

#### SOC

# Massachusetts Department Synthetic Organic Contaminant Report

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PWS ID #: 32		213000			NORTH READING					
PWS Name:	No	North Reading Water Department					PWS Class: COM ⊠ NTNC ☐ TNC			
DEP LOCATION (LOC) ID#  10292 Central		DEP Location Name			Sample Information Date		Date Collected	Collected By		
		St Andover	Combined		☐ (M)ultiple ☒ (S)ingle	☐ (R)aw 9/18/2019		M. E. L.		
Routine or Special Sample	Original, Resubmitted or Confirmation Report		(1			Report, list below:				
⊠RS □SS	☑ Orig					Report Correctio		on Date of Original Sample		
AMPLE NOTES	- (Such as, i	f a Manifold/Multipl	e sample, list any so							
. ANALY HUA	IL LABO	RATORY INFO	RMATION.				TO THE DESIGNATION			
rimary Lab MA	Cert. #:	M-MA086	Primary Lab Na		nalytical		Sub	contracted? (Y/N)		
	Cert. #:			Analysis Lab MA Cert#		Analysis Lab Na		contracted? (Y/N)  Lab Sample ID#		
rimary Lab MA	Cert. #:	M-MA086	Primary Lab Na	Analysis Lab		Analysis Lab Na Granite State Anal	ime			
rimary Lab MA Analytical Me (List All	Cert. #:	M-MA086  Date Extracted	Primary Lab Na  Date  Analyzed	Analysis Lab			ytical	Lab Sample ID#		
rimary Lab MA Analytical Me (List All EPA 504	thods ) .1	M-MA086  Date Extracted 9/26/2019	Primary Lab Na  Date Analyzed 9/26/2019	Analysis Lab MA Cert# M-NH003	(	Granite State Anal	ytical	Lab Sample ID#		
rimary Lab MA Analytical Me (List All EPA 504	A Cert. #:  othods ) .1 5	Date Extracted 9/26/2019 9/26/2019	Date Analyzed 9/26/2019 9/27/2019	Analysis Lab MA Cert# M-NH003 M-NH003	(	Granite State Anal	ytical ytical	Lab Sample ID# 190927621 190927621		
Analytical Me (List All EPA 504 EPA 505	A Cert. #:  wthods ) .1 5 .3	Date Extracted 9/26/2019 9/25/2019	Primary Lab Na  Date Analyzed 9/26/2019 9/27/2019 9/26/2019	Analysis Lab MA Cert# M-NH003 M-NH003	(	Granite State Anal Granite State Anal Granite State Anal	ytical ytical ytical ytical	Lab Sample ID# 190927621 190927621 190927621		
Analytical Me Analytical Me (List All EPA 504 EPA 505 EPA 515	Cert. #:  thods  1.1  5  .3  .2  .1	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019 9/23/2019 9/25/2019	Date Analyzed 9/26/2019 9/27/2019 9/26/2019 9/26/2019 9/26/2019	Analysis Lat MA Cert# M-NH003 M-NH003 M-NH003 M-NH003 M-NH003		Granite State Anal Granite State Anal Granite State Anal Granite State Anal Granite State Anal	ytical lytical ytical ytical ytical	Lab Sample ID# 190927621 190927621 190927621 190927621 190927621		
Analytical Me (List All EPA 504 EPA 515 EPA 525 EPA 531.	Cert. #:  thods  1.1  5  .3  .2  .1	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019 9/23/2019 9/25/2019	Date Analyzed 9/26/2019 9/27/2019 9/26/2019 9/26/2019 9/26/2019	Analysis Lat MA Cert# M-NH003 M-NH003 M-NH003 M-NH003 M-NH003		Granite State Anal Granite State Anal Granite State Anal Granite State Anal Granite State Anal	ytical lytical ytical ytical ytical	Lab Sample ID# 190927621 190927621 190927621 190927621		
Analytical Me (List All EPA 504 EPA 515 EPA 525 EPA 531.  Was this Sar composited by ti	thods  .1  .1  .2  .1  nple he Lab?	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019 9/25/2019 9/25/2019 COMPOSITE SA	Date Analyzed 9/26/2019 9/27/2019 9/26/2019 9/26/2019 9/26/2019	Analysis Lat MA Cert# M-NH003 M-NH003 M-NH003 M-NH003 M-NH003	oosited sources by	Granite State Anal Granite State Anal Granite State Anal Granite State Anal Granite State Anal	ytical lytical ytical ytical ytical	Lab Sample ID# 190927621 190927621 190927621 190927621 190927621		

CAS#	SOC Regulated Contaminants	Result µg/L	MCL µg/L	MDL µg/L	Analytical Method
1563-66-2	CARBOFURAN	ND	40	0.9	EPA 531.1
23135-22-0	OXAMYL (VYDATE)	ND	200	1	EPA 531.1
94-75-7	2,4-D	ND	70	1	EPA 515.3
93-72-1	2,4,5-TP (SILVEX)	ND	50	0.25	EPA 515.3
75-99-0	DALAPON	ND	200	1	EPA 515.3
88-85-7	DINOSEB	ND	7	0.5	EPA 515.3
1918-02-1	PICLORAM	ND	500	1.3 0.1 0.1	EPA 515.3 EPA 515.3 EPA 525.2
87-86-5	PENTACHLOROPHENOL	ND	1		
15972-60-8	ALACHLOR	ND	2		
1912-24-9	ATRAZINE	ND	3	0.1	EPA 525.2
72-20-80	ENDRIN	ND	2	0.1	EPA 525.2
76-44-8	HEPTACHLOR	ND	0.4	0.04	EPA 525.2
1024-57-3	HEPTACHLOR EPOXIDE	ND	0.2	0.06	EPA 525.2
58-89-9	LINDANE	ND	0.2	0.07	EPA 525.2
72-43-5	METHOXYCHLOR	ND	40	0.1	EPA 525.2
118-74-1	HEXACHLOROBENZENE	ND	1	0.1	EPA 525.2
77-47-4	HEXACHLOROCYCLOPENTADIENE	ND	50	0.1	EPA 525.2
122-34-9	SIMAZINE	ND	4	0.1	EPA 525.2
50-32-8	BENZO(A)PYRENE	ND	0.2	0.1	EPA 525.2
103-23-1	DI(2-ETHYLHEXYL)ADIPATE	ND	400	0.6	EPA 525.2
117-81-7	DI(2-ETHYLHEXYL)PHTHALATE	ND	6	3	EPA 525.2





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010 "	T		Resi	16 1	<b>MCL</b>	Mo		
CAS#	SOC Regulated C	ontaminants	µg/		ig/L	MDI µg/l		Analytical Method
57-74-9	OHLONDANE			ND		0.2		EPA 505
8001-35-2	TOXAPHENE		ND		3	1.0		EPA 505
12674-11-2	PCB AROCEOR 1016		ND			0.2		EPA 505
11104-28-2	PCB AROCLOR 1221		NE	)		0.2		EPA 505
11141-16-5	PCB AROCLOR 1232		NC			0.2		EPA 505
53469-21-9	PCB AROCLOR 1242		ND			0.2		EPA 505
12672-29-6	PCB AROCLOR 1248		ND		-10	0.2		EPA 505
11097-69-1	PCB AROCLOR 1254		ND			0.2		EPA 505
11096-82-5	PCB AROCLOR 1260		ND			0.2		EPA 505
1336-36-3	PCBS (DECACHLOROBIPH	IENYL)			).5			
	Monitoring requiremen	ts for DBCP and EDB have t All groundwater sources n	been wa	ived statewide for	or SURF	ACE WATER	SOURCE	S <u>ONLY</u> .
96-12-8	DIBROMOCHLOROPROPA		ND		.2	0.02		EPA 504.1
106-93-4	ETHYLENEDIBROMIDE (ED		ND		02	0.02		
Monito	ring requirements for the following	ng four contaminants have b	een wai	ved statewide fo	r hoth a	roundwater ar	d surface	EPA 504.1
	толиоппо	and reporting for Diquat is r	equired	for surface water	rs that h	nave applied D	iquat.	water bodices, nowever
85-00-7	DIQUAT			2	0			
145-73-3	ENDOTHALL			10	0			
1071-83-6	GLYPHOSATE			70	0			
1746-01-6	2,3,7,8-TCDD (DIOXIN)			3.0x	10-5			
CAS#	SOC Unregulated Co	ontaminants	Result µg/L		ORSG µg/L			Analytical Method
116-06-3	ALDICARB		ND	3	k	- μg/L 1		EPA 531,1
1646-88-4	ALDICARB SULFONE		ND	2	*	1		EPA 531.1
1646-87-3	ALDICARB SULFOXIDE		ND	4	4*			EPA 531.1
63-25-2	CARBARYL		ND					EPA 531.1
16655-82-6	3-HYDROXYCARBOFURAN		ND					EPA 531.1
16752-77-5	METHOMYL		ND	_				EPA 531.1
1918-00-9	DICAMBA		ND			0.18		EPA 515.3
309-00-2	ALDRIN		ND			0.1		EPA 525.2
23184-66-9	BUTACHLOR		ND			0.1		EPA 525.2
60-57-1	DIELDRIN		ND			0.04		EPA 525.2
51218-45-2	METOLACHLOR		ND			0.1		EPA 525.2
21087-64-9	METRIBUZIN		ND	100	)*	0.1		EPA 525.2
1918-16-7	PROPACHLOR		ND	-		0.1		EPA 525.2
o MCL, howe	ver the DEP Office of Research	and Standards has establish		ideline (ORSG)	limit for		nt .	4.7102012
Method	Surrogate Name	% Recovery (70 - 130%)	1 🗂	Method		Surrogate Na	_	% Recovery (70 - 130%
EPA 515.3	2,4-Dichlorophenyl	111	1  -	EPA 525.2	Tri	phenylphos		118
	acetic acid		1  -		1	p.101131p1103	Pilato	110
EPA 525.2	1,3-Dimethyl-2-	107	1  -					
	nitrobenzene		1 1					
EPA 525.2	Perylene-d12	92						
EPA 525.2	Pyrene-d10	95	-		-			

If not submitting these results electronically, mail <u>TWO</u> 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.

Date:

10/1/2019

is true, accurate and complete to the best extent of my knowledge.

DEP REVIEW STATUS (Initial & Date)	Review	Пиото
Accepted Disapproved Co	omments	□ WQTS     Data Entered





# **Synthetic Organic Contaminant Report**

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PWS ID #:	32	213000			NORTH READING					
PWS Name:		North Reading Water Department					PWS Class: COM NTNC TNC			
DEP LOCATION (LOC) ID#		DEP Lo	ocation Name		Sample Information		Date Collected	Collected By		
10291	10291 West Village W		)		☐ (M)ultiple ☑ (S)ingle	☐ (R)aw ☐ (F)inished	9/18/2019	M. E. L.		
Routine or		Original, Resubr				If Resubmitted	Report, list below:			
pecial Sample		Confirmation I		(1)	Reason for Resi	ubmission	(2) Collection Date of Original Sample			
RS □SS	☑ Orig	inal 🔲 Resubmitte	d  Confirmation	☐ Resampl	e 🗌 Reanalysis [	Report Correction	n			
AMPLE NOTES -	– (Such as, i	f a Manifold/Multiple	e sample, list any s	ources that were	on-line during sam	ple collection).				
		M-MA086	RMATION: Primary Lab Na	ame: Alpha A	nalytical		Subco	entracted? (Y/N)		
rimary Lab MA	Cert. #:	M-MA086	Primary Lab Na	Analysis Lab		Analysis I sh Na		entracted? (Y/N)		
rimary Lab MA	Cert. #:	M-MA086	Primary Lab Na			Analysis Lab Na	arne	Lab Sample ID#		
rimary Lab MA Analytical Me (List All	A Cert. #: ethods )	M-MA086  Date Extracted	Primary Lab Na  Date  Analyzed	Analysis Lab MA Cert#		Granite State Anal	ome lytical	Lab Sample ID#		
rimary Lab MA Analytical Me (List All EPA 504	thods ) .1	Date Extracted 9/26/2019	Primary Lab Na Date Analyzed 9/26/2019	Analysis Lab MA Cert# M-NH003			ytical	Lab Sample ID#		
Analytical Me (List All EPA 504	A Cert. #: othods ) .1 5	Date Extracted 9/26/2019 9/26/2019	Primary Lab Na  Date Analyzed  9/26/2019  9/27/2019	Analysis Lab MA Cert# M-NH003 M-NH003		Granite State Anal	lme lytical ytical ytical	Lab Sample ID# 190927622 190927622		
imary Lab MA Analytical Me (List All EPA 504 EPA 505	A Cert. #:  thods  .1  5  .2	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019	Primary Lab Na  Date Analyzed 9/26/2019 9/27/2019 9/26/2019	Analysis Lab MA Cert# M-NH003 M-NH003 M-NH003		Granite State Anal Granite State Anal Granite State Anal	ytical ytical ytical ytical	Lab Sample ID# 190927622 190927622 190927622		
Analytical Me Analytical Me (List All EPA 504 EPA 505 EPA 515	A Cert. #:  othods ) .1 5 .3 .2 .1	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019 9/23/2019 9/25/2019	Date Analyzed 9/26/2019 9/27/2019 9/26/2019 9/26/2019	Analysis Lab MA Cert# M-NH003 M-NH003 M-NH003 M-NH003		Granite State Anal Granite State Anal Granite State Anal Granite State Anal Granite State Anal	lytical lytical lytical ytical ytical ytical	Lab Sample ID#  190927622  190927622  190927622  190927622  190927622		
Analytical Me (List All EPA 504 EPA 515 EPA 525 EPA 531.	A Cert. #:  othods ) .1 5 .3 .2 .1	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019 9/23/2019 9/25/2019	Date Analyzed 9/26/2019 9/27/2019 9/26/2019 9/26/2019	Analysis Lab MA Cert# M-NH003 M-NH003 M-NH003 M-NH003		Granite State Anal Granite State Anal Granite State Anal Granite State Anal Granite State Anal	lytical lytical lytical ytical ytical ytical	Lab Sample ID#  190927622  190927622  190927622  190927622		
Analytical Me (List All EPA 504 EPA 505 EPA 515 EPA 525 EPA 531 Was this Sar	A Cert. #:  thods  .1  5  .3  .2  .1	M-MA086  Date Extracted 9/26/2019 9/26/2019 9/25/2019 9/23/2019 9/25/2019 COMPOSITE SA	Date Analyzed 9/26/2019 9/27/2019 9/26/2019 9/26/2019	Analysis Lab MA Cert# M-NH003 M-NH003 M-NH003 M-NH003 M-NH003	oosited sources by	Granite State Anal Granite State Anal Granite State Anal Granite State Anal Granite State Anal	lytical lytical lytical ytical ytical ytical	Lab Sample ID#  190927622  190927622  190927622  190927622  190927622		

CAS#	SOC Regulated Contaminants	Result µg/L	MCL µg/L	MDL µg/L	Analytical Method
1563-66-2	CARBOFURAN	ND	40	0.9	EPA 531.1
23135-22-0	OXAMYL (VYDATE)	ND	200	1	EPA 531.1
94-75-7	2,4-D	ND	70	1	EPA 515.3
93-72-1	2,4,5-TP (SILVEX)	ND	50	0.25	EPA 515.3
75-99-0	DALAPON	ND	200	1	EPA 515.3
88-85-7	DINOSEB	ND	7	0.5 1.3 0.1	EPA 515.3 EPA 515.3 EPA 515.3
1918-02-1	PICLORAM	ND	500		
87-86-5	PENTACHLOROPHENOL	ND	1		
5972-60-8	ALACHLOR	ND	2	0.1	EPA 525.2
1912-24-9	ATRAZINE	ND	3	0.1	EPA 525.2
72-20-80	ENDRIN	ND	2	0.1	EPA 525.2
76-44-8	HEPTACHLOR	ND	0.4	0.04	EPA 525.2
1024-57-3	HEPTACHLOR EPOXIDE	ND	0.2	0.06	EPA 525.2
58-89-9	LINDANE	ND	0.2	0.07	EPA 525.2
72-43-5	METHOXYCHLOR	ND	40	0.1	EPA 525.2
118-74-1	HEXACHLOROBENZENE	ND	1	0.1	EPA 525.2
77-47-4	HEXACHLOROCYCLOPENTADIENE	ND	50	0.1	EPA 525.2
122-34-9	SIMAZINE	ND	4	0.1	EPA 525.2
50-32-8	BENZO(A)PYRENE	ND	0.2	0.1	EPA 525.2
103-23-1	DI(2-ETHYLHEXYL)ADIPATE	ND	400	0.6	EPA 525.2
117-81-7	DI(2-ETHYLHEXYL)PHTHALATE	ND	6	3	EPA 525.2





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						Samp		190927622
CAS#	SOC Regulated C	ontaminants		esult .g/L	МC		MDL µg/L	Analytical Method
57-74-9	CHLORDANE			ND	2	2	0.2	EPA 505
8001-35-2	TOXAPHENE			ND	3	3	1.0	EPA 505
12674-11-2	PCB AROCLOR 1016			D		-	0.2	EPA 505
11104-28-2	PCB AROCLOR 1221		VD			0.2	EPA 505	
11141-16-5	PCB AROCLOR 1232			ND			0.2	EPA 505
53469-21-9	PCB AROCLOR 1242			ND			0.2	EPA 505
12672-29-6	PCB AROCLOR 1248			ND		-	0.2	EPA 505
11097-69-1	PCB AROCLOR 1254		1	ID			0.2	EPA 505
11096-82-5	PCB AROCLOR 1260		1	ND			0.2	EPA 505
1336-36-3	PCBS (DECACHLOROBIPH	IENYL)			0.5	5		
	Monitoring requiremen	ts for DBCP and ED	B have been	waived s	tatewide for	SURFA	CE WATER SOURCE	S ONLY.
96-12-8		All groundwater so			_			
106-93-4	DIBROMOCHLOROPROPA			D	0.2		0.02	EPA 504.1
	ETHYLENEDIBROMIDE (EDing requirements for the following	ng four contaminant		D waived st	0.02		0.02	EPA 504.1
	monitoring	and reporting for Di	iquat is requi	ed for su	rface waters	s that ha	unowater and surface ve applied Diquat.	water sources, however
85-00-7	DIQUAT				20			
145-73-3	ENDOTHALL				100			
1071-83-6	GLYPHOSATE				700			
1746-01-6	2,3,7,8-TCDD (DIOXIN)				3.0x1	0-5		
0.00			Ros	ult	ORSO	0	MDL	
CAS#	SOC Unregulated C	ontaminants	μg		µg/L		µg/L	Analytical Method
116-06-3	ALDICARB		N	D	3*		1	EPA 531.1
1646-88-4	ALDICARB SULFONE		N	D	2*		1	EPA 531.1
1646-87-3	ALDICARB SULFOXIDE		N	D	4*		1	EPA 531.1
63-25-2	CARBARYL		N	D			1	EPA 531.1
16655-82-6	3-HYDROXYCARBOFURAN		N	D			1	EPA 531.1
16752-77-5	METHOMYL		N	D			1	EPA 531.1
1918-00-9	DICAMBA		N	D			0.18	EPA 515.3
309-00-2	ALDRÍN		N	ND			0.1	EPA 525.2
23184-66-9	BUTACHLOR		N	D			0.1	EPA 525.2
60-57-1	DIELDRIN		N	0			0.04	EPA 525,2
51218-45-2	METOLACHLOR		NI	)			0.1	EPA 525,2
21087-64-9	METRIBUZIN		NI		100*		0.1	EPA 525.2
1918-16-7	PROPACHLOR		NI		-		0.1	EPA 525.2
	er the DEP Office of Research	and Standards has			e (ORSG) lir	mit for th		217102012
Method	Surrogate Name	% Recovery (70 -			thod		urrogate Name	% Recovery (70 – 130%
EPA 515.3	2,4-Dichlorophenyl	116			525.2		nenyiphosphate	120
	acetic acid					pi	y-prioapilate	120
EPA 525.2	1,3-Dimethyl-2-	103						
	nitrobenzene							
EPA 525,2	Perylene-d12	98						
EPA 525.2	Pyrene-d10	101						
ized to fill out i accurate and	under penalties of law that I this form and the information c complete to the best extent of	am the person ontained herein my knowledge.					ature: _ fapt.600 Date: _ 10/1/2	2019
and the second distance of	these results electronically	mail TWO conie.	s of this ren	ort to vo	ur NED Da	lenoine	Office no later than	10 days after the end of
mon	th in which you received thi ATUS (Initial & Date)	s report or no late	r than 10 da	ys after	the end or	f the rei	porting period, which	thever is sooner.