Table A1a: Quabbin and Wachusett Reservoir - Giardia and Cryptosporidium Results

Method: USEPA Method 1623.1

Location	SAMPLE Date	Crypto Concentration (Oocysts/100L)	# Recovered	# Empty Oocysts	# with Amorphous Structure	# with 1 internal Structure	G/ARDIA Concentration (Cysts/100L)	# Recovered	# Empty cysts	# with Amorphous Structure	# with >= 1 internal Structures	^T esting Lab	
CWTP Inlet	06-Jan-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	13-Jan-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet CWTP Inlet	20-Jan-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	26-Jan-15 3-Feb-15	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND		
CWTP Inlet	10-Feb-15				ND					ND		mantalis am	La C710/ 9 C42.0/
CWTP Inlet	17-Feb-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	matrix sp	ke C71% & G42 %
CWTP Inlet	25-Feb-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	3-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	10-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	17-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	24-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	31-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	7-Apr-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	14-Apr-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	21-Apr-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	28-Apr-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	5-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	12-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	19-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	26-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	2-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	9-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	16-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	matrix sp	ke C 40%, G 53%
CWTP Inlet	23-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	30-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	7-Jul-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	14-Jul-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	21-Jul-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	28-Jul-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	4-Aug-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	11-Aug-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet CWTP Inlet	18-Aug-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	25-Aug-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet CWTP Inlet	1-Sep-15 8-Sep-15	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		
CWTP Inlet	15-Sep-15	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	15-Sep-15 22-Sep-15	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND		
CWTP Inlet	29-Sep-15	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	6-Oct-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CWTP Inlet	13-Oct-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Svvii iiiidt	10-001-10	IND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

Table A1a: Quabbin and Wachusett Reservoir - Giardia and Cryptosporidium Results

Method: USEPA Method 1623.1

Location	SAMPLE Date	Crypto Concentration (Oocysts/100L)	# Recovered	# Empty Oocysts	# with Amorphous Structure	# with 1 internal Structure	G/ARDIA Concentration (cysts/100L)	# Recovered	# Empty cysts	# with Amorphous Structure	# with >= 1 internal Structures	Á
CWTP Inlet	20-Oct-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	27-Oct-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	3-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	10-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	17-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	23-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	1-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	8-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	15-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	21-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CWTP Inlet	28-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Table A1a: Quabbin and Wachusett Reservoir - Giardia and Cryptosporidium Results

Method: USEPA Method 1623.1

^{Lo} cation	SAMP _{LE Date}	Grypto Concentration (Oocysts/100L)	# Recovered	# Empty Oocysts	# with Amorphous Structure	# with 1 internal Structure	G/ARDIA Concentration (c)sts/100L)	# Recovered	# Empty cysts	# with Amorphous Structure	# with >= 1 internal Structures	Testing Lab	
WDF	06-Jan-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	20-Jan-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	03-Feb-15	ND	ND	ND	ND	ND	2	1	ND	1	ND		
WDF	17-Feb-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	03-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	17-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	31-Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	14-Apr-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	28-Apr-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	12-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	28-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	09-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	23-Jun-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	07-Jul-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	21-Jul-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	4-Aug-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	18-Aug-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	1-Sep-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	matrix spike	C 39%, G 45%
WDF	15-Sep-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	29-Sep-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	13-Oct-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	27-Oct-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	10-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	23-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	9-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
WDF	21-Dec-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

Table A1a: Quabbin and Wachusett Reservoir - Giardia and Cryptosporidium Results Method: USEPA Method 1623.1

Reported concentration are in oocysts/100L for Cryptosporidium and cysts/100L for Giardia.

Other results are reported as oocysts/50L for Cryptosporidium and cysts/50L for Giardia.

Testing Lab: Analytical Services Inc. since April 17, 2012

EPA Method 1623.1 initiated September 2014.

Recovered
Empty Oocysts
with
Amorphous
Structure

*The Wachusett Giardia/Crypto sample location was changed from Cosgrove to CWTP Inlet on 04/01/08. The CWTP Inlet is a sampling location that represents the source water and is immediately prior to water treatment.

Concentration
(cysts/100L)

Recovered

Empty cysts

with >= 1
internal
Structures

Festing Lab

The Quabbin Giardia/Crypto sample location was changed from WPS to WDF on 2/06/07 due to valve repair work being performed at WPS. The work was completed on 8/15/07. The sampling will continue to be performed at WDF because it is (1) an easier sampling location and (2) a better sampling tap.

Old WPS= Winsor Power Station
WDF = Ware Disinfection Facility
BWTF = Brutsch Water Treatment Facility