MASSACHUSETTS DEP/DIVISION OF WATER SUPPLY TRIHALOMETHANE REPORT

I PWS INFORMATION:	: Please refer to you		LOMETHANE R Duality Sampling Sch		lete this section.	
1. PWS ID#: 4122000		() () () () () () () () () ()		2. City/Town:H	lanover	
3. PWS Name:Hand				4. PWS Class (circ)	le one) <u>COM</u> N'	TNC
5. <u>Source ID#</u>		6. Sample Locat	<u>tion</u>	7. Date Collected		ollected by
A: 4122000-10380		640 King Street		01/04/07		lynn
B: 4122000-10383		Fire Station # 3_	<u></u>	01/04/07		lynn
C: 4122000-10385		70 Ponderosa		01/04/07	1. F	lynn
II LABORATORY ANAI Lab Name: _ ANALYT Subcontracted? Yes [] Notes:	LYTICAL INFORM	MATION: CORP.		Lab Cert.# Sub. Lab Cert. #	#	-
	MCL	Detection		Result	s (µg/L)	
	(µg/L)	Limit (µg/L)	A	B	С	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	<u> </u>
Total Trihalomethanes Surrogate Recoveries (as	80.0	nethod 524 2):	31.3	52.0	56.9	
Compour			% Recovered		QC Limits	(%)
1,2-dichlorobenzene d ₄		1	98,98,97		70-130	
4-bromofluorobenzene			97,96,95		70-130	
The QA/QC required matrix spike sar Laboratory Director Signa		at our office.	6 D		n-07	
III. DBPR Compliance R TTHM Monitoring Freque Total number of TTHM Sa Average result for ALL loc	ency: (choose one) amples collected du cations sampled du	QUAR Tring the monitor ring the monitor	TER $\underline{/}$ ring period: $\underline{3}$ ring period (μ g/L)/	YEAR 3 46.7	YEARS	22.07E.]
Running Annual Average = I certify under penalty of law is best of my knowledge and beline Primary Certified Operation	that I am the person o ief.	authorized to fill c	prior consecutive q out this form and the i	uarterly averages (µ	ıg/L): <u>40.29</u> herein is true, accurat 1/26/01	-
Attention: Mail <u>TWO</u> cop the end of the reporting per	pies of this report to riod.	your DEP Reg	ional Office within	1 30 days of receipt of	of results and no late	r than 10 days after
For DEP/DWS use only: Please in	nitial and date as comp					
Accepted:		Disapproved:	<u></u>	Data e	entered into WQTS:	
Comments:						

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MASSACHUSETTS DEP/DIVISION OF WATER SUPPLY TRIHALOMETHANE REPORT

I PWS INFORMATION: Please refer to your DEP Water Quality Sampling S 1. PWS ID#: _4122000 3. PWS Name: Hanover Water Dept 5. Source ID# 6. Sample Location A: 4122000-10380 B: 4122000-10383 Fire Station # 3 C: 4122000-10385 D:	Schedule to help complete this sectio 2. City/Town:Hanover 4. PWS Class (circle one)COM 7. Date Collected 04/05/07 04/05/07 04/05/07	_
9. Routine / Special (explain) 10. Notes: A: X_ or		

II LABORATORY ANALYTICAL INFORMATION:

Lab Name: ANALYTICAL BALANCE CORP. Subcontracted? Yes [] No [x] Sub. Lab Name: Notes:

Lab Cert.#: _ M-MA022 _____ Sub. Lab Cert. #_____

	MCL Detection		Results (µg/L)					
	(μg/L)		A	В	С	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	<u> </u>		
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	

0

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

The QA/QC required matrix spike sample information in or	The at our office	A	1	4	
Laboratory Director Signature and Date:	10h	DX_		18 Apr. 07	

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

III. DDI K Compliance Keper ang, [- me			
	OTTADTED V	/YEAR	3 YEARS
TTHM Monitoring Frequency: (choose one)	OUARTER 🗡	/ 1 LAK	JIDIMO
T HIM MOMINING Trequency. (choose one)	X		
	•. • • 1.	3	

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

13Average result for ALL locations sampled during the monitoring period ($\mu g/L$): 50,43

Running Annual Average = Average of this quarter and three prior consecutive quarterly averages ($\mu g/L$): 47.94

Running Annual Average – Average of this quarter and under provide the source of the second dependence of the second dep

best of my knowledge and belief. Primary Certified Operator Signature	\Box	17001	$\gamma / M_{\star} \sim 10^{10}$	6/8/07
Primary Certified Operator Signature	and Date:	1601031	unn1	
I finally certified operator bigineter	DED Deries	al Office within ?	days of the	t of results and no late

Primary Certified Operator Signature and Date:	<u> </u>	2 mg	1 10 1
Attention: Mail TWO copies of this report to your DEP Region	I Office within 30 day	lys of feceipt of results an	id no later than 10 days after
the end of the reporting period.		2	

the one of the reporting period.	
For DEP/DWS use only: Please initial and date as completed.	
FOr DEFIDING use only. I leuse tittlat and auto us compretent	

Accepted:	Disapproved:	Data entered into WQTS:
Comments:		

THM

EPA 524.2

07/18/07

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	ormation: Please refer to you	ur DEP water Sampling Sch	comp comp comp comp City	Town: Hanover			
WS ID # WS Nat	#:4122000 me: Hanover Water Dept	L	PWS Class:	COM x NTNC	TNC		
	LOC) ID#		DEP Location Name	Sample Sample	Date Collected	÷ C	ollected by
A	10380	640 King Stree	at and a second s	_x_Yes	07/10/07		T. Ferry
в	10383	Fire Station #3		_x_Yes	07/10/07		Т. Ferry
с	10385	70 Ponderosa	Dr.	_x Yes	07/10/07		T. Ferry
D				Yes			
Ro	utine or Special Sample	Original or	Resubmitted Report		If resubr	nitted report, list below:	
				Re	ason for resubmission	Collectio	n date of original sample
	x_ RS SS	_x_Original Resubmitted	Confirmation	ResampleR	eanalysis Report Corr.		
3 _	x_RSSS	_x_Original Resubmitted	Confirmation	ResampleR	canalysis Report Corr.		
: .	x_RSSS	_x_Original Resubmitted	Confirmation	ResampleR	eanalysis Report Corr.		
> _	_x_ RS SS	_x_Original Resubmitted	Confirmation	ResampleR	analysis Report Corr.		
iample o	ures - (Such as manifold/multiple sampl	le, list any sources that were on line dur	ing collection)				
3				······································			
:							
Analy mary l	tical Laboratory Informat Lab MA Cert. # M-MA022	ion: Primary Lab N	ame: Analytical Balance	Corp. Subco	ntracted? Y_x_N		
alysis	Lab MA Cert. # M-MA022	2 Analysis Lab N	ame: Analytical Balance	Corp.			
	Contaminant	MCL (µg/L)	MDL (µg/L)	11.00		s ¹ (μg/L)	1
	a shine bould be			A	B	C	D
fotal TE		80		25.4	33.8 ND	44.9 ND	
Bromofo			0.5	3.9		35.4	
Chlorofo		a contraction of the second	0.5	9.5	7.4	8.0	
Bromodi	ichloromethane		0.5	0.4	/.4	0.0	

Lab Sample	D	95755-01	95755-02	95755-03	
Surrogate #		93%	93%	93%	
Surrogate #	2 4-bromofluorobenzene	97%	97%	97%	
Report results	s as a number greater than 0 or ND (not a <mdl td="" value).<=""><td></td><td>·</td><td></td><td></td></mdl>		·		
	Lab sample notes:				
A					
в					
с					
D	· · · · · · · · · · · · · · · · · · ·			- And and a second s	
	nder penalties of law that I am the person authorized to fil		A second for some	State	

out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Lab method

Date analyzed

Date extracted (551.1 only)

Primary Lab Director Signature

EPA 524.2

-----07/18/07 EPA 524.2

07/18/07

Date: C Y than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & date) Accepted Disapproved	Review comments	WQTS data e	ntered
		(

WS Informat	ion: Please refer to you 4122000	omethanes Rep Ir DEP Water Sampling Sche	iule (WQSS) to help com	plete this form. /Town: Hanover			
WS Name:	Hanover Water Dept	 	PWS Class:	COM x NTNC	TNC		
	DEP Location (LOC) ID#		DEP Location Name	Sample Acidified?	Date Collected	Colle	xted by
A		19 Rockland St		XYes	08/21/07	T. Flyn	n/ T. Ferry
в		149 King St.		XYes	08/21/07	T. Flyn	u/ T. Ferry
с		Merchants Row	Mail	XYes	08/21/07	T. Flyn	a/T.Ferry
D		219 Winter St.		X Yes	08/21/07	T. Flyn	ı⁄T.Ferry
Routine	or Special Sample	Original or	Resubmitted Report		If resubm	itted report, list below:	
				R	eason for resubmission	Collection d	ate of original sample
A _x_RS	SSS	_x_Original Resubmitted _	Confirmation	ResampleR	eanalysis Report Corr.		
3 _x_RS	5SS	_x_Original Resubmitted _	Confirmation	ResampleR	eanalysis Report Corr.		
C_x_RS	SSS	_x_Original Resubmitted	Confirmation	ResampleR	eanalysis Report Corr.		
D_x_RS	ss	_x_Original Resubmitted _	Confirmation	ResampleR	eanalysis Report Corr.		
smole potes - (S	is the manufold/multiple same	e, list any sources that were on line duri	e collection)	All Control of the	States 1		
	•		•				<u></u>
:		······································					
>							
	Laboratory Informat IA Cert. # M-MA022		me: _Analytical Balance	Corp. Subco	ontracted? Y x N		
alysis Lab N	MA Cert. # M-MA022	2 Analysis Lab Na	me: Analytical Balance				
(Contaminant	MCL (µg/L)	MDL (µg/L)		Results B	^r (μg/L) C	
and TID (s		80		45.8	29.7	79.9	D 23.3
otal THMs romoform		00	0.5	2.4	6.9	2.5	4.7
hloroform			0.5	15.6	3.8	36.7	3.7
			0.5	13.6	7.3	26.2	
Bromodichloro			0.5	12.9		14.5	6.1
Dibromochloro	DIRETUGINE		0.3		11.7 EBA \$24.2		
ab method	(661.11-)			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
ate extracted	(551.1 only)						
ate analyzed	······			08/23/07	97267-02	97267-03	97267-04
ab Sample ID	,			97267-01			······································
urrogate # 1		1,2-dichlorobenzene d ₄		110%	107%	112%	112%

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

 Lab sample notes:

 A

 B

 C

I certify under penalties of law that I am the person authorized to fill

4-bromofluorobenzene

out this form and the information contained herein is true, accurate

Surrogate # 2

D

Primary Lab Director Signature:

112%

112%

110%

2

108%

and complete to the best extent of my knowledge. Date: <u>314 y</u> <u>23</u> 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

THM

PWS In	formation: Please refer to you	ur DEP Water S	Sampling Sched		lete this fo	orm. Hanover					
PWSN				PWS Class:	C	OM x NTNC	TNC	2		and 11	
	DEP Location (LOC) ID#			DEP Location Name		Sample Acidified?	Date	Collected		Collected by	
A	10385		70 Ponderosa			XYes	0	8/21/07		T. Flynn/ T. Ferry	
В						XYes					
с		i				XYes					
D						X_Yes					
	()		Original or R	esubmitted Report				If resubru	itted report, list below		
	toutine or Special Sample		Original of K	continue report		Re	ason for resubm			lection date of original sample	
A	_x_RS SS	_x_Original _	Resubmitted	Confirmation		ResampleRe					
B	X_RS SS	x_Original	Resubmitted	Confirmation		ResampleRe					
c	_x_RS SS	x_Original	Resubmitted	Confirmation		ResampleRe	eanalysis _ Rep	ort Corr.			
D	_x_RS SS	x_Original		Confirmation		ResampleRe	eanalysis Rep	ort Corr.		······································	
Ţ	notes - (Such as matifold/multiple sam	ple, list any sources t	that were on line durin,	g collection).							
A		. <u></u>									
B	·····										
D											
	lytical Laboratory Informa	tion									
Primary	Lab MA Cert. # _M-MA02 is Lab MA Cert. # _M-MA02	2 I	Primary Lab Nar Analysis Lab Na	ne: _Analytical Balance me: _Analytical Balance	Corp	Subco	ntracted?	Y_x_N			
Anarysi	Contaminant		MCL	MDL	<u> </u>			Result	^l (μg/L)	e y stal i tot	
		6	μg/ L)	(μg/L)		A	в		c	D	
Total '	THMs		80			62.4					
Bromo	oform	_		0.5		2.7					
Chlore	oform			0.5		25.5					
Bromo	odichloromethane			0.5		20.6	· · · · · · · · · · · · · · · · · · ·				
Dibro	mochloromethane			0.5		13.6					
Lab m	ethod				E	EPA 524.2					
Date e	extracted (551.1 only)										
Date a	nalyzed	12-22			1	08/23/07					

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:

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

Lab sample notes:

1,2-dichlorobenzene d₄

4-bromofluorobenzene

Lab Sample ID

Surrogate # 1

Surrogate # 2

A B C D 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 th	e end of the month in which you receive	d this report or no later
than 10 days after the end of the reporting period, which		U ,	.	1
		J		1

97267-09

115%

111%

DEP REVIEW STATUS (Initial & date) Accepted Disapproved	Review comments	WQTS data enter	¢a
		{	

PWS Information: Please refer to	your DEP Water Sampling Schedule (WQSS) to help complete this for	n.
1 // O Information / France / France		TT
DIVO ID #. 4122000	City/Town:	Hanover

S N	D #:4122000 ame:Hanover Water Dep	t	PWS Class:	COM x NTNC T	NC	Contraction of the second
	DEP Location (LOC) 1D#		DEP Location Name	Sample Acidified?	Date Collected	Collected by
A		Webster St.		XYes	08/21/07	T. Flynn/ T. Ferry
в		Fire Station #	<i>±</i> 1	XYes	08/21/07	T. Flynn/ T. Ferry
с	10380	640 King St.		XYes	08/21/07	T. Flynn/ T. Ferry
D	10383	Fire Station #	¥ 3	XYes	08/21/07	T. Flynn/ T. Ferry
	Routine or Special Sample	Original	or Resubmitted Report		If resubmitte	ed report, list below:
		Complete Complete		Reason f	or resubmission	Collection date of original sample
	x RS SS	_x_OriginalResubmitte	d Confirmation	ResampleReanaly	sis Report Corr.	·····
3	_x_RS SS	_x_ Original Resubmitte	d Confirmation	ResampleReanaly	sis Report Corr.	
;	_x_RS SS	_x_ Original Resubmitte	d Confirmation	ResampleReanaly	rsis Report Corr.	
D	_x_ RS SS	_x_Original Resubmitte	d Confirmation	ResampleReanaly	sis _ Report Corr.	
Samo	e ootes - (Such as manifold/multiple sau	ple, list any sources that were on line d	uring collection).			
3						
с						

Primary Lab MA Cert. # M-MA022_____

Primary Lab Name: _Analytical Balance Corp.__

Subcontracted? Y _ X _ N

Contaminant	MCL	MCL MDL		Results	Results' (μ g/L)		
ai THMs moform oroform omodichloromethane promochloromethane promochloromethane promochloromethane promothod te extracted (551.1 only) te analyzed p Sample ID rrogate # 1 rrogate # 2 ort results as a number greater than Lab sample notes:	(L)روبر)	(με/Ι.)	A	В	c	D	
Total THMs	80		74.0	63.4	41.4	46.6	
Bromoform		0.5	2.4	2.0	9.3	2.3	
hloroform		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	De Commence de la commenc		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	
ab Sample ID			97267-05	97267-06	97267-07	97267-08	
Surrogate # 1	1,2-dichlorobenzene d ₄		112%	110%	114%	111%	
urrogate # 2	4-bromofluorobenzene	2	112%	113%	108%	110%	
eport results as a number greater than	0 or ND (not a <mdl td="" value).<=""><td></td><td></td><td></td><td></td><td>1.000</td></mdl>					1.000	
Lab sample notes:	Construction of the		and the second se				
A							
В	······································						
C I							
°							

and complete to the best extent of my knowledge. Date: <u>31Aq</u>. <u>31Aq</u>.

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

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		and the first of the second se	a Cohedule	I WILLIND ID	nein combicie aus i	.om
	· · · · · · ·	DEP Water Sampli	no schedule	(11 (000) 10	holp compress as	
			IL DUNDUNU	· · ·		

S Information: Please refer to y	our DEP Water Sampling Schedu	City/Town: _Hanover	NTNC TNC			
S Name: Hanover water Dept.	and the second se	PWS Class: COM X	Sample	Date Collected	Collecte	d by
DEP Location (LOC) ID#		creat Advanced reality	Acidified?			
10380	640 King St.	640 King St.		10/02/2007	T. Flynn	
3 10383	Fire Station #3	Fire Station #3		10/02/2007	T. Flynn	
10385	70 Ponderosa Dr.	70 Ponderosa Dr.		10/02/2007	T. Flynn	
)						
				If resubmitte	ed report, list below:	
Routine or Special Sample	Onginal of R	esubmitted Report	Beas	n för resubmission		of original sample
_x_RS SS		_x_Original Resubmitted Confirmation		ResampleReanalysis Report Corr.		
_x_RS SS	_x_Original Resubmitted Confirmation					
_x_RSSS						
_x_RS SS	_x_Original Resubmitted	Confirmation	ResampleRear			
mple notes - (Such as manifold/multiple sr	ample, list any sources that were on line during	t collection).				
Analytical Laboratory Inform	mation:		Subcont	racted? Y_x N		
mary Lab MA Cert. # _M-MA alysis Lab MA Cert. # _M-MA	022 Primary Lao Na	me: _Analytical Balance Cor me: _Analytical Balance Co				
Contaminant	MCL. (µg/L)	MDL (µg/L)		Results		
	(۲ پیل)۔		A	В	C	D
otal THMs	80	· · · · · · · · · · · · · · · · · · ·	28.2	32.1	43.9	· · · · · · · · · · · · · · · · · · ·
romoform		0.5	8.1	3.4		· · · · · · · · · · · · · · · · · · ·
hloroform		0.5	6.2	12.0	23.0	
romodichloromethane		0.5	5.8	9.1	12.8	
bibromochloromethane		0.5	8.1	7.6	6.7	
			EPA 524.2	EPA 524.2	EPA 524.2	EPA 524.2
Date extracted (551.1 only)		MC IN LAW				
Date analyzed			10/10/2007	10/10/2007	10/10/2007	
Lab Sample ID	a transfer of the set		98848-01	98848-02	98848-03	
Surrogate # 1	1,2-dichlorobenzene d ₄		95%	95%	93%	%
Surrogate # 2 4-bromofluorobenzene			91%	86%	85%	%
eport results as a number greater that						718
Lab sample notes:						
A			·····		<u></u>	
В				· · · · · · · · · · · · · · · · · · ·		
с						ar
D					35	/
antify under penalties of la	w that I am the person author	prized to fill			-	\sim

Review comments

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: <u>Primary Lab,Director Signature</u> 221 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 than 10 days after the end of the reporting period, whichever is sooner. eport or no later

DEP REVIEW	STATUS (Initial & date)
Accepted	Disapproved

_ WQTS data entered