

Massachusetts Department of Environmental Protection - Drinking Water Program Radionuclide Report

I. PWS INFOR	MATION:	Please ref	er to your	DEP W	ater Q	uality Sam	pling Schedu	ile (WQSS) to	help com	plete this form				
PWS ID #:	32	13000]			С	ity / Town:	North Read	ding					
PWS Name:	Nor	th Reading	g Water D	epartn	nent			PWS Class:		COM NTNC TNC			J	
DEP LOCATION (LOC) ID#		DEI	Location N	ame			Sam	ole Information		Date Collected		Collected By		
10292	Central	St. – Ando	ver Comb	oined			(M)ultiple	☐ (R)aw ☑ (F)inished		07/08/2014 ME				
Routine or Special Sample			esubmitted ation Report			If Resubmitted Report, list below: (1) Reason for Resubmission (2) Collection Date of Original								
⊠RS □SS	⊠ Ori	ginal 🗌 Resu	bmitted Co	onfirmatio	on		Resample Reanalysis Report							
SAMPLE NOTES -	- (Such as, i	f a Manifold/M	ultiple sample	e, list any	source	es that were o			ion).					
				4										
II. ANALYTICA	L LABO	RATORY I	NFORMA	TION:					2	10 = 5		CONTRACTOR OF THE CONTRACTOR O		
Primary Lab MA	Cert. #:	M-MA086	Primar	y Lab N	lame:	Alpha An	alytical, Inc.			Subcontr	acted? (Y/N)	Y	
Was this sar composited by t			E SAMPLE I		P Sour	ce Code (XX	XXXXX-XXX) a	nd dates collected	d, up to fou	r consecutive qua	rterly sam	ples per s	ingle	

LAB SAMPLE NOT	res													
					waren u									
Contaminant		RESULT	Std Dev (+/-)	MCL	MDL	Lal	b Method	Date Analyzed	Lat Sample		Analysis Lab MA Cert#		Lab e	
GROSS ALPHA (pCi/L)		0.0	1.7		1.7	SM	17110 B	07/22/2014	G177/	14-1 CO00	CO00008 Hazen		earc	
URANIUM - activit (pCi/L)	У													
Report Uranium res	ult and MDL	in (pCl/L) as	analyzed, oth	nerwise u	se form	nula to calcula	ale [Uranium ji	g/L x 0.67 = Uran	ium pCi/L].	Check this box if	result is c	alculated		
ADJUSTED GROS	S ALPHA				A gro	ss alpha mea	asurement may	a (Gross Alpha m be substituted for ross alpha excee	the uraniu	m analysis, if the				
URANIUM – mass (µg/L)														
Report Uranium res	ult and MDL	in (μg/L) as a	inalyzed, othe	erwise us	e formu	ula to calculat	te [Uranium pC	i/L / 0.67 = Uranii	um μg/L]. (Check this box if re	esult is ca	culated [<u></u>	
RADIUM-226 (pCi/L)		0.1	0.2		0.1	SM 7	7500-Ra B	07/18/2014	G177/1	4-1 CO000	08 н	azen Rese	earc	
RADIUM-228 (pCi/L)		0.1	0.6		0.6	EP.	A Ra-05	07/21/2014 G177/		1-1 CO00008		azen Rese	earcl	
	MBINED RADIUM 0 2 The MCL for Combined Radium (Radium-226 plus Radium-228) is A gross alpha measurement may be substituted for the radium-226							-226 analysis, if the			It is			
GROSS BETA (pCi/L)	3.1 SI		SM	l 7110 B	110 B 07/22/2014 G177		14-1 CO00008		azen Rese	earc				
*The MCL for gross constituents. Gross							sample for Pho	ton Activity shall	be perform	ed to identify the r	najor radi	oactive		
RADON (pCi/L)				**								W. 5005		
**Radon testing is or	otional, unle	ss specifically	required by [DEP. Th	e MA gı	uideline for R	adon is 10,000	pCi/L. The EPA h	as propose	ed a radon MCL o	f 300 – 40	00 pCi/L.		
l certify under penalt fill out this form and a accurate and comple	the informati	ion contained	herein is true		Pri	mary Lab	Director Si	gnature: 🎉 Date:	145	Robert Ros 07/29/20		Research, I	inc	
lf not submitting ti	nese result	s electronica	ally, mail <u>Tv</u>	VO copi	es of ti	his report to	your DEP Re		o later the	n 10 days after	the end	of the m	onth	
DEP REVIEW ST			and report	<u> </u>	,c. ma		the end o	. are reporting p	-51100, 4711			WQTS		
Accepted	Disappro	nved			Review Comment	s					Data Ente			



Massachusetts Department of Environmental Protection - Drinking Water Program

Radionuclide Report

PWS ID #:	: 3213000 City / Tow								North Reading						
PWS Name:	No	rth Readin	g Water D	epartn	nent		PWS Class:			COM 🛛 NT	NC TNC				
DEP LOCATION (LOC) ID#		DE	P Location N	ame			Sam	ole Information		Date Collecte					
10010	Lakesid	le Blvd W	ГР				☐ (M)ultiple ☑ (S)ingle	☐ (R)aw ☐ (F)inished		07/08/2014	/2014 MEC				
Routine or Special Sample			Resubmitted					t, list below:							
RS □ SS	M 0**						(1) Reason for Reason for Reason	2) Collection Date of Original Sampl							
SAMPLE NOTES			ubmitted Co				Correc	ction	. 600						
OAMIPEL NOTES	- (30011 83, 1	a Manholom	nutiple sample	e, list any	y sources	s that were	on-line line duni	ng sample co	lection).						
II. ANALYTICA	ΔΙΙΔΒΟ	RATORY	NEORMA	LION.	17.			1.055	W. T. 107 . 114						
Primary Lab M/		M-MA086		y Lab N	lame:	Alpha Ar	nalytical, Inc.	4,736174		Cubaaata	-110 0/00 [
			TE SAMPLE I	•	iame.	Vibila Vi	iaiyticai, iiic.			Subcontra	cted? (Y/N)				
Was this sa composited by		List the con	nposited source	ce by DE	P Source	e Code (XX	(XXXXX-XXX) ar	nd dates colle	cted, up to four	consecutive quarte	erly samples per sin				
П		entry point.													
LAB SAMPLE NO	TES														
Contamina	int	RESULT	Std Dev (+/-)	MCL	MDL	La	b Method	Date Analyze	Lab d Sample						
GROSS ALPHA (pCi/L)		1.2	0.7		0.6	SI	И 7110 B	07/22/20	14 G177/1	4-2 CO0000	08 Hazen Resea				
URANIUM – activi pCi/L)	ty			100		1.,									
Report Uranium res	ult and MDL	in (pCi/L) as	analyzed, oth	erwise u	se formu	ıla to calcu	late [Uranium μg	J/L x 0.67 = U	ranium pCi/L].	Check this box if re	esult is calculated [
ADJUSTED GROS (pCI/L)	S ALPHA	Charles Commenced in the Commenced in th			A gros	s alpha me	sted Gross Alpha asurement may t an 15 pCi/L. If gr	be substituted	for the uraniur	m) is 15 pCi/L. n analysis, if the gr , uranium must also	oss alpha result is be measured.				
URANIUM – mass (μg/L)															
Report Uranium res	ult and MDL	in (μg/L) as a	analyzed, othe	rwise us	e formul	a to calcula	te (Uranium pCi	/L / 0.67 = Ur	anium ug/L1. C	heck this box if res	ult is calculated □				
RADIUM-226						T									
(pCi/L)		0.3	0.2		0.1	SM	7500-Ra B	07/18/201	4 G177/14	-2 CO0000	B Hazen Resea				
RADIUM-228 pCi/L)		0.4	0.6		0.6	EP	'A Ra-05	07/21/201	4 G177/14	-2 CO00008	3 Hazen Resea				
COMBINED RAD	MUI	0.7		5	A gross	alpha mea		e substituted	for the radium-		gross alpha result to be measured.				
GROSS BETA pCi/L)		46	1	*	0.6	SM	17110 B	07/22/201	4 G177/14	-2 CO00008	B Hazen Resea				
The MCL for gross onstituents. Gross	beta is 4 mre Beta testing	em/year. If gro is optional, u	oss beta exce nless specific	eds 50 p ally requ	Ci/L, and ired by D	lysis of the	sample for Phot	on Activity sh	all be performe	d to identify the ma	jor radioactive				
ADON Ci/L)				**				na Calaban ya kata a 1.60 ka 2 kata a 1.60 ka 2 kata a 1.60 ka 2 ka	alita kecing conductivi matali igi saga an itu ntonsal, ka						
Radon testing is o	otional, unles	ss specifically	required by D	EP. The	MA gui	deline for R	ladon is 10,000 p	Ci/L. The EP	A has propose	d a radon MCL of 3	00 – 4000 pCi/L.				
certify under penall Il out this form and	the informati	on contained	herein is true,		Prim	ary Lab	Director Sig	_	2505		l, Hazen Research, Inc				
ccurate and comple not submitting th				<u>/O</u> copie	es of thi	s report to	your DEP Re	Date: _ gional Office	no later tha	07/29/2014 on 10 days after th	t ne end of the mor				
0.00										chever is sooner					
EP REVIEW ST	ATUS (Initi	al & Date)				Review					□wqts				
		Dicopper	and the second second second second			Comment					Data Entere				



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I. PWS INFORM	MATION	: Please re	fer to your	DEP W	ater Qu	uality San	npling Sche	dule	(WQSS) to t	elp con	plete	this form			
PWS ID #:		13000	City / Town: North Reading								· · · · · · · · · · · · · · · · · · ·				
PWS Name:	Noi	rth Readin	g Water D	epartn	nent		PWS Class: CC					COM NTNC TNC			
DEP LOCATION (LOC) ID#	P Location N	lame			Sample Information				Date Collected		С	Collected By			
10291					☐ (M)ultiple ☑ (S)ingle		☐ (R)aw ☑ (F)inis		07/	08/2014	14 MEC				
Routine or Special Sample			esubmitted ation Report			If Resubmitted Report, list below: (1) Reason for Resubmission (2) Collection Date									
⊠ RS □ SS	⊠ Ori	iginal 🗌 Resu	bmitted 🗆 C	onfirmati	on	(1) Reason for Resubmission (2) Collection Date of Resample Reanalysis Report								iginal Sa	ample
SAMPLE NOTES -	(Such as, i	f a Manifold/M	lulliple sampl	e, list any	y source	s that were	on-line line du	uring s	sample collecti	on).					
II. ANALYTICAI Primary Lab MA		M-MA086	Primar	y Lab N	lame:	Alpha Ar	nalytical, Inc.		VIII (11 11 11 11 11 11 11 11 11 11 11 11 11		s	Subcontrac	cted? ((Y/N) [Y
Was this sam composited by th		COMPOSIT List the com entry point.	E SAMPLE I	NOTES ce by DE	P Source	e Code (XX	(XXXXX-XXX)	and d	ates collected	. up to fou	r conse	culive quarte	rly sam	ples per	single
LAB SAMPLE NOTE	ES														
			-		7	THE PERSON NAMED IN COLUMN 1					CONTRACTOR OF THE SECOND		N OF YOUR		
Contaminan	t	RESULT	Std Dev (+/-)	MCL	MDL	La	b Method		Date Analyzed	Lab Sample ID#		Analysis I MA Cert			
GROSS ALPHA (pCi/L)		0.0	2.4		2.5	SI	M 7110 B	07/22/2014		G177/14-3		CO0000	008 Hazen Researc		search
URANIUM – activity (pCi/L)								1							
Report Uranium resul	It and MDL	in (pCl/L) as	analyzed, oth	ierwise u	ise formi	ula to calcu	ate [Uranium	μg/L >	x 0.67 = Uranic	Jm pCi/L].	Check	this box if re	sult is o	calculated	d \square
ADJUSTED GROSS (pCi/L)					The M A gros	CL for Adju	sted Gross Alp	oha (G	Gross Alpha mi substituted for s alpha exceed	inus Urani the uraniu	um) is 1	5 pCi/L.	nss alph	na result	
URANIUM – mass (μg/L)								T							
Report Uranium resul	t and MDL	in (μg/L) as a	inalyzed, othe	erwise us	se formul	a to calcula	ite [Uranium p	Ci/L /	0.67 = Uraniu	m µg/L]. (Check th	nis box if res	ult is ca	lculated	
RADIUM-226 (pCi/L)		0.0	0.1		0.1	SM	7500-Ra B	0	7/18/2014	G177/1	4-3	CO00008	3 н	azen Re	search
RADIUM-228 (pCi/L)		0.0	0.6		0.6	EF	A Ra-05	0	7/21/2014	G177/1	4-3	CO00008	з н	azen Re	search
COMBINED RADII (pCi/L)	UM	0.0	 	5	A gros	s alpha me	asurement ma	y be s	ium-226 plus F substituted for t alpha exceeds	the radium	1-226 ar	alysis, if the			ult is
GROSS BETA (pCi/L)		38	5	*	3.2	SN	17110 B	0	7/22/2014	G177/1	4-3	CO00008	3 н	azen Re	search
*The MCL for gross be constituents. Gross B	eta is 4 mr Beta testing	em/year. If gro is optional, u	oss beta exce nless specific	eds 50 p ally requ	Ci/L, an	alysis of the DEP.	sample for Pl	noton	Activity shall b	e perform	ed to ide	entify the ma	jor radi	oactive	
RADON (pCi/L)				**											Mary Committee of the
**Radon testing is opti	ional, unle	ss specifically	required by [DEP. The	e MA gu	ideline for F	Radon is 10,00	0 pCi/	L. The EPA ha	s propose	ed a rad	on MCL of 3	00 – 40	00 pCi/L	
I certify under penaltie fill out this form and th accurate and complete	e informati	ion contained	herein is true		Prin	nary Lab	Director S	(1986)	ature: // Date:	SE		Robert Rostac		Research,	Inc
If not submitting the	ese result	s electronica	ally, mail <u>TV</u>	VO copi or no la	es of th	is report to	o your DEP I	Reaio		later tha	an 10 d	avs after th	ne end	of the n	nonth
DEP REVIEW STA								J. 011	- roporarig p			. 10 3001161		714/0-	
Dan Neview on	. 55 (Disappr	aug d			Review								☐ WQT	