAL INFORMATION:

Lab Name: ANALYTICAL BALANCE CORP. Lab Cert.#: M-MA022
 Subcontracted? Yes [] No [x] Sub. Lab Name: _____ Sub. Lab Cert. # _____
 Notes: _____

	MCL ($\mu\text{g/L}$)	Detection Limit ($\mu\text{g/L}$)	Results ($\mu\text{g/L}$)			
			A	B	C	D
Lab Sample ID			90806-01	90806-02	90806-03	
Date Analyzed			01/10/07	01/10/07	01/10/07	
Analytical Method			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
Bromoform	-----	0.5	6.3	ND	0.7	
Chloroform	-----	0.5	11.8	39.1	40.7	
Bromodichloromethane	-----	0.5	6.6	10.5	12.2	
Dibromochloromethane	-----	0.5	6.6	2.4	3.3	
Total Trihalomethanes	80.0	-----	31.3	52.0	56.9	

Surrogate Recoveries (as required by EPA method 524.2):

Compound	% Recovered	QC Limits (%)
1,2-dichlorobenzene d_4	98,98,97	70-130
4-bromofluorobenzene	97,96,95	70-130

The QA/QC required matrix spike sample information in on file at our office.

Laboratory Director Signature and Date: [Signature] 22 Jan 07

III. DBPR Compliance Reporting: [This section mandatory for Public Water Systems regulated under 310CMR 22.07E.]

TTHM Monitoring Frequency: (choose one) QUARTER ☒ YEAR ☐ 3 YEARS ☐Total number of TTHM Samples collected during the monitoring period: 3Average result for ALL locations sampled during the monitoring period ($\mu\text{g/L}$): 46.73Running Annual Average = Average of this quarter and three prior consecutive quarterly averages ($\mu\text{g/L}$): 40.24

I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

Primary Certified Operator Signature and Date: [Signature] 1/26/07

Attention: Mail TWO copies of this report to your DEP Regional Office within 30 days of receipt of results and no later than 10 days after the end of the reporting period.

For DEP/DWS use only: Please initial and date as completed.

Accepted:	Disapproved:	Data entered into WQTS:
Comments:		

**MASSACHUSETTS DEP/DIVISION OF WATER SUPPLY
TRIHALOMETHANE REPORT**

T

I PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule to help complete this section.

1. PWS ID#: 4122000 2. City/Town: Hanover
 3. PWS Name: Hanover Water Dept. 4. PWS Class (circle one) COM NTNC
 5. Source ID# 6. Sample Location 7. Date Collected 8. Collected by
 A: 4122000-10380 640 King Street 04/05/07 T. Flynn
 B: 4122000-10383 Fire Station # 3 04/05/07 T. Flynn
 C: 4122000-10385 70 Ponderosa 04/05/07 T. Flynn
 D: _____
 9. Routine / Special (explain) 10. Notes:
 A: X or _____
 B: X or _____
 C: X or _____
 D: _____ or _____

II LABORATORY ANALYTICAL INFORMATION:

Lab Name: ANALYTICAL BALANCE CORP. Lab Cert.#: M-MA022
 Subcontracted? Yes [] No [x] Sub. Lab Name: _____ Sub. Lab Cert. # _____
 Notes: _____

	MCL (µg/L)	Detection Limit (µg/L)	Results (µg/L)			
			A	B	C	D
Lab Sample ID			92897-01	92897-02	92897-03	
Date Analyzed			04/06/07	04/06/07	04/06/07	
Analytical Method			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
Bromoform	----	0.5	8.5	3.2	1.2	
Chloroform	----	0.5	8.6	32.3	36.4	
Bromodichloromethane	----	0.5	7.1	14.8	15.8	
Dibromochloromethane	----	0.5	9.4	7.6	6.4	
Total Trihalomethanes	80.0	----	33.6	57.9	59.8	

Surrogate Recoveries (as required by EPA method 524.2):

Compound	% Recovered	QC Limits (%)
1,2-dichlorobenzene d ₄	106,103,104	70-130
4-bromofluorobenzene	105,107,105	70-130

The QA/QC required matrix spike sample information in on file at our office.

Laboratory Director Signature and Date: [Signature] 18 Apr. 07

III. DBPR Compliance Reporting: [This section mandatory for Public Water Systems regulated under 310CMR 22.07E.]

TTHM Monitoring Frequency: (choose one) QUARTER X YEAR 3 YEARS

Total number of TTHM Samples collected during the monitoring period: 3

Average result for ALL locations sampled during the monitoring period (µg/L): 50.43

Running Annual Average = Average of this quarter and three prior consecutive quarterly averages (µg/L): 47.94

I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

Primary Certified Operator Signature and Date: [Signature] 6/8/07

Attention: Mail TWO copies of this report to your **DEP Regional Office** within 30 days of receipt of results and no later than 10 days after the end of the reporting period.

For DEP/DWS use only: Please initial and date as completed.

Accepted:	Disapproved:	Data entered into WQTS:
Comments:		

Total Trihalomethanes Report

PWS Information: Please refer to your DEP Water Sampling Schedule (WQSS) to help complete this form.

PWS ID #: 4122000

City/Town: Hanover

PWS Name: Hanover Water Dept.

PWS Class: COM x NTNC TNC

(LOC) ID	DEP Location Name	Sample Acidified?	Date Collected	Collected by
A	10380 640 King Street	<input checked="" type="checkbox"/> Yes	07/10/07	T. Ferry
B	10383 Fire Station #3	<input checked="" type="checkbox"/> Yes	07/10/07	T. Ferry
C	10385 70 Ponderosa Dr.	<input checked="" type="checkbox"/> Yes	07/10/07	T. Ferry
D		<input type="checkbox"/> Yes		

Routine or Special Sample	Original or Resubmitted Report	If resubmitted report, list below:	
		Reason for resubmission	Collection date of original sample
A <input checked="" type="checkbox"/> RS <input type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
B <input checked="" type="checkbox"/> RS <input type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
C <input checked="" type="checkbox"/> RS <input type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
D <input checked="" type="checkbox"/> RS <input type="checkbox"/> SS	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	

Sample notes: (Such as manifold/multiple sample, list any sources that were on line during collection):

A
B
C
D

II. Analytical Laboratory Information:

Primary Lab MA Cert. # M-MA022

Primary Lab Name: Analytical Balance Corp.

Subcontracted? ☐ Y ☒ N

Analysis Lab MA Cert. # M-MA022

Analysis Lab Name: Analytical Balance Corp.

Contaminant	MCL (µg/L)	MDL (µg/L)	Results (µg/L)			
			A	B	C	D
Total THMs	80	----	25.4	33.8	44.9	
Bromoform		0.5	3.9	ND	ND	
Chloroform		0.5	9.5	24.1	35.4	
Bromodichloromethane		0.5	6.2	7.4	8.0	
Dibromochloromethane		0.5	5.8	2.3	1.5	
Lab method			EPA 524.2	EPA 524.2	EPA 524.2	
Date extracted (§51.1 only)			----	----	----	
Date analyzed			07/18/07	07/18/07	07/18/07	
Lab Sample ID			95755-01	95755-02	95755-03	
Surrogate # 1	1,2-dichlorobenzene d ₄		93%	93%	93%	
Surrogate # 2	4-bromofluorobenzene		97%	97%	97%	

Report results as a number greater than 0 or ND (not a <MDL value).

Lab sample notes:	
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: 

Date: 7/20/07

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & date) Accepted _____ Disapproved _____	Review comments	____ WQTS data entered
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Massachusetts Department of Environmental Protection - Drinking Water Program

THM

Total Trihalomethanes Report

PWS Information: Please refer to your DEP Water Sampling Schedule (WQSS) to help complete this form.

PWS ID #: 4122000

City/Town: Hanover

PWS Name: Hanover Water Dept.

PWS Class:

COM x NTNC TNC

DEP Location (LOC) ID#	DEP Location Name	Sample Acidified?	Date Collected	Collected by
A	19 Rockland St.	X Yes	08/21/07	T. Flynn/ T. Ferry
B	149 King St.	X Yes	08/21/07	T. Flynn/ T. Ferry
C	Merchants Row Mall	X Yes	08/21/07	T. Flynn/ T. Ferry
D	219 Winter St.	X Yes	08/21/07	T. Flynn/ T. Ferry

Routine or Special Sample	Original or Resubmitted Report	If resubmitted report, list below:	
		Reason for resubmission	Collection date of original sample
A	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
B	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
C	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
D	<input type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	

Sample notes - (Such as manifold/multiple sample, list any sources that were on line during collection).

A
B
C
D

II. Analytical Laboratory Information:

Primary Lab MA Cert. # M-MA022

Primary Lab Name: Analytical Balance Corp.

Subcontracted? ☐ Y ☒ N

Analysis Lab MA Cert. # M-MA022

Analysis Lab Name: Analytical Balance Corp.

Contaminant	MCL ($\mu\text{g/L}$)	MDL ($\mu\text{g/L}$)	Results' ($\mu\text{g/L}$)			
			A	B	C	D
Total THMs	80	-----	45.8	29.7	79.9	23.3
Bromoform		0.5	2.4	6.9	2.5	4.7
Chloroform		0.5	15.6	3.8	36.7	3.7
Bromodichloromethane		0.5	14.9	7.3	26.2	6.1
Dibromochloromethane		0.5	12.9	11.7	14.5	8.8
Lab method			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
Date extracted (551.1 only)			-----	-----	-----	-----
Date analyzed			08/23/07	08/23/07	08/23/07	08/23/07
Lab Sample ID			97267-01	97267-02	97267-03	97267-04
Surrogate # 1	1,2-dichlorobenzene d ₄		110%	107%	112%	112%
Surrogate # 2	4-bromofluorobenzene		112%	110%	112%	108%

Report results as a number greater than 0 or ND (not a <MDL value).

	Lab sample notes:
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Date:

Primary Lab Director Signature: 

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & date) Accepted _____ Disapproved _____	Review comments	_____ WQTS data entered
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Total Trihalomethanes Report

PWS Information: Please refer to your DEP Water Sampling Schedule (WQSS) to help complete this form.

PWS ID #: 4122000

PWS Name: Hanover Water Dept.

PWS Class:

City/Town: Hanover

COM x NTNC TNC

DEP Location (LOC) ID#	DEP Location Name	Sample Acidified?	Date Collected	Collected by
A 10385	70 Ponderosa	X Yes	08/21/07	T. Flynn/ T. Ferry
B		X Yes		
C		X Yes		
D		X Yes		

Routine or Special Sample	Original or Resubmitted Report	If resubmitted report, list below:	
		Reason for resubmission	Collection date of original sample
A <u> </u> x <u> </u> RS <u> </u> SS	<u> </u> x Original <u> </u> Resubmitted <u> </u> Confirmation	<u> </u> Resample <u> </u> Reanalysis <u> </u> Report Corr.	
B <u> </u> x <u> </u> RS <u> </u> SS	<u> </u> x Original <u> </u> Resubmitted <u> </u> Confirmation	<u> </u> Resample <u> </u> Reanalysis <u> </u> Report Corr.	
C <u> </u> x <u> </u> RS <u> </u> SS	<u> </u> x Original <u> </u> Resubmitted <u> </u> Confirmation	<u> </u> Resample <u> </u> Reanalysis <u> </u> Report Corr.	
D <u> </u> x <u> </u> RS <u> </u> SS	<u> </u> x Original <u> </u> Resubmitted <u> </u> Confirmation	<u> </u> Resample <u> </u> Reanalysis <u> </u> Report Corr.	

Sample notes: (Such as manifold/multiple sample, list any sources that were on line during collection).

A	
B	
C	
D	

II. Analytical Laboratory Information:

Primary Lab MA Cert. # M-MA022

Primary Lab Name: Analytical Balance Corp.

Subcontracted? Y x N

Analysis Lab MA Cert. # M-MA022

Analysis Lab Name: Analytical Balance Corp.

Contaminant	MCL ($\mu\text{g/L}$)	MDL ($\mu\text{g/L}$)	Results ($\mu\text{g/L}$)			
			A	B	C	D
Total THMs	80	----	62.4			
Bromoform		0.5	2.7			
Chloroform		0.5	25.5			
Bromodichloromethane		0.5	20.6			
Dibromochloromethane		0.5	13.6			
Lab method			EPA 524.2			
Date extracted (551.1 only)			----			
Date analyzed			08/23/07			
Lab Sample ID			97267-09			
Surrogate # 1	1,2-dichlorobenzene d_4		115%			
Surrogate # 2	4-bromofluorobenzene		111%			

Report results as a number greater than 0 or ND (not a <MDL value).

Lab sample notes:	
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: 

Date: 31 Aug 07

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & date) Accepted <u> </u> Disapproved <u> </u>	Review comments	WQTS data entered
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Total Trihalomethanes Report

PWS Information: Please refer to your DEP Water Sampling Schedule (WQSS) to help complete this form.

PWS ID #: 4122000

City/Town: Hanover

PWS Name: Hanover Water Dept.

PWS Class: COM ☒ NTNC ☐ TNC

PWS Name: Hanover Water Dept.		PWS Class:	COM x	NINC	TNC
DEP Location (LOC) ID#		DEP Location Name	Sample Acidified?	Date Collected	Collected by
A	----	Webster St.	X__ Yes	08/21/07	T. Flynn/ T. Ferry
B	----	Fire Station # 1	X__ Yes	08/21/07	T. Flynn/ T. Ferry
C	10380	640 King St.	X__ Yes	08/21/07	T. Flynn/ T. Ferry
D	10383	Fire Station # 3	X__ Yes	08/21/07	T. Flynn/ T. Ferry

Routine or Special Sample	Original or Resubmitted Report	If resubmitted report, list below:	
		Reason for resubmission	Collection date of original sample
A	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
B	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
C	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	
D	<input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmitted <input type="checkbox"/> Confirmation	<input type="checkbox"/> Resample <input type="checkbox"/> Reanalysis <input type="checkbox"/> Report Corr.	

Sample notes: (Such as manifold/multiple sample, list any sources that were on line during collection).

A	
B	
C	
D	

II. Analytical Laboratory Information:

Primary Lab MA Cert. # M-MA022

Primary Lab Name: Analytical Balance Corp.

Subcontracted? ☐ Y ☒ N

Analysis Lab MA Cert. # M-MA022

Analysis Lab Name: Analytical Balance Corp.

Contaminant	MCL ($\mu\text{g/L}$)	MDL ($\mu\text{g/L}$)	Results ($\mu\text{g/L}$)			
			A	B	C	D
Total THMs	80	-----	74.0	63.4	41.4	46.6
Bromoform		0.5	2.4	2.0	9.3	2.3
Chloroform		0.5	32.4	28.4	10.3	20.1
Bromodichloromethane		0.5	24.8	21.1	9.5	14.4
Dibromochloromethane		0.5	14.4	11.9	12.3	9.8
Lab method			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
Date extracted (\$51.1 only)			-----	-----	-----	-----
Date analyzed			08/23/07	08/23/07	08/23/07	08/23/07
Lab Sample ID			97267-05	97267-06	97267-07	97267-08
Surrogate # 1	1,2-dichlorobenzene d_4		112%	110%	114%	111%
Surrogate # 2	4-bromofluorobenzene		112%	113%	108%	110%

Report results as a number greater than 0 or ND (not a <MDL value).

Lab sample notes:	
A	
B	
C	
D	

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: 

Date: 3/14/07

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & date) Accepted _____ Disapproved _____	Review comments	___ WQTS data entered
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Massachusetts Department of Environmental Protection - Drinking Water Program

Total Trihalomethanes Report

THM

PWS Information: Please refer to your DEP Water Sampling Schedule (WQSS) to help complete this form.

PWS ID #: 412000

City/Town: Hanover

PWS Class: COM X NTNC TNC

PWS Name: Hanover Water Dept.

DEP Location (LOC) ID#	DEP Location Name	Sample Acidified?	Date Collected	Collected by
A 10380	640 King St.	X Yes	10/02/2007	T. Flynn
B 10383	Fire Station #3	X Yes	10/02/2007	T. Flynn
C 10385	70 Ponderosa Dr.	X Yes	10/02/2007	T. Flynn
D		X Yes		

Routine or Special Sample	Original or Resubmitted Report	If resubmitted report, list below:	
		Reason for resubmission	Collection date of original sample
A X RS SS	X Original Resubmitted Confirmation	Resample Reanalysis Report Corr.	
B X RS SS	X Original Resubmitted Confirmation	Resample Reanalysis Report Corr.	
C X RS SS	X Original Resubmitted Confirmation	Resample Reanalysis Report Corr.	
D X RS SS	X Original Resubmitted Confirmation	Resample Reanalysis Report Corr.	

Sample notes - (Such as manifold/multiple sample, list any sources that were on line during collection)

A
B
C
D

II. Analytical Laboratory Information:

Primary Lab MA Cert. # M-MA022

Analysis Lab MA Cert. # M-MA022

Primary Lab Name: Analytical Balance Corp.

Analysis Lab Name: Analytical Balance Corp.

Subcontracted? Y X N

Contaminant	MCL (µg/L)	MDL (µg/L)	Results (µg/L)			
			A	B	C	D
Total THMs	80	----	28.2	32.1	43.9	
Bromoform		0.5	8.1	3.4	1.4	
Chloroform		0.5	6.2	12.0	23.0	
Bromodichloromethane		0.5	5.8	9.1	12.8	
Dibromochloromethane		0.5	8.1	7.6	6.7	
Lab method			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
Date extracted (551.1 only)			----	----	----	----
Date analyzed			10/10/2007	10/10/2007	10/10/2007	
Lab Sample ID			98848-01	98848-02	98848-03	
Surrogate # 1	1,2-dichlorobenzene d ₄		95%	95%	93%	%
Surrogate # 2	4-bromofluorobenzene		91%	86%	85%	%

Report results as a number greater than 0 or ND (not a <MDL value).

Lab sample notes:
A
B
C
D

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Date:

Primary Lab Director Signature

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & date) Accepted _____ Disapproved _____	Review comments	WQTS data entered
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