

CERTIFICATE OF ANALYSIS

REPORTED TO	Tissington, Mel - -,		
ATTENTION	Mel Tissington	WORK ORDER	0080284
PO NUMBER PROJECT PROJECT INFO	Essential Drinking Water	RECEIVED / TEMP REPORTED COC NUMBER	2020-08-05 10:00 / 11°C 2020-08-12 16:07 B48245

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

We've Got Chemistry

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too. It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

👗 Ah

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

If you have any questions or concerns, please contact me at teamcaro@caro.ca

Authorized By:

Team CARO Client Service Representative

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TEST RESULTS

REPORTED TO PROJECT	Tissington, Mel Essential Drinking Water				WORK ORDER REPORTED	0080284 2020-08-1	2 16:07
Analyte		Result	Guideline	RL	Units	Analyzed	Qualifier
Full Analysis (008)	0284-01) Matrix: Water S	Sampled: 2020)-08-04 09:30				
Anions							
Chloride		0.57	AO ≤ 250	0.10	mg/L	2020-08-06	
Fluoride		< 0.10	MAC = 1.5		mg/L	2020-08-06	
Nitrate (as N)		0.170	MAC = 10	0.010	mg/L	2020-08-06	
Nitrite (as N)		< 0.010	MAC = 1	0.010	mg/L	2020-08-06	
Sulfate		9.2	AO ≤ 500	1.0	mg/L	2020-08-06	
Calculated Paramete	ers						
Total Trihalomethan	nes	< 0.00400	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as	CaCO3)	79.8	None Required	0.500	mg/L	N/A	
Solids, Total Dissolv	ved	95.3	AO ≤ 500	1.00	mg/L	N/A	
General Parameters							
Alkalinity, Total (as	CaCO3)	83.1	N/A	1.0	mg/L	2020-08-07	
	ithalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-08-07	
Alkalinity, Bicarbona	ate (as CaCO3)	83.1	N/A	1.0	mg/L	2020-08-07	
Alkalinity, Carbonat		< 1.0	N/A	1.0	mg/L	2020-08-07	
Alkalinity, Hydroxide	e (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-08-07	
Conductivity (EC)	<u> </u>	168	N/A	2.0	μS/cm	2020-08-07	
Cyanide, Total		< 0.0020	MAC = 0.2	0.0020	mg/L	2020-08-07	
pH		7.94	7.0-10.5	0.10	pH units	2020-08-07	HT2
Turbidity		0.11	OG < 1	0.10	NTU	2020-08-05	
Microbiological Para	ameters						
Coliforms, Total		< 1	MAC = 0	1	CFU/100 mL	2020-08-05	HT3
E. coli		< 1	MAC = 0	1	CFU/100 mL	2020-08-05	HT3
Total Metals							
Aluminum, total		< 0.0050	OG < 0.1	0.0050	mg/L	2020-08-10	
Antimony, total		< 0.00020	MAC = 0.006	0.00020	-	2020-08-10	
Arsenic, total		0.00386	MAC = 0.01	0.00050	•	2020-08-10	
Barium, total		< 0.0050	MAC = 2	0.0050	-	2020-08-10	
Boron, total		< 0.0500	MAC = 5	0.0500	-	2020-08-10	
Cadmium, total		< 0.000010	MAC = 0.005	0.000010	-	2020-08-10	
Calcium, total		26.6	None Required		mg/L	2020-08-10	
Chromium, total		0.00168	MAC = 0.05	0.00050	-	2020-08-10	
Copper, total		0.00058	MAC = 2	0.00040		2020-08-10	
Iron, total		< 0.010	AO ≤ 0.3	0.010	-	2020-08-10	
Lead, total		< 0.00020	MAC = 0.005	0.00020		2020-08-10	
Magnesium, total		3.24	None Required	0.010		2020-08-10	
Manganese, total		< 0.00020	MAC = 0.12	0.00020	-	2020-08-10	
Mercury, total		< 0.000010	MAC = 0.001	0.000010	-	2020-08-11	
Potassium, total		1.25	N/A		mg/L	2020-08-10	
Selenium, total		< 0.00050	MAC = 0.05	0.00050	-	2020-08-10	
Sodium, total		3.02	AO ≤ 200		mg/L	2020-08-10	



TEST RESULTS

	ssington, Mel						
	ssential Drinking Water				WORK ORDER REPORTED	0080284 2020-08-1	2 16:07
Analyte		Result	Guideline	RL	Units	Analyzed	Qualifie
Full Analysis (00802	84-01) Matrix: Water S	ampled: 2020	-08-04 09:30, Cont	inued			
Total Metals, Continue	d						
Strontium, total		0.0582	7	0.0010	mg/L	2020-08-10	
Uranium, total		0.00154	MAC = 0.02	0.000020	mg/L	2020-08-10	
Zinc, total		0.0183	AO ≤ 5	0.0040	mg/L	2020-08-10	
Volatile Organic Comp	ounds (VOC)						
Bromodichloromethan	e	< 0.0010	N/A	0.0010	mg/L	2020-08-07	
D		< 0.0010	N/A	0.0010	mg/L	2020-08-07	
Bromoform		< 0.0010	N/A	0.0010	mg/L	2020-08-07	
Chloroform		0.0010			0		
	e	< 0.0010	N/A	0.0010	-	2020-08-07	
Chloroform	-		N/A		-	2020-08-07 2020-08-07	

HT3 Microbiological analysis was initiated beyond the maximum holding time of 30 hours. Results may not be valid.



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Tissington, PROJECT Essential Di	Mel rinking Water	WORK ORDER REPORTED	0080284 2020-08-1:	2 16:07
Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2017)	Titration with H2SO4	\checkmark	Kelowna
Anions in Water	SM 4110 B (2017)	Ion Chromatography	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2017)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Conductivity in Water	SM 2510 B (2017)	Conductivity Meter	✓	Kelowna
Cyanide, SAD in Water	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperomet	ry ✓	Kelowna
E. coli in Water	SM 9222* (2017)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Hardness in Water	SM 2340 B* (2017)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	\checkmark	Richmond
pH in Water	SM 4500-H+ B (2017)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2017)	SM 1030 E (2011)		N/A
Total Metals in Water	EPA 200.2* / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	\checkmark	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	\checkmark	Richmond
Turbidity in Water	SM 2130 B (2017)	Nephelometry	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, ph > 7 = basic
μS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tissington, Mel
PROJECT	Essential Drinking Water

WORK ORDER REPORTED 0080284 2020-08-12 16:07

General Comments:

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do <u>not</u> take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager:teamcaro@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline (s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.



REPORTED TO	Tissington, Mel	WORK ORDER	0080284
PROJECT	Essential Drinking Water	REPORTED	2020-08-12 16:07

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- Method Blank (Blk): A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- Duplicate (Dup): An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- Blank Spike (BS): A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- Matrix Spike (MS): A second aliquot of sample is fortified with with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM)**: A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike	Source	% REC	REC	% RPD RPD	Qualifier
, many to	Hoodit		Level	Result	/0 IXE0	Limit	Limit	quanto

Anions, Batch B0H0296

Blank (B0H0296-BLK1)			Prepared: 202	0-08-06, Analyze	ed: 2020-08-06	
Chloride	< 0.10	0.10 mg/L				
Fluoride	< 0.10	0.10 mg/L				
Nitrate (as N)	< 0.010	0.010 mg/L				
Nitrite (as N)	< 0.010	0.010 mg/L				
Sulfate	< 1.0	1.0 mg/L				
Blank (B0H0296-BLK2)			Prepared: 202	0-08-06, Analyze	ed: 2020-08-06	
Chloride	< 0.10	0.10 mg/L				
Fluoride	< 0.10	0.10 mg/L				
Nitrate (as N)	< 0.010	0.010 mg/L				
Nitrite (as N)	< 0.010	0.010 mg/L				
Sulfate	< 1.0	1.0 mg/L				
LCS (B0H0296-BS1)			Prepared: 202	0-08-06, Analyze	ed: 2020-08-06	
Chloride	16.3	0.10 mg/L	16.0	102	90-110	
Fluoride	4.00	0.10 mg/L	4.00	100	88-108	
Nitrate (as N)	4.03	0.010 mg/L	4.00	101	90-110	
Nitrite (as N)	2.01	0.010 mg/L	2.00	101	85-115	
Sulfate	16.0	1.0 mg/L	16.0	100	90-110	
LCS (B0H0296-BS2)			Prepared: 202	0-08-06, Analyze	ed: 2020-08-06	
Chloride	16.1	0.10 mg/L	16.0	101	90-110	
Fluoride	3.93	0.10 mg/L	4.00	98	88-108	
Nitrate (as N)	4.02	0.010 mg/L	4.00	100	90-110	
	0.00	0.010 mg/L	2.00	100	85-115	
Nitrite (as N)	2.00	0.010 Hig/L	2.00	100	00-110	

General Parameters, Batch B0H0293

Blank (B0H0293-BLK1)			Prepared: 202	20-08-05, Analyze	ed: 2020-08-05	i
Turbidity	< 0.10	0.10 NTU				
LCS (B0H0293-BS1)			Prepared: 202	20-08-05, Analyze	ed: 2020-08-05	i
Turbidity	38.5	0.10 NTU	40.0	96	90-110	



REPORTED TO PROJECT	Tissington, Mel Essential Drinking V	Vater				WORK REPOF	ORDER RTED	0080 2020)284)-08-12	16:07
Analyte		Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters	, Batch B0H0404									
Blank (B0H0404-BL	. K1)			Prepared	: 2020-08-0	7, Analyze	ed: 2020-0	8-07		
Cyanide, Total		< 0.0020	0.0020 mg/L							
Blank (B0H0404-BL	_K2)			Prepared	: 2020-08-0	7, Analyze	ed: 2020-0	8-07		
Cyanide, Total		< 0.0020	0.0020 mg/L							
LCS (B0H0404-BS1)			Prepared	: 2020-08-0	7, Analyze	ed: 2020-0	8-07		
Cyanide, Total		0.0195	0.0020 mg/L	0.0200		98	82-120			
LCS (B0H0404-BS2	')			Prepared	: 2020-08-0	7 Analyze	ed: 2020-0	8-07		
Cyanide, Total	·)	0.0212	0.0020 mg/L	0.0200	0 _ 0 _ 0 _ 0	106	82-120			
					. 2020 08 0			8.07		
LCS Dup (B0H0404 Cyanide, Total	-0301)	0.0198	0.0020 mg/L	0.0200	: 2020-08-0	7, Analyze	82-120	8-07 1	10	
•		0.0196	0.0020 mg/L						10	
LCS Dup (B0H0404	-BSD2)			-	: 2020-08-0					
Cyanide, Total General Parameters	, Batch B0H0535	0.0214	0.0020 mg/L	0.0200		107	82-120	1	10	
Blank (B0H0535-BL	-K1)			Prepared	: 2020-08-0	7, Analyze	ed: 2020-0	8-07		
Alkalinity, Total (as Ca	CO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphtha	· · ·	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate Alkalinity, Carbonate (a		< 1.0 < 1.0	1.0 mg/L 1.0 mg/L							
Alkalinity, Hydroxide (a		< 1.0	1.0 mg/L							
Conductivity (EC)		< 2.0	2.0 µS/cm							
Blank (B0H0535-BL	_K2)			Prepared	: 2020-08-0	7, Analyze	ed: 2020-0	8-07		
Alkalinity, Total (as Ca		< 1.0	1.0 mg/L							
Alkalinity, Phenolphtha		< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate Alkalinity, Carbonate (a		< 1.0 < 1.0	1.0 mg/L 1.0 mg/L							
Alkalinity, Hydroxide (a	,	< 1.0	1.0 mg/L							
Conductivity (EC)		< 2.0	2.0 µS/cm							
Blank (B0H0535-BL	-K3)			Prepared	: 2020-08-0	7, Analyze	ed: 2020-0	8-07		
Alkalinity, Total (as Ca	CO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphtha		< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate	. ,	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (a Alkalinity, Hydroxide (a	,	< 1.0 < 1.0	1.0 mg/L 1.0 mg/L							
Conductivity (EC)		< 2.0	2.0 µS/cm							
LCS (B0H0535-BS1)			Prepared	: 2020-08-0	7. Analvze	ed: 2020-0	8-07		
Alkalinity, Total (as Ca	•	102	1.0 mg/L	100	0 _ 0 _ 0 _ 0	102	80-120			
LCS (B0H0535-BS2))			Prepared	: 2020-08-0	7 Analyze	ed: 2020-0	8-07		
Alkalinity, Total (as Ca	,	102	1.0 mg/L	100	. 2020 00 0	102	80-120	0 01		
LCS (B0H0535-BS3					: 2020-08-0			8-07		
Alkalinity, Total (as Ca	•	103	1.0 mg/L	100	. 2020-00-0	103	80-120	0-01		
LCS (B0H0535-BS4	•	100	i.o mg/L		: 2020-08-0			8-07		
Conductivity (EC)	7)	1420	2.0 µS/cm	1410	. 2020-00-0	101	95-104	0-01		
	<u></u>	1720	2.0 μ0/011					0.07		
LCS (B0H0535-BS5)	4400		-	: 2020-08-0			8-07		
Conductivity (EC)		1460	2.0 µS/cm	1410		103	95-104			

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Analyte		Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameter	s, Batch B0H0535, Contii	nued								
LCS (B0H0535-BS	6)			Prepared	: 2020-08-0)7, Analyze	d: 2020-0	8-07		
Conductivity (EC)		1470	2.0 µS/cm	1410		104	95-104			
Reference (B0H05	35-SRM1)			Prepared	: 2020-08-0)7, Analyze	d: 2020-0	8-07		
pH		6.99	0.10 pH units	7.01		100	98-102			
Reference (B0H05	35-SRM2)			Prepared	: 2020-08-0)7. Analyze	d [.] 2020-0	8-07		
pH	,	6.99	0.10 pH units	7.01	0 _ 0 _ 0 _ 0	100	98-102			
					. 2020 00 0			0 07		
Reference (B0H05	55-5RIVIS)	6.98	0.10 pH units	7.01	: 2020-08-0	100	98-102	0-07		
рН		0.90		7.01		100	90-102			
-	rameters, Batch B0H0203	3		-						
Blank (B0H0203-B	LK1)				: 2020-08-0	05, Analyze	ed: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
		• 1	1 01 0/1001				-l. 0000 0	0.05		
Blank (B0H0203-B	LK2)			-	: 2020-08-0	15, Analyze	d: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
			1 61 6/1001				.l. 0000 0	0.05		
Blank (B0H0203-B	LN3)	- 1	1.051//100 -		: 2020-08-0	lo, Analyze	a: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
Blank (B0H0203-B	LK4)			Prepared	: 2020-08-0)5, Analyze	ed: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
E. COII		<u> </u>	1 CF0/1001							
Blank (B0H0203-B	LK5)				: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
			1 CI 0/1001							
Blank (B0H0203-B	LK6)			•	: 2020-08-0)5, Analyze	ed: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
		• 1	1 01 0/1001							
Blank (B0H0203-B	LK7)			•	: 2020-08-0	15, Analyze	d: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
		• 1	1 61 6/1001				.l. 0000 0	0.05		
Blank (B0H0203-B	LK8)				: 2020-08-0	15, Analyze	d: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
		• 1	1 01 0/1001							
Blank (B0H0203-B	LK9)			•	: 2020-08-0	05, Analyze	ed: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
		• 1	1 01 0/1001							
Blank (B0H0203-B	LKA)			•	: 2020-08-0	05, Analyze	d: 2020-0	8-05		
Coliforms, Total E. coli		< 1	1 CFU/100 r 1 CFU/100 r							
		` 1	1 01 0/1001		0000 00 -		1.0000	0.05		
Blank (B0H0203-B	LKB)				: 2020-08-0	15, Analyze	a: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	ni						



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REPORTED TO PROJECT	Tissington, Mel Essential Drinking Wa	ater				WORK REPOR	ORDER TED	0080 2020	284 -08-12	16:07
Analyte		Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifie
Microbiological Pa	rameters,Batch B0H020	03, Continued								
Blank (B0H0203-B	BLKC)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKD)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r							
Blank (B0H0203-B	BLKE)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKF)			Prepareo	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 i	nL						
Blank (B0H0203-B	BLKG)			Prepareo	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 i	nL						
Blank (B0H0203-B	BLKH)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKI)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKJ)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKK)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r							
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKL)			Prepared	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 r	nL						
Blank (B0H0203-B	BLKM)			Prepareo	d: 2020-08-0)5, Analyze	d: 2020-0	8-05		
Coliforms, Total		< 1	1 CFU/100 r	nL						
E. coli		< 1	1 CFU/100 i	nL						

Total Metals, Batch B0H0646

Blank (B0H0646-BLK1)			Prepared: 2020-08-10, Analyzed: 2020-08-10
Aluminum, total	< 0.0050	0.0050 mg/L	
Antimony, total	< 0.00020	0.00020 mg/L	
Arsenic, total	< 0.00050	0.00050 mg/L	
Barium, total	< 0.0050	0.0050 mg/L	
Boron, total	< 0.0500	0.0500 mg/L	
Cadmium, total	< 0.000010	0.000010 mg/L	
Calcium, total	< 0.20	0.20 mg/L	
Chromium, total	< 0.00050	0.00050 mg/L	
Copper, total	< 0.00040	0.00040 mg/L	
Iron, total	< 0.010	0.010 mg/L	
Lead, total	< 0.00020	0.00020 mg/L	



REPORTED TO PROJECT	Tissington, Mel Essential Drinking Water				WORK ORDER 0080284 REPORTED 2020-08-1				16:07
Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier

Total Metals, Batch B0H0646, Continued

Blank (B0H0646-BLK1), Continued	Prepared: 2020-08-10, Analyzed: 2020-08-10					
Magnesium, total	< 0.010	0.010 mg/L				
Manganese, total	< 0.00020	0.00020 mg/L				
Potassium, total	< 0.10	0.10 mg/L				
Selenium, total	< 0.00050	0.00050 mg/L				
Sodium, total	< 0.10	0.10 mg/L				
Strontium, total	< 0.0010	0.0010 mg/L				
Uranium, total	< 0.000020	0.000020 mg/L				
Zinc, total	< 0.0040	0.0040 mg/L				
LCS (B0H0646-BS1)			Prepared: 202	20-08-10, Analyze	d: 2020-08-10	
Aluminum, total	0.0222	0.0050 mg/L	0.0199	112	80-120	
Antimony, total	0.0224	0.00020 mg/L	0.0200	112	80-120	
Arsenic, total	0.0212	0.00050 mg/L	0.0200	106	80-120	
Barium, total	0.0211	0.0050 mg/L	0.0198	107	80-120	
Boron, total	< 0.0500	0.0500 mg/L	0.0200	101	80-120	
Cadmium, total	0.0214	0.000010 mg/L	0.0199	108	80-120	
Calcium, total	2.11	0.20 mg/L	2.02	104	80-120	
Chromium, total	0.0204	0.00050 mg/L	0.0198	103	80-120	
Copper, total	0.0209	0.00040 mg/L	0.0200	104	80-120	
Iron, total	2.04	0.010 mg/L	2.02	101	80-120	
Lead, total	0.0217	0.00020 mg/L	0.0199	109	80-120	
Magnesium, total	2.00	0.010 mg/L	2.02	99	80-120	
Manganese, total	0.0196	0.00020 mg/L	0.0199	98	80-120	
Potassium, total	1.95	0.10 mg/L	2.02	97	80-120	
Selenium, total	0.0212	0.00050 mg/L	0.0200	106	80-120	
Sodium, total	1.99	0.10 mg/L	2.02	98	80-120	
Strontium, total	0.0209	0.0010 mg/L	0.0200	105	80-120	
Uranium, total	0.0219	0.000020 mg/L	0.0200	110	80-120	
Zinc, total	0.0217	0.0040 mg/L	0.0200	109	80-120	
Reference (B0H0646-SRM1)			Prepared: 202	20-08-10, Analyze	d: 2020-08-10	
Aluminum, total	0.308	0.0050 mg/L	0.299	103	70-130	
Antimony, total	0.0550	0.00020 mg/L	0.0517	106	70-130	
Arsenic, total	0.130	0.00050 mg/L	0.119	109	70-130	
Barium, total	0.828	0.0050 mg/L	0.801	103	70-130	
Boron, total	4.28	0.0500 mg/L	4.11	100	70-130	
Cadmium, total	0.0532	0.000010 mg/L	0.0503	106	70-130	
Calcium, total	10.0	0.20 mg/L	10.7	94	70-130	
Chromium, total	0.255	0.00050 mg/L	0.250	102	70-130	
Copper, total	0.512	0.00040 mg/L	0.487	102	70-130	
Iron, total	0.501	0.010 mg/L	0.504	99	70-130	
Lead, total	0.307	0.00020 mg/L	0.278	110	70-130	
Magnesium, total	3.77	0.010 mg/L	3.59	105	70-130	
Manganese, total	0.112	0.00020 mg/L	0.111	100	70-130	
Potassium, total	6.27	0.10 mg/L	5.89	106	70-130	
Selenium, total	0.141	0.00050 mg/L	0.120	118	70-130	
Sodium, total	9.15	0.10 mg/L	8.71	105	70-130	
Strontium, total	0.407	0.0010 mg/L	0.393	103	70-130	
Uranium, total	0.0370	0.000020 mg/L	0.0344	104	70-130	
Zinc, total	2.65	0.0040 mg/L	2.50	106	70-130	
	2.00	0.0010 mg/L	2.00	100		

Total Metals, Batch B0H0720

Blank (B0H0720-BLK1)

Mercury, total

< 0.000010 0.000010 mg/L

Prepared: 2020-08-10, Analyzed: 2020-08-11



Surrogate: 4-Bromofluorobenzene

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT	Tissington, Mel Essential Drinking			WORK ORDER REPORTED			0080284 2020-08-12			
Analyte		Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifie
Total Metals, Batc	h B0H0720, Continue	d								
Blank (B0H0720-B	SLK2)			Prepared	1: 2020-08-1	10, Analyze	d: 2020-0	08-11		
Mercury, total		< 0.000010	0.000010 mg/L							
Duplicate (B0H072	20-DUP1)	S	ource: 0080284-01	Prepared	1: 2020-08-1	10, Analyze	d: 2020-(08-11		
Mercury, total		< 0.000010	0.000010 mg/L		< 0.000010)			20	
Reference (B0H07	20-SRM1)			Prepared	1: 2020-08-1	10, Analyze	d: 2020-(08-11		
Mercury, total		0.00494	0.000010 mg/L	0.00581		85	70-130			
Reference (B0H07	20-SRM2)			Prepared	1: 2020-08-1	10, Analyze	d: 2020-(08-11		
Mercury, total		0.00553	0.000010 mg/L	0.00581		95	70-130			
Volatile Organic Co Blank (B0H0532-B	ompounds (VOC), Ba BLK1)	tch B0H0532		Prepared	1: 2020-08-0)7, Analyze	d: 2020-(08-07		
Bromodichlorometha	ne	< 0.0010	0.0010 mg/L							
Bromoform		< 0.0010	0.0010 mg/L							
Chloroform		< 0.0010	0.0010 mg/L							
Dibromochlorometha		< 0.0010	0.0010 mg/L							
Surrogate: Toluene-c		0.0251	mg/L	0.0265		95	70-130			
Surrogate: 4-Bromof	luorobenzene	0.0198	mg/L	0.0249		79	70-130			
LCS (B0H0532-BS	51)			Prepared	: 2020-08-0	07, Analyze	d: 2020-(08-07		
Bromodichlorometha	ne	0.0234	0.0010 mg/L	0.0200		117	70-130			
Bromoform		0.0239	0.0010 mg/L	0.0200		120	70-130			
Chloroform		0.0218	0.0010 mg/L	0.0200		109	70-130			
Dibromochlorometha		0.0241	0.0010 mg/L	0.0202		119	70-130			
Surrogate: Toluene-c	18	0.0232	mg/L	0.0265		88	70-130			
0	1 I	0.0070					70 100			

mg/L

0.0249

0.0273

110

70-130